

THE GROWTH OF SPECULATIVE  
BUILDING IN GREECE :

Modes of Housing Production and Socioeconomic Change ,  
1950-1974

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## Abstract

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The Growth of Speculative Building in Greece:

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During the postwar period the economy of urban housing in Greece has undergone a major transformation. The great bulk of housebuilding in the 1950's could be described as "precapitalist". "Speculative" building, i.e. the production of housing as a commodity for the market under the control of capitalists, prevailed, albeit in a rather primitive form, in the limited sector of middle-class apartment housing. By the 1970's, however, the latter economic form has grown into the dominant mode of housing production and distribution.

The generality and significance of this transformation for the early stages of capitalist urbanisation has seldom been recognised. Thus, the study begins with a theoretical model of the different modes of housing production and housing sectors relevant to such a historical context, and the concept of the "dual" system where both speculative-capitalist and precapitalist modes operate. Analysis of postwar housebuilding on the basis of this model establishes rigorously the extent, character, and sociospatial correlates of each mode. It is argued that popular precapitalist owner-building is not reducible to a residual phenomenon of socially marginal "squatter" housing, but constitutes a major historical form based on distinctive aspects of Greek society and autonomy vis-à-vis capitalist relations and modern administrative controls. Thus, the decline of this sector has not been the outcome of voluntary assimilation into the market but the result of political and economic constraints. This hypothesis is corroborated by a detailed analysis of demand and allocation of housing in Athens.

Given the decline in the role of precapitalist housing, the growth of speculative building is a corollary of trends in aggregate residential investment. The rest of the study examines the formation of the latter, first, in relation to the pattern of Greek economic development, and then, with the help of a model of household behaviour and the economics of the early capitalist housing system as a whole.



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Dimitris Emmanuel

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## TABLE OF CONTENTS

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Introduction	11
1. Modes of Production and Development of Capitalism in Housing	26
2. The Dual Economy of Housing in Greek Cities: Structure, Extent and Distribution of Speculative and Precapitalist Building.	59
3. Socioeconomic Foundations of the Precapitalist Housing Sector.	102
4. Expansion of the Speculative Sector 1950-1974: Determi- nants of the Structure of Housebuilding.	147
5. Postwar Investment in Housing and the Pattern of Greek Economic Development.	197
6. Structure and Determinants of Residential Capital Formation.	249
Conclusions	311
Appendices to Chapters	327
2.1. The spatial distribution of population, building types and socioeconomic categories in Greater Athens	329
3.1. The structure of land and housing ownership in Greek cities: A case study of an area in the inner zone of Athens.	337
4.1. Population, incomes, rent-class structure and housing depreciation in Greater Athens, 1950-1971.	342
6.1. Postwar trends in the cost of housing and the mechanism of land price formation.	358
General Appendix	385
Bibliography	413

LIST OF TABLES

---

2.1. Size distribution of urban building, 1951-1958.	67
2.2. Size distribution of private building activity in urban areas, 1964-1966 and 1970-1972 (building permits).	71
2.3. Characteristics of new dwellings built privately, 1964-66 and 1970-72 (building permits).	72
2.4. Average size of buildings by number of storeys, 1964-66.	73
2.5. The role of entirely new structures, extensions and unauthorised building in private dwelling construction, 1964-66 and 1970-72.	77
2.6. Sectoral composition of private urban residential building, 1951-1972.	79
2.7. The distribution of medium and higher buildings within the hierarchy of Greek cities, 1970.	81
2.8. Total consumption expenditure per household member by occupation of the head of household, all urban areas, 1974.	86
2.9. Distribution of urban population by type of social/residential area, Greater Athens, 1971.	92
2.10. Distribution of population increase by type of social/residential area, Greater Athens, 1951-71.	95
2.11. Share of urban households in rental accomodation, 1951-1971.	97
2.12. Rates of owner-occupation by occupational class of the head of household - urban areas, 1957/58 and 1974.	99
3.1. Size distribution of agricultural land holdings in the Greater Athens administrative area, 1961 and 1971.	115
3.2. Size distribution of personal incomes from building property, total of Greece, 1967.	118
3.3. Building controls in Greater Athens: average incomes, land values and maximum permitted development intensity ("building coefficients"), 1971-1972.	126



3.4. Sales of peripheral land and urban plots in Greater Athens, 1958-70.	130
3.5. Mortgage loans to households in relation to private residential investment, 1958-76.	134
4.1. Sectoral composition of private residential building: Athens, 1961-1971.	151
4.2. Sensitivity analysis of the share of the speculative sector in the growth of housing stock.	161
4.3. A conceptual scheme of types of housing systems.	165
4.4. Trends in the sectoral structure of residential building in Greater Athens 1952-1971: predicted and actual values.	171
4.5. Housing conditions (rooms per person) by occupational class of the head of household: Athens, 1961, 1971.	183
4.6. Share of the Athens municipality in the Greater Athens Area population, 1920-1971.	186
5.1. Annual gross investment in dwellings and manufacturing in relation to total fixed capital formation in Greece, 1948-1977.	206
5.2. Private investment in dwellings, disposable income and household savings, 1948-76.	235
5.3. Net inflow of capital for the household sector, 1953-76.	239
5.4. Private investment in dwellings and net capital inflow for the household sector, 1953-76.	239
5.5. Main countries of origin of net capital inflow to the household sector 1966-1975 (selected years)	242

#### Tables in the Appendices

2.1.1. Economically active population by occupational category and place of residence in the Municipalities and Communes of Greater Athens, 1971 Census	331
2.1.2. Buildings in Greater Athens by number of storeys, Municipalities and Communes, 1970	333

2.1.3. Population in Greater Athens by Municipalities and Communes, 1951-1971.	335
3.1.1. "Aghios Pavlos": Distribution of building plots by type of use.	339
3.1.2. Distribution of "property units" among classes of owners in apartment buildings, "Aghios Pavlos" area, 1971.	341
4.1.1. Population and households in Greater Athens, 1951-1971.	342
4.1.2. Greater Athens: Residents in 1965 and losses of population due to deaths, immigration and internal migration during 1966-70.	343
4.1.3. Trends in national private consumption expenditure and housing consumption, total Greece, 1951-1971.	345
4.1.4. Average annual rates of growth in the number of households and rent expenditure per household, Athens, 1951-1971.	347
4.1.5. Occupational stratification of households, Athens 1961, 1971 and consumption and housing expenditure levels by occupational class, urban areas, 1957/58, 1974.	351
4.1.6. Shares of main occupational strata, Athens and urban areas.	352
4.1.7. Social differentiation of $C$ and $C_h$ per household, 1957/58 and 1974.	352
4.1.8. Rent-class distribution of urban households, 1957/58.	355
6.1.1. Trends in the price index of rents and investment in dwellings.	359
6.1.2. Trends in the price index of rents, housing expenditures and total consumer expenditures.	359
6.1.3. Average annual growth of labour productivity in construction, manufacturing and the economy as a whole, 1951-1971.	361

6.1.4. Change in land values and implied changes in average building coefficients in the major zones of Greater Athens, 1964-72.	366
A.1. Private building activity, 1961-1978.	387
A.2. New dwellings, private authorised activity.	393
A.3. New dwellings 1955-1972: All sectors (public, private authorised and private unauthorised activity).	395
A.4. Unauthorised dwelling construction ("illegal building").	396
A.5. Public sector activity in dwelling construction.	398
A.6. Real estate transfer (sales), 1956-1975: Apartments, urban building plots and agricultural land plots.	400
A.7. Trends in fixed capital formation, 1948-78.	402
A.8. Trends in incomes, consumption and savings.	404
A.9. Trends in private residential investment, household liquid assets, housing credit and housing consumption.	406
A.10. Trends in dwelling construction costs, rents and the general price level.	408
A.11. Trends in the consumer price index, rents, and the cost of housing expenditures: Urban areas.	410

## LIST OF FIGURES

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2.1.	Socioeconomic class character of the municipalities and communes of Greater Athens, 1971.	89
2.2.	Greater Athens Area, municipalities and communes: Composition of the building stock, 1970.	91
3.1.	Dwelling construction in Greater Athens, 1945-1975.	129
3.2.	Expansion of the City Plan of Athens, 1920-1971.	132
4.1.	Private building activity by categories of building height, urban areas, 1961-1977.	148
4.2.	Private building activity by categories of building height, Greater Athens, 1961-1977.	148
4.3.	(Diagram of the model).	155
5.1.	Gross investment in manufacturing and dwellings, 1948-1977.	230
2.1.1.	Municipalities, communes and Master Plan zones in Greater Athens.	330
4.1.1.	Formalised rent-class distribution of urban households.	356

# Introduction

1.

Greece in the postwar period has consistently devoted a very high share of national resources to new housing. The share of dwelling construction in the Gross Domestic Product approached 6% in the 1950's and well exceeded 7% in the 1960's and early 1970's. Thus, although the rate of growth of the Greek Domestic Product was throughout the period among the highest internationally - more than 6% annually - construction output rose even faster, surpassing 9% for all the post-1950 years. Urban residential development absorbed the greatest part of this construction activity.

Although this record is somewhat exceptional, the case is not atypical. The pattern of relatively high rates of housing investment has been also observed in a broad category of countries of similar intermediate "middle-income" level in the international scale of development. A rough positive association between the level of economic development (income per capita) and construction activity per capita becomes evident by a simple comparison of the advanced countries and the rest of the world.<sup>1</sup> This is obviously a matter of available resources. Further analysis of this relationship, however, shows that it is not linear but takes the form of an S-curve. In terms of shares of GDP, dwelling construction and construction as a whole are lower in the highest-income and lowest-income countries in comparison to middle-income ones.<sup>2</sup> As Paul Strassman has put it "one will not find a statistically significant relationship between construction and income per head generally. But if one divides countries into richer and poorer groups, one finds a negative association in one and a positive association in the other."<sup>3</sup> Whereas, in the second half of the 1950's the countries

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1. See, for instance, D. Turrin "The Economic Significance of Construction", Ekistics 29, 171 (1970): 108-113 abstracted from Architect's Journal 150, 42 (1969): 923-929.

2. See Paul W. Strassman "Construction Productivity and Employment in Developing Countries" International Labour Review, 101, 5 (1970): 503-518 and U.N. Secretariat "Investment on Dwelling Construction" Ekistics 90 (1963): 281-282.

3. Strassman, "Construction Productivity".

with over 1000 dollars per capita and those with under 300 had on the average 3.8% and 2.1% of their GDPs respectively going to dwelling construction, countries between the 300-1000 range allocated a 4.2%.<sup>4</sup>

Does this pattern, which is derived from cross-country data, signify the existence of a certain universal time-path of the economic role of housing and thus the occurrence of a major expansion of housing production at a certain "stage" of each country's development? The relevant studies seem to imply that this is so. The argument is that countries that reach a certain income level and are passing into an urbanised state, necessarily enter a phase of large-scale city-building, to provide for the modern urban infrastructure they lack. Hence the increase of the relative weight of housing in the economy. Long-term data, however, on national incomes and housing expenditure of a number of Western advanced countries do not support any such clear-cut model.<sup>5</sup> Residential construction fluctuates historically in "long-waves" that are determined, to a large extent, by wars, demographic changes, international movements of people and capital and particular national conditions that, in combination, would make any mechanistic model unlikely. Thus, though the relationship between a dual transition to higher income-level and an urbanised society and a changed economic significance of housing is certainly a suggestive one, it should be put in its historical context. The economic expansion of the residential economy in "middle-income" countries must be seen in the context of the specific character of the postwar period; a period of fast growth and geographic diffusion of the capitalist economy and of rapid urbanisation and modernisation.

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4. U.N. Secretariat, "Investment on Dwelling Construction". Greece with a share for dwellings around the 6% level and a GDP per capita approaching 400 dollars in 1961 and fastly growing, clearly belongs to the middle-income category.

5. A long-term decline of the role of housing in the national economy of the U.S. (up to 1950 that is) has been well substantiated in Leo Grebler et al. Capital Formation in Residential Real Estate (New York, 1956) ch. 9. No such clear pattern emerges in other advanced countries, though the relevant statistical material is limited. In England, there seems to have been a fall after the middle of the nineteenth century, whereas in the interwar period the trend was reversed. See S. Kuznets, Modern Economic Growth, (New Haven, 1966) tables 5.3. and 5.6., and H.W. Richardson and D.H. Aldcroft. Building in the British Economy between the Wars, (London, 1968) table 27 and p. 273. See also the discussion in Chapter 5 of the present study.

The relative weight, then, of housing growth in the national economy is, as such, of secondary significance (though it may point to the overall "model" of economic development); what is of theoretical interest is the systematic occurrence of a major expansion in the urban housing sector of relatively high-income developing countries, in association with a major transformation of the economy of housing. It has, indeed, been recognised by reviewers of the international evidence, that the fast growth of house building involves such a transformation. The latter results from the changes following the transition from a rural social organisation to a predominantly modern-urban one. Two broad components of these changes have been stressed: the transition from non-monetary to monetary relations and the transition from a traditional to a modern construction organisation. The first change is a corollary of the growth of cities. In Strassman's words, "essentially what happens is this. As housing moves out of the non-monetary sector with rising urbanisation, it reaches peak growth rates in middle-income countries. Other construction rises to a lesser extent".<sup>6</sup> The second involves the increased role of modern construction techniques and materials, higher labour productivity, and employment of technical and managerial skills.<sup>7</sup>

Are these two general mechanisms the proper theoretical focus for the analysis of housing change in such conditions? Do they point to realistic models of the dynamic of the residential economy in early capitalist urbanisation? Compared to certain widespread simplistic accounts limited to the quantitative effects of population movements and income growth, the above models point to the right direction: for underneath the development specialist's jargon of "monetary" and "modern-efficient" sectors we have an argument for the significance of the transition to market relations and to a capitalist organisation of housing production. This important transformation of the housing economy, however, is considered as a simple corollary of urbanisation and economic-technological development. In this respect, the above theoretical orientations are inadequate.

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6. Strassman, "Construction Productivity". An automatic association of urbanisation with a sharp increase in residential investment could not be assumed as necessary or even probable in a "Soviet" model of economic growth. This formulation refers to a capitalist "model" of development.

7. Turrin, "Economic Significance".

The assumption of generalised "monetary" relations in cities implies the existence of a *market* of housing, and in the case of new construction, the production and distribution of housing as a commodity; it also implies a market of labour exchanged for wages or fees for small contract work. The transition, however, to monetary relations thus understood, is not the automatic product of city growth; non-monetary relations in the form of family labour producing for family use, and, more importantly, extensive non-market supply of housing by small owner-controlled housebuilding are a substantial part of the residential economy of cities in developing countries. "Squatter" housing is a familiar non-market form. Attention to squatter housing - which has the dubious luck to be considered a "social problem" - may have hidden the broader picture, namely, that even in high-income developing countries in the postwar period, speculative building and the market economy supply a limited part of urban housing<sup>8</sup> though we may have a prevalence of the market and monetary exchange in labour, building materials, and urban land.

Excepting a number of countries with developed public housing sectors (e.g. Singapore, Hong Kong) the greatest part of new residential capital for lower-class and probably for lower middle-class families in "developing" cities, must be essentially non-capitalist production; petty owner-controlled production for use and, in varied degrees, marginal forms of petty speculation and small investments in rental property. In Marxist terminology, such an economy could only be described as a "petty mode of production" with limited commodity exchange relations. After all, even if commodity exchange prevails in the construction sphere - which is but a part of the total complex of housing production - we could hardly call capitalist an economy based on independent labourers or small contractor groups owning their means of production, which is certainly the case in developing countries, and in early capitalist cities in general.

Thus, we should properly recognize the role of what we may theoretically call a *precapitalist* mode of housing production. "Squatter" housing, after all, is simply such a precapitalist mode, its particular character-

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8. See Orville F. Grimes, Jr, Housing for Low Income Urban Families: Economics and Policy in the Developing World (Baltimore, 1976), ch. 2.



ristics with regard to land appropriation and security of tenure notwithstanding. The theoretical emphasis on the transition to "monetary" relations hides the fact of important discontinuities in modes of production in the residential economy: the existence of "dual" systems of housing production and distribution *within* cities. The growth of cities as a vehicle for the expansion of monetary relations in general is therefore of secondary importance to the structural characteristics of this "dual" system and the determinants of the expansion of speculative and capitalist modes of housing production.

I have equally great doubts that the nature and dynamic of an expanding business sector of housing supply can be adequately approached through the blanket use of a stereotype of "modern" and "efficient" construction organisation. First, housing production, by the nature of the product, is more a matter of control and utilisation of capital and land than of construction technology. This is less so in other types of construction. In housing, the organisation and size of the construction unit is largely dictated by the economics of land and finance and their level of development. This leads us to the second point, namely that references to a "modern business" type imply that prototypes of the advanced countries can describe theoretically the object in question. This may be adequate for construction technology, but definitely not for housing supply in general. Speculative housebuilding and the structure of land-use controls and house finance have undergone such radical changes in the last hundred years in Western countries, that we can justifiably argue that speculative-capitalist building in the conditions of the early capitalist Western city has been a distinct type of economy with significant variations between countries and periods, but certainly different from its present-day forms. Thus, international and historical comparisons, to be of any use, require a certain theoretical clarification, namely, a systematic distinction between modern-capitalist housing economics and a "model" of a speculative building economy as a specific type appropriate for conditions of relative capitalist underdevelopment.<sup>9</sup>

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9. For instance, Neo-Marxist explanations of housing "over-investment" stress the tendencies of dominant classes associated with conditions of "underdevelopment" towards luxury consumption and easy commercial and real estate ventures. Speculative building thus, in this sense, is the outgrowth of the class structure and economic "distortions" of under-

The structure of this early speculative economy determines its role in the growth and modernisation of housing in a developing city, as well as the issues that are relevant to the study of the development of capitalist relations in housing.

I would argue, then, that the growth and modernisation of housing in countries undergoing a transition to a relatively advanced stage of economic development and urbanisation, and the character of the housing system during such periods are to a large extent determined by the specific character of the early capitalist housing economy, namely, the structure and relative role of precapitalist and speculative-capitalist modes of production of residential capital, and the process of the development of capitalism in housing. The latter, and the wider social and political factors that influence the rate and "path" of this development, thus acquire a distinctive theoretical importance. In the present work we will study the structure of postwar urban housing in Greece in exactly these terms with the main emphasis on the growth of the speculative sector. The analysis will also involve us with the issue of the determinants of housing investment at the "macroeconomic" level since the broad pattern of resource allocation has obviously been a major factor in the postwar growth of speculative building. In the process we will find ample opportunity for showing the close interconnection between the formation of rates of housebuilding at the national level as Greek economic development proceeded, and the changing structure of the housing system. The importance, thus, of the study of the development of capitalism in housing for the comparative analysis of the relationship between housebuilding and economic development will become apparent. The main emphasis, however, of the present study will be on the former, i.e. on the growth of speculative-capitalist building.

## 2.

A study of the mechanisms and determinants of the growth of speculative building has an obvious relevance in the Greek case. The great bulk of urban housebuilding in the 1950s could be described as "pre-capitalist". Houses were built for use rather than exchange in the market, under the complete control of households owning small plots and the neces-

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development. In an alternative formulation, as we argue in the first chapter, the speculative residential "mode" derives its specific characteristics from the relative backwardness of financial institutions and the limited concentration of capital in early capitalist cities.

sary capital. "Speculative" building, i.e. the production of housing as a commodity to be sold in the market, under the control of a class of capital owners distinct from both users (or other final owners) and landowners, prevailed, albeit in a rather primitive form, only in the limited sector of middle-class apartment housing. By the 1970's, however, this economic form has clearly grown into the dominant mode of housing production and distribution. No account of Greek housing and urban growth in the postwar period can be constructed without a full treatment of this change and the fact of the "dual" character of the system of housing production, i.e. the coexistence of two radically different modes. This provides an additional and wider purpose to a study of Greek urban housing from the viewpoint of the expansion of capitalist relations. For it poses in a very clear way the problem of the development of concepts, theories and methods for the social and economic analysis of "dual" early capitalist housing systems. For this problem, modern urban and housing economics offer very little: at best, some starting points and contrasts for the exploration of alternatives.

The analysis of Greek experience in these terms, moreover, can be of wider theoretical significance for a class of similar problems in the historical and comparative study of housing systems and so suggest some necessary revisions in current theories of the structure of cities in Western and non-Western societies.

A study of the development of capitalism in residential production and of "dual" housing systems in the early stages of urban-industrial growth could highlight some neglected aspects of the history of cities of Western advanced economies. Urban studies have unduly narrowed the significance of the concept of the residential system of early industrial cities by an unbalanced emphasis on the typicality of the "English" model. Marx and Engels, with the weight of their authority, helped create a myth of the archetypal capitalist English city. It is time we recognise that in terms of residential economy the latter represents a rather special case among nineteenth-century cities; England, we should remember, did not have any small-holding peasant economy, urban landownership was extremely concentrated, aristocratic anti-urbanist controls of popular building had a long history, and the share of residential construction in the national product - at least for the second

half of the century - was somewhere between 1% and 1.5% whereas in Germany and the U.S., for instance, it well exceeded 4%.<sup>10</sup> These institutional and economic characteristics are closely related to the fact that urban housing was, even since the beginnings of the last century, dominated by speculative builders and commodity relations and the fact that urban land and non-speculative housing production were not accessible to the working class.

North American cities in the nineteenth and early twentieth century presented a substantially different picture. The "American" model seems more relevant for countries where urban-industrial growth took place in the context of small-holder peasant economies, relatively easy access to ownership of urban land, few public controls and a comparatively high rate of saving and access to ownership of petty-capital by popular strata. Not surprisingly, non-speculative housing production in the form of popular petty owner-building was quite widespread, especially in the smaller urban centres. The existence of a substantial sector of non-capitalist relations dynamically related to the pattern of access to urban land and control over housing production in cities that were thoroughly capitalist from a societal perspective, and the systematic variations in this respect among cities in different societies suggest a number of significant research problems. What is the extent, character and role of non-capitalist (neither public or quasi-public) housing sectors? What factors account for the different structure in terms of modes of housing production and distribution among early capitalist cities of different countries? What are the determinants of the process towards the dominance of speculative-capitalist housing? The fact that "primitive" forms of non-capitalist housing have rapidly declined in this century in all advanced countries having, in addition, little appeal to urban reformers, can hardly excuse the complete lack of studies of these issues. As a result, Western urban theory is extremely ill-equipped to deal with the political economy of housing in cities of developing countries, whereas a systematic comparison

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10. S. Kuznets, Modern Economic Growth, tables 5.3. and 5.6. Unfortunately, systematic studies of the residential political economy as it changed from the nineteenth century to the present are lacking. We need more studies like the indispensable (for the U.S.) volume of Grebler et al. (Capital Formation).

of the latter with nineteenth-century Western cities in the context of a comprehensive theory of the early capitalist city could have been of great significance.

Comparisons of nineteenth-century English and American *speculative* building with that of present-day developing countries, could be of equal significance. In this respect at least, the two sides of the Atlantic presented substantial similarities, stemming, mainly, from the characteristics of an analogous stage in the development of housing finance and the accumulation and concentration of capital in public and private building agencies. The theme will be examined further in chapter 1 of this study. Though generalisations from historical experience are always a risky affair, especially in housing where local characteristics and institutions exert a strong influence, it certainly appears worthwhile to consider the nineteenth-century speculative market as a distinct theoretical type of early capitalist residential production and system of housing relations, and examine its implications for the comparative study of housing growth and change.<sup>11</sup>

Comparative theoretical approaches to urban structure and change for cities in developing countries, are not, of course, new; nor is the concept of a transition from a "traditional", "pre-industrial" organisation to a "modern-industrial" one. Comparative studies of changes in the spatial distribution of population and social classes within cities have, indeed, stressed the long-term effects of a rising public and private income-capacity and of related improvements in the technology, resources and expertise that together bring the modernisation of urban infrastructure, transportation, and the building industry. Along with a process of *social* modernisation - that is, a gradual formation of Western types of

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11. For a comprehensive study of the structure of late nineteenth-century English speculative residential development, see, H.J. Dyos, Victorian Suburb (Leicester, 1961). Most references to the particularities of the twentieth-century early-capitalist "structure of the housing market" (a rather misleading term), can be found only in economic histories of "long waves" of building. It is unfortunate that the very rich literature on building long-cycles has not received much attention in urban studies (this is less true for housing economics). A comprehensive review of the existing literature (with a wealth of international references) is contained in Manuel Gotlieb, Long Swings in Urban Development (New York, 1976). See also the references in ch. 1.

employment structure and family life-styles - the above bring about the development of certain universal trends: the long-term trend towards lower density gradients,<sup>12</sup> towards a "North American" residential pattern,<sup>13</sup> and the trend towards a universal homogeneity of economic and social urban institutions.<sup>14</sup>

These approaches imply an economic-evolutionary theory of change. In comparison, say, to the majority of so-called "comparative" case studies of ethnographic or legal-institutional vein and the dangers of being swamped by a multitude of "culturally-specific" descriptions, these theories, no matter how much we may react to their evolutionism and determinism, are of positive value. Economic development and modernisation (capitalist or otherwise) are universal processes, and social change should be understood, to a large extent, as the product of a world-system of relations, governed by the historical process of the diffusion of markets, technology and modernity from the developed "core" to the world "periphery".<sup>15</sup>

But these processes, though caused by universal forces, are certainly not ones of "natural" and unilinear change unfolding gradually. The particularities of local class-structures and history, and variations in the outcomes of conflicts over change, make for much greater complexity. Moreover, the critical literature of the last years has success-

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12. Colin Clark, Population Growth and Land Use (London, 1967), ch. 9, B.J.L. Berry et al. "Urban Population Densities: Structure and Change", Geographical Review, 53, (1963): 389-405.

13. Leo F. Schnore, "On the Spatial Structure of Cities in the Two Americas", The Study of Urbanization, P.M. Hauser - L.F. Schnore (eds.), (New York, 1965): 347-401.

14. Gideon Sjoberg, "Cities in Developing and Industrial Societies: A Cross-cultural Analysis", in the Hauser - Schnore volume (1965): 213-263

15. For economic and sociological discussions of these world-scale processes and their interaction with the local structures of various countries and the consequent social changes, see, Eric J. Hobsbawm, The Age of Capital: 1848-1875 (London, 1975), Reinhart Bendix, "Tradition and Modernity Reconsidered" in Embattled Reason: Essays on Social Knowledge (Oxford, 1970): 250-314, Immanuel Wallerstein, The Origins of the Modern World System (New York, 1974). For the limitations of such an approach, however, see chapter 1, especially note 10.

fully established that peculiarly non-modern "deviations" in class structure and urban patterns seem to be a systematic and persistent aspect of cities in the capitalist "periphery". This critique and the effort to account for the recurrence of these patterns led to the development of models of the "Third World" city. The concept is by now fairly well established in urban studies, to the point of running the risk of becoming a new orthodoxy, though certainly a more fruitful one. Since the concepts I have introduced have strong affinities with the problematic of the "Third World" city - the concept of a "dual" system consisting of distinct modes of production, the resemblances of a family economy in housing (the petty owner-building sector) to the wider peasant-type sector described for these cities - it seems necessary to state my reservations for this model, especially in relation to housing.

(a). The model does not specify the conditions for its applicability at various levels of economic development or any specific mechanism of change; this is, in part, due to its static and morphological construction and the methodology of Weberian "ideal types". The elements of the "type", however, have been worked out mainly with reference to Southeast Asian and partly African cities.<sup>16</sup> Thus, by structure and empirical content, the model is a poor means of analysis in situations of rapid change and in relatively high-income developing countries of a different historical background. Even if the claimed theoretical and geographical scope was justified, such a concept would be of limited value for a broad range of social formations and issues; how useful would a concept of the "Western city", that covered two centuries of history and a large number of countries, be?

(b). The model seems to overlap uncritically an economic mode - the low-income peasant-type sector and/or "informal" and/or non-modern sector<sup>17</sup> with a social and political situation - "marginal", lumpenproletariat, poor migrants in cities - as well as with certain housing conditions

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16. T.G. McGee, The Urbanization Process in the Third World (London, 1971): ch. 3.

17. These concepts and the two-sector or "dual" model of the Third World city are advanced in McGee, The Urbanization Process, ch. 3, his "The Persistence of the Proto-Proletariat: Occupational Structures and Planning of the Future of Third World Cities" Progress in Geography, 9

and economic organisation - slums and "squatter" housing. I do not see why these three aspects should necessarily overlap, that is delimit the same population, or, at that, be causally interrelated, since they belong to three distinct and relatively autonomous aspects of the social system. Of course, they might do so under certain conditions. The whole matter remains, however, unclear; a legacy, it appears, of the ideological concern with squatters, marginality and the like, as "social problems", which, together with unstable petty-service employment, tend to characterise a substantial section of poor migrants.

(c). There is, lastly, a simplistic *economic determinism* running through this model; the existence of a "dual" economic mode in general, and in housing in particular, that is the existence of squatter housing in the latter, are explained by the fact of "urbanisation-without-industrialisation" and the limited extent of the modern high-income sector. This implies that the expansion of industrial and "modern" employment and income opportunities, in essence a more successful effort to achieve urban capitalism proper (i.e. Western), will make the precapitalist sector to wither away naturally. This gets us back to the terms of the evolutionists with a bit of pessimism added. To view precapitalist modes of production and residential economy as merely *residual*, violates both their long history and their social and economic significance. It also assumes away the conflicts of the transition to capitalism. Besides, if we are to follow this economic explanation, we should have expected nineteenth-century London with its periods of structural unemployment to have substantial numbers of squatter communities; as far as I know this was not the case.

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(1976): 3-38, J. Friedman and F. Sullivan, "The Absorption of Labor in the Urban Economy: The Case of Developing Countries", Economic Development and Cultural Change, 22, 3 (1974) and K. Hart, "Informal Income Opportunities and Urban Employment in Ghana", R. Jolly et al. (eds.), Third World Employment (London, 1973): 66-70.

An extended critical discussion of two-sector models and, in general, theories of the social and ecological structure of Third World cities and their implications for the study of Greek urban society, is provided in Lila Leontidou Emmanuel, Urban Class Polarisation in Underdeveloped Countries: Latin America and the Case of Greece, unpublished MSc thesis, Department of Geography, London School of Economics and Political Science (London, 1973).



The "Third World City" literature has done us the great service of introducing the concepts of non-capitalist types of economic organisation and of "dual" systems in urban theory; it has not done so, however, for the residential economy, neither examined adequately the relation of the latter with the broader urban structure, or the problem of capitalist expansion and concomitant changes in such cases.<sup>18</sup> The Greek postwar experience demonstrates, in my opinion, the usefulness of an emphasis on the issues of capitalist development in housing in their own right, as relatively autonomous economic and social relations.

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18. Perhaps a cautionary note on the use of the concepts of "mode of production" and "dualism" is required here. It has been pointed out that an uncritical use of the concept of "mode of production" for economic forms that are very particular and of narrow historical scope, may deprive it of its general-theoretical and "epochal" content as applied in the Marxist historical method (Ernesto Laclau, Politics and Ideology in Marxist Theory (London, 1977), pp. 49-50). Are we justified then, to employ it in reference to the economy of housing at particular historic periods? If we can demonstrate that it refers, in this context, to no isolated and particularistic occurrences, but belongs to a broader "mode" with wider societal significance, I think we would be somewhat justified.

Still, the criticism is valid. Since, however, more abstract terms like, say, "the structure of production" do not convey the meaning of the concept (briefly: type of ownership, division of labour, distribution of surplus, productive capacity for expansion, all interconnected systematically to form a particular type of economy of production), I would opt for keeping the concept with an explicit recognition of the fact that we refer to something certainly narrower than its established significance in historical-epochal analysis.

With regard to "dualism", some Marxist critiques of the concept have claimed that it necessarily implies an unrealistic lack of interrelationships between the sectors of the "dual" structure (between, say, the "modern" and the "traditional"), or an over-emphasis on the determinant role of the internal structure of sectors (see the critique by Andre Gunder Frank, mainly with reference to analyses of Brazilian agriculture, Capitalism and Underdevelopment in Latin America, (New York, 1969, Pelikan ed. 1971), pp. 268-269). I have always been at loss why this is necessarily so. Differences of theory on the role of exchange economic relations (in contrast to "internal" productive relations) in the analysis of social change among Marxists, may account for the debate over "dualism". Ernesto Laclau has offered the opinion that the alleged limitations of the concept derive in part by its particular usage by nineteenth century Liberals involved in Latin American agriculture (Laclau, Politics and Ideology, p. 33). This is, however, of no concern for the present discussion and seems entirely fortuitous.

## 3.

The present work is a study of the growth and distribution of urban housing in postwar Greece with particular reference to Athens, as it is determined by the "dual" political economy of early capitalism, and by the process of the expansion of the speculative sector. The main concern, however, will be the nature of this "dual" housing system as such, the characteristics of precapitalist popular owner-built housing, and the socioeconomic and political factors that account for the growth of speculative building. The latter will be the unifying theme of the study.

In the first chapter I expand theoretically on the concepts of precapitalism, "speculation", modern capitalism in housing production and distribution, the nature of a "dual" early capitalist system and offer some preliminary hypotheses on the socioeconomic and political factors that determine the rate and pattern of the expansion of speculative and capitalist relations. Although I am mainly concerned with the Greek case, this chapter tries to provide the widest possible scope, given limitations of material, for the concepts introduced, by using cross-country and historical references. After all, there is nothing more useless in comparative research than so-called "culturally specific" theories.

In the second chapter I substantiate with empirical material the thesis of a "dual" structure for postwar Greek urban housing, and examine the extent and socio-spatial distribution of speculative and precapitalist modes. Since the origins and socioeconomic foundations of precapitalist petty owner-building are the object of some debate, and are also essential in understanding the reasons for its decline, I discuss them separately in the third chapter. The thrust of the argument in this chapter is that popular precapitalist owner-building in Greek cities is not reducible to a residual phenomenon restricted to socially marginal "squatter" housing, but constitutes a major historical form, valued as such and based on certain distinctive aspects of Greek society and on autonomy *vis-à-vis* capitalist market influences and modern administrative controls in the allocation of urban land and economic resources. As an implication of this analysis I advance the hypothesis that the decline of this sector in the 1960's has not been the outcome of voluntary assimilation of popular resources into the market as a

result of the growth of incomes and the modernisation of consumption patterns, but mainly the effect of political and economic constraints. These alternative interpretations are examined in chapter 4 through a detailed analysis of the pattern of demand and the allocation of housing in Athens.

Given the decline in the role of precapitalist housing, the growth of speculative building is a corollary of trends in aggregate investment in housing as these are determined by postwar economic growth and the specificities of the Greek housing system and wider economy. The last two chapters examine the determinants of aggregate residential capital formation, first in relation to the broad pattern of resource allocation in Greek economic development (chapter 5) and, then, with the help of a more detailed model of household behaviour and the economics of the early capitalist housing system as a whole (chapter 6).

At a more than one point in the study the analysis of the growth of speculative building and the decline of the precapitalist mode of popular housing points to the overriding importance of the "political factor": determinant interventions by the State and the corresponding pattern of class relations, ideologies, and distributions of political power. This aspect opens up a whole new set of significant questions for research and theory that cannot be adequately confronted in this work, though they are of singular importance for the historical and comparative study of the development of capitalism in housing. In the concluding remarks of this study, I advance alongside the main arguments about the changes in the housing system, some theoretical conjectures on the nature of the relationships of ideology and conflict between social classes that were associated with these changes. The conclusions will also return to some of the general issues raised in this introduction namely the limitations of evolutionist and "Third World" theories of structure and change in early capitalist cities, and the need for more complex comparative models of the determinants of housing capital formation in "middle-income" countries in the process of capitalist development and modernisation.

# 1. Modes of Production and Development of Capitalism in Housing

In the study of periods of fundamental change we should be sceptical of explanations that project backwards, in a teleological manner, either some evolutionary process or the realisation of historical goals. We must recognise that both the dead-ends and the losers of development are a significant part of the historical process. We can thus derive more valid analogies and theories for the study of the present. This point needs stressing because current comparative studies of cities, biased as they are towards a view of historical development that culminates in modern economies of housing and public policies, have relegated a number of significant phenomena of the housing process in early capitalist cities of the past or the present to an obscure and neglected role. These are:

1. The specific nature of early capitalist housing, i.e. small-rentier speculative building, its significance for the pattern of growth and distribution of housing, and its relations to the social structure, landownerwhip patterns and politics of "developing" cities.
2. The important role in the history of cities of pre-capitalist, "simple" modes of house-building and urban development, as distinct from speculative building or the use of - even primitive - capitalist organisation in the construction "industry". Such modes are based (to use Marxist concepts) on a "petty mode of production" and limited commodity exchange relations: an economy of independent labourers and craftsmen working to order, and small owners building mainly for their own use rather than for sale or rent. It should be recognised that precapitalist housing *production* is not necessarily connected to precapitalist *land allocation* (e.g. corporatist as in medieval cities). Private property, land rent and a market in urban land have occurred very early, and for some time now are universal in capitalist societies.

The rise of the market in urban land and real property, however, does not automatically lead to the predominance of speculative production: precapitalist building may be important for extended periods in early capitalist cities.

3. The social conflicts and economic and spatial changes that are involved in the expansion of the speculative economy and the decline of "simple" popular housebuilding and corresponding property relations.

These forms of residential economy and these processes of change have been important during earlier periods of Western capitalist cities. They are of particular significance, however, for an understanding of cities in developing countries, particularly for those cases which have undergone major expansions in urban residential development and the growth of modern capitalist institutions in the postwar period, with the transition to relatively high levels of economic development and urbanisation. They have certainly been of major importance in postwar Greek cities.

In order therefore to study the problem of urban housing change in postwar Greece and more particularly the growth of speculative building - and do so in terms that would be relevant to the wider case of "transitional" countries in intermediate stages of economic development - we require some theoretical understanding of the concepts of precapitalist and early-capitalist "modes of housing production" in the context of predominantly capitalist societies; their relations to the wider social structure; and the characteristics of the overall housing system that results from the coexistence of different modes. This way, we may also surpass the pitfalls of a view of changes in housing as a mere *reflection* of wider economic changes - growth of incomes, technology, and modern public policies - which also implies a concept of the non-modern and the non-capitalist as a simple "survival" or a "residual" form, the unhappy by-product of a lack of success in development.

In this chapter I will first review some accepted theories of the housing system in early capitalist cities and question their universality and basic assumptions. Then I will clarify the concept of "modes of production" as it applies to residential development and distinguish the types of precapitalist petty owner-building, petty commodity production, "speculative" building and modern capitalist production of housing, in order to arrive at a general typology.

## 1. The structure of the housing "market" in early capitalist cities

We have been so accustomed to the accepted ideas about the capitalist city of the nineteenth century and its residential patterns, that it requires a substantial effort to go beyond them and form a more balanced historical and comparative perspective. Our concepts have been mostly influenced by the historical experience of English cities in the last century. James Vance Jr, in a remarkable paper,<sup>1</sup> has given a systematic account of the housing system of the period, drawing also from the history of other European cities. Vance distinguished this capitalist system of "land-assignment" from the precapitalist "medieval" organisation of land and employment and from "post-capitalist" systems with a high degree of state intervention. According to his argument, the rise of capitalist class structure and social institutions in early capitalist cities leads to a generalised system of allocation of land and housing by rent-paying ability and a concentration of new residential development in higher-income markets. This leaves the working classes dependent on land and housing abandoned by higher-income groups as they move to better new housing - the well-known "filtering" process. As a consequence, any increase in the rate of urbanisation would, in most cases, produce a shortage of working-class housing and a deterioration of living conditions for the majority of urban dwellers. Hence the familiar image of the city we associate with Engels' depiction of Manchester or the Chicago Ecologists of the 1930's: a stratified residential system with a hierarchy of housing situations and areas of increasing real value, rental cost and social class ascription, where residential growth takes place at the one end, and slum conditions and stagnation prevail at the other.

Such a housing system is *integrated-hierarchical* in two senses. First, on the level of the *allocation* of existing housing stock, there is an overall market of houses which, on a set of common criteria, distinguishes a series of housing stock classes with different rents: these are

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1. James E. Vance, Jr, "Land Assignment in the Precapitalist, Capitalist and Post-capitalist City", Economic Geography, 17, 2 (1971): 101-120.

allocated to the various income classes competing for the housing stock with priority running from top to bottom in the income hierarchy. Second, on the level of *production* of new stock, building responds to the market values and shortages formed through the aforementioned stratified competitive mechanism, and does so, moreover, mainly for the higher-income segments. Given a sufficient expansion of the income and population demand for new housing in this system, and the prevalence of exchange-values, the predominance of a speculative building sector becomes, given sufficient resources, a natural corollary of the overall "model". The operation of this "capitalist" pattern of the formation and allocation of new residential stock implies, or rather encourages, an analogous mechanism of commodity production.

The model we have been describing is based on a number of particular assumptions. First, it assumes a unitary mode of housing production. Second, it assumes the *sociological* fact of the dominance of exchange values and of a consensus among social classes with regard to the available housing situations and their value. This consensus may be voluntary or a practical adaptation effected by an economic class of land-rentiers controlling urban property, and by the operation of a system of capitalist rent. In the latter case, there is a further basic assumption of the model, implying certain conditions of economic differentiation and a certain distribution of ownership of land and housing.

The conditions that would realise this series of fundamental assumptions, however, are neither necessary nor universal in early capitalist cities, but vary historically and among countries. Non-market valuation and non-capitalist production of housing for use by households of lower social strata owning urban land has been, and still is, a widespread phenomenon. This is based on conditions of urban landownership and economic differentiation that diverge significantly from the ones assumed above.

To be more precise: a diffuse distribution of landownership and institutionalised rights over the free use of land among broad segments of the urban population, particularly the lower-income strata, and a lack of differentiation of the roles of landowner/producer/user, similar to a small peasant economy, would permit a widespread precapitalist production and distribution of housing which may take place alongside speculative-

capitalist building proper. This would lead to what we may call a *dual* housing system with regard to the principles of production and allocation. Existence, however, of different modes of housing production related to particular social strata and, consequently, the operation of relatively *autonomous* processes of growth and distribution in the different places of the social and spatial structure leads to the necessary conclusion that neither overall market integration nor hierarchical allocation of housing and land can be assumed as the fundamental principles of the early capitalist housing economy. This poses the problem of the analysis of residential growth and change on a wholly different basis.<sup>2</sup> This is especially significant for the *class* distribution of the housing product and the access to space of lower-income groups where petty precapitalist production tends to be concentrated. But it is equally important for the formation of total housing "investment" and its spatial distribution.

It is somewhat surprising that a model of a totally "integrated" housing market (or, as Vance would put it, a "generalised" one), exclusively dominated by speculative production, has come to be generally associated with the structure of early capitalist industrial urbanisation. After all, the English experience from which it is mainly derived is

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2. The assumptions of "vertical integration" and hierarchical allocation according to rent-paying ability in a competition process are the cornerstones of current housing market models. For instance, see W.G. Grigsby, Housing Markets and Public Policy (Philadelphia, 1963) and Wallace Smith, Filtering and Neighborhood Change, Research Report No. 24, Center of Real Estate and Urban Economics, Univ. of California, (Los Angeles, 1964). Models of the "spatial structure" of the housing market (land and ground-rent distribution) are similarly based on assumptions of integrated capitalist markets and hierarchical allocation (for a review of the more well-known models, see E.S. Mills, Studies in the Structure of the Urban Economy (Baltimore, 1972), pp. 63-80). The fact that the current models of the structure of the land market and ground-rents are based on certain very limiting assumptions about the mode of housing supply is seldom realised. Though a generalised market of land property may exist even when the supply system is not economically unified and integrated, in a "dual" system of semi-segregated economies of building the *structure* of land allocation and ground-rents will be largely different. We cannot go into this now, but we may say in passing that to the degree that sectors of housing supply are of limited spatial mobility and consumers are not neutral towards housing types and areas, the assumptions of models of capitalist land market and land rents are substantially undermined. In connection to this, see Appendix 6.1 and chapter 4.



rather exceptional in nineteenth-century urbanisation, though perhaps with similarities in patterns of tenure and urban landownership with most European urban centres. In North America a strikingly different pattern can be clearly discerned. Diffuse access to landownership, household-controlled building, and, therefore, supply of housing outside speculative production and a stratified market of old structures has been widespread among the lower middle class and the working class in the nineteenth and twentieth centuries, especially in smaller urban centres.<sup>3</sup> The most important outcome of such a residential political economy was the radically different rates of access to house ownership of the American and the English proletariat. The latter has been stereotypically (and quite rightly, at that) described as the victim of a ruthless housing market, high rents and extreme scarcities.<sup>4</sup>

Higher wages, and therefore a certain ability to save on the part of the working classes of the New World, made some of the difference. Growing economic resources, however, would have been dissipated in a housing system of high rents and limited speculative supply, if popular

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3. Gotlieb, Long Swings in Urban Development, p. 140, refers to the widespread practice, in the U.S., of custom-building in privately procured lots. Speculative production of urban housing in the U.S. has begun to play a predominant role only by the turn of the century and increased fastly during the 1920's boom; (Clarence D. Long, Building Cycles and the Theory of Investment, Princeton, 1940, pp. 187-88). User-owner-controlled building was still quite widespread during the 1930's; see L. Grebler, Production of New Housing (New York, 1950), p. 7. Even in the 1960's, owner-built housing, as distinct from contractor-built or developer-built, accounted for 20% of new single housing and 12% of all new housing; most of it was built in rural areas, but still, as much as one-third in the periphery of metropolitan areas (W.C. Grindley, "Owner-builders: Survivors with a Future" in Freedom to Build, ed. by J.F.C. Turner & R. Fichter, 1972, New York, pp. 3-21). For the extensive role of user-controlled building in postwar France, see C. Topalov, Les Promoteurs Immobiliers (Paris, 1974), p. 52.

4. Stephan Thernstrom in his Poverty and Progress: Social Mobility in a Nineteenth Century City (Cambridge, Mass., 1964), contrasts the English experience, recorded by Engels, Rowntree, Booth and others, where working-class home ownership was virtually non-existent (in most cases well under 1%!) and American urban centres around 1850-1880. In the case he studied, "real estate was strikingly available to working-class men who remained in Newburyport for any length of time" (p. 117). Actually, the proportion of owners after 20 years of residence rose to 60-80% (p. 117). This growth of house property was based on family-controlled building on owned land with the help of small personal savings.

access to urban peripheral land and the reproduction of petty owner-building outside the market was not an established historical form. We are familiar with the effects of easy access to land and a high degree of competition among landowners in America, in contrast to the Continent, on *agricultural* rents, prices, and production.<sup>5</sup> It is unfortunate that the implications of similar patterns in relation to land in the *urban* periphery have not been sufficiently explored. As Manuel Gotlieb has pointed in a passage pregnant with theoretical insights,

"The greater partitioning of land ownership in America, the infrequent use of the long-term ground lease, the policy of overdevelopment or the creation of pockets of vacant land in or around growing cities, and our system of property taxation of vacant sites perhaps induced a lower mean level of site values or a lesser difference between agricultural and urban land values, than in Europe where the tradition of land appreciation had deeper historical roots, where land on city outskirts was often laid out in princely holdings, and where land dealing was more of a professional business pursuit."<sup>6</sup>

Popular access to urban land, in itself, does not secure substantial non-capitalist housing supply unless accompanied with established *rights* to built in a manner independent from restrictive and costly controls. Differences in effective public restrictions and controls over popular house-building between U.S. and European cities seem a

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5. Hence the puzzle presented to European economists by the peculiarities of the "strange" American system of easy access to land, and the collapse of agricultural rents from the third quarter of the nineteenth century onwards in Britain and the Continent due to competition from rent-free lands of the new countries: Arghiri Emmanuel, Unequal Exchange (London, 1972), p. 238.

6. Gotlieb, Long Swings in Urban Development, p. 142. The differences in the levels and behaviour of ground-rents (specifically, *absolute* ground-rents) in the history of urban growth in the U.S. and Europe has been noted also by Karl Pribram, "Residual, Differential and Absolute Urban Ground Rents and their Cyclical Fluctuations", Econometrica, 8 (1940): 62-78. This does not necessarily contradict the occurrence of huge land gains and values (which at the time caused the well-known critique of Henry George and his disciples). Even if "absolute" ground-rents are low (depending on the existence of monopoly power over new development land), *differential* rents and *development values* in areas of intensive speculative development can be very high.

further important determinant of contrasts in housing systems; European cities, particularly the great capitals, had a long tradition of aristocratic anti-urbanism effected through severe restrictions on urban growth and on house building for the emerging proletariat.<sup>7</sup>

Thus, the "American" model would seem to cast strong doubt on the universality of the accepted concept of the housing system in the early capitalist city. The evidence of present-day cities in developing countries of similar stages of development and urbanisation should have shifted the emphasis decisively. Market provision and speculative building incorporate only a part of urban housing, even in relatively high-income developing countries (see Introduction). Moreover, there is by now ample international evidence on the extensive role of popular petty-ownership and owner-building outside capitalist relations, of which the most publicised part has been "squatter" housing. Even if legal forms of autonomous popular owner-building are not as well documented, the size of squatter populations in some cities, the recurrent incorporation and legalisation of squatter areas into "normal" urban growth, and the *institutionalisation* of such "self-help" housing through programs of provision of sites and services should have led to the realisation of the existence of a different economic mode of housing of a historical character that goes beyond the colourful "deviance" of squatters.

A number of reasons may explain why this broader theoretical formulation is generally lacking. The most important is the exclusive focus on the process of "squattng" and the "marginal" poor associated with

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7. Severe building controls against new housing for the poor were in effective operation in London since the Elisabethan Era (instituted first in 1580). (Doroty George, London Life in the Eighteenth Century, Penguin edition, London, 1965, p.78). As Raymond Williams comments, "It is ironic to reflect that much of the physical squalor and complexity of eighteenth-century London was a consequence not simply of rapid expansion but of attempts to control that expansion" (The Country and the City, (London, 1971, p.145). Antipathy for industrial urbanisation and the growth of urban proletariat and policies of growth control, slum clearance etc. were common throughout European Capitals of the Victorian period. The latter, after all, were the strongholds of non-industrial parasitic aristocracies of land and Government. See for a review, Victor Kiernan, "Victorian London: Unending Purgatory", New Left Review, 76 (1972): 73-90.

it, to the effect that the wider issue of popular housing and its economy in the context of urban growth has been approached through the distortion of official definitions of the "problem".<sup>8</sup> Ideologically motivated emphasis on the "social problem" aspect, be it the violation of property rights and building controls or "slum" conditions, can hardly be the basis of adequate conceptualisation and valid comparisons. After all, on an *ad hoc* modern view we may characterise as "slums" or illegal-uncontrolled settlements almost *all* historical forms of popular housing, or, at that, present-day village housing in most countries!

Even when the historical typicality and persistence of non-market and non-modern forms of housing production in "transitional" societies is realised, these forms are most often not understood as important phenomena in themselves, but as a reflection of the structural peculiarities of the overall economic organisation of cities, namely the existence of masses of low-income migrants with instability of employment, poor integration in the industrial sector, and mainly occupied in "informal",

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8. The language used is very instructive: "marginality", "illegality", etc., not to mention the concerns over the alleged revolutionary leanings of squatter settlements. Hence, the whole subject is overburdened with a problematic of "integration" into normal housing and social life. For a review of the political assumptions of approaches to squatter housing, see Lila Leontidou Emmanuel, "Squatter Settlements: A Bibliography of Controversies", Unpublished Paper, Department of Geography, London School of Economics (London, 1973). The amassing evidence on "cross-cultural" residential patterns has led urban geographers into acknowledging the normal character of "squatter" housing and its association with a broad spectrum of lower and lower-middle-class strata in developing countries; see for instance, R.J. Johnston, "Towards a General Model of Intra-urban Residential Patterns: Some Cross-cultural Observations", *Progress in Geography*, 4 (1972): 85-124. Johnston, however, goes to the other extreme: he negates the *specificities* of such situations with respect to class structure and housing mode (and real conditions) and *equates* them with middle- and lower-income areas in advanced industrial countries. They supposedly reflect the same social "ethos", tenure and spatial position. This is grossly unhistorical. It is the outcome of a tradition of urban studies which by a *reflectionist* method relate a statistical and unconceptual "stratification" pattern with cartographers' "space". Comparisons of subjective orientations out of economic and social context can hardly be considered an advance towards more knowledge in these matters.

non-modern, service and petty-production activities.<sup>9</sup> Since I have already touched on these points in the Introduction, and since little of interest can be said about those misconceptions that stem from normative definitions of what constitutes "normal" modern housing, I will comment only on problems in theory and method that the view described in the last paragraph raises.

The use of the theory of the "Third World" city or wider models of "underdevelopment" in explaining housing conditions and organisation raises a general question: is the history of housing, particularly working-class housing, determined by the structure and development of the capitalist system at the *societal* level? There are reasonable grounds for preferring such a general working hypothesis instead of the unhistorical minutiae of specialised housing economics; its heuristic and explanatory value can be judged then on the strength of evidence. As it happens, however, such an economic *reductionism* has passed unquestioned. We have already referred to the accepted idea that the organisation and conditions of housing in nineteenth-century Britain typify the necessary outcome of early capitalist urbanisation *in general*. Marx, Engels, and a host of progressive historians have put their authority behind this view. Thus the particular institutional and urban-economic conditions of the country and the period have not been taken into full account.<sup>10</sup> We have already pointed to the specific assumptions that are

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9. This thesis has been more clearly stated in A.G. Frank, "Urban Poverty in Latin America", I.L. Horowitz, (ed.), Masses in Latin America, (New York, 1970): 215-234.

10. This issue has been greatly obscured by the debate between Conservative and Progressive historians over the effects of industrial capitalism in the early nineteenth century on the standards of living of the English working class. I find myself in the unhappy position of having to side with the Conservatives on the issue of housing conditions; extremely poor conditions and speculative over-exploitation were to a large extent the product of the specific characteristics of the English building economy of the period, and thus not wholly the systematic product of the structure of the early industrial system. T.S. Ashton stresses high prices of imported materials, scarcities caused by the Napoleonic Wars and State controls and taxation. See Capitalism and the Historians, ed. by F.A. Hayek (Chicago, 1954) for the Conservatives' arguments and Ashton's article "The Treatment of Capitalism by Historians", pp. 31-61. A most balanced evaluation of the evidence concerning the debate (not, however, housing) is E.J. Hobsbawm's "The British Standard of Living, 1790-1850" in his Labouring Men (London, 1964, paperback 1968): 64-104. For a bibliography see p. 124 in the same.

behind the corresponding model as systematised by Vance. A similar simplistic approach seems to be prevalent, however, among current studies of urban conditions in "underdeveloped" countries, where the concepts of "Third World" city, "urbanisation-without-industrialisation", and "parasitic" primate cities have been developed in order to account for the character of early urban capitalism in these conditions, and explain in turn the housing situation. As a result, significant variations in housing structures have been ruled out, at least as an important theoretical issue in comparative analysis.

Part of the problem lies deeper. Are we to use the concept of "capitalism" as a "model" of a determinate social system, perhaps with certain major sub-types, universally applied to broad categories of countries - say "developed" or "peripheral-underdeveloped" - in order to explain concrete situations? Or should we, in the tradition of Marx, distinguish the "model" as an abstract theory, from the variety of social systems - or "social formations" - that may be found in particular times and places and which are the product of the combined history of different modes of production and class structures? The former view has been associated with a number of historical theories, from Pirenne and Adam Smith to some modern Neo-Marxists, that attribute the emergence of capitalism and the formation of a fundamentally uniform series of systems to the diffusion of the capitalist *market* and the growth of the urban commercial bourgeoisie. This view has been criticised on the grounds that it involves a concept of capitalism and its genesis which pays near-exclusive attention to processes belonging to the sphere of exchange rather than production, and that it lacks the necessary emphasis on changes in the ownership structure, the extinction of independent small producers and the rise to predominance of wage-labour and a class of capitalists directing production along the prototype of industrial organisation.<sup>11</sup>

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11. These issues have been raised in the course of arguments over the passage from feudalism to capitalism in Europe. See the papers collected in The Transition from Feudalism to Capitalism (London, 1976). Maurice Dobb has been the major exponent of an emphasis on production relations in the concept of capitalism (mainly in his Studies in the Development of Capitalism, London, 1963:, ch. 1). The critiques levelled against those stressing the growth of trade and towns in the rise of capitalism (e.g. Pirenne, Sweezy), have been lately directed also against some current Neo-Marxist theories of capitalist development (or "underdevelopment") in

Marx, however, has directed our attention to the class struggles and political processes in history that are connected with the development of capitalism, with his celebrated analysis of "primitive accumulation" - the extraction of surplus from the precapitalist economies of rural peripheries and the colonies, the expropriation of small producers, the usurpation of land, the enclosures.<sup>12</sup> Similarly, the particular outcomes of agrarian class-struggles and revolutions have been emphasised as a crucial "variable" in an adequate explanation of the rise of capitalism and its subsequent economic and political character.<sup>13</sup> Whereas the concept of "primitive accumulation" points to the importance of an initial process of concentration of capital and the destruction of independent petty-production for the development of capitalism, the latter may very well be hindered by a tradition of large parasitic "feudal" property, and therefore be facilitated by an agrarian revolution that creates a class of small and middle holders. The importance of such different "paths", depending on conditions of class structure and political institutions, and different historical articulations of modes of production, is clearly overlooked by any blanket application of a universal concept of a capitalist "system" emerging with the expansion of trade and the incorporation of peripheral regions.<sup>14</sup> The deterministic and uniform use of models of "Third World" capitalist urbanisation has carried over much of the crudity and assumptions of such applications.

The importance of different historical patterns of class structure with regard to landownership distribution, the status of petty production and petty-bourgeois strata and the associated political institutions

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backward countries (namely these of A.G. Frank, Sweezy, and I. Wallerstein). See E. Laclau, "Feudalism and Capitalism in Latin America" ch. 1 in his Politics and Ideology in Marxist Theory, and R. Brenner, "The Origins of Capitalist Development: A Critique of Neo-Smithian Marxism", New Left Review, 104 (1977): 25-92.

12. Karl Marx, Capital, Moskow edition, vol. 1, part 8.

13. See the articles by M. Dobb, "A Reply" and K. Takahashi "A Contribution to the Discussion" in the Transition volume, pp. 165-169 and 68-97 respectively.

14. This has been especially stressed in the criticism of theories of underdevelopment as the quasi-automatic effect of world-wide diffusion of capitalist markets, to the point of gross undervaluation of the role of local class structures (see, Brenner, "The Origins of Capitalist Development").

not limited to the rural sector where these aspects are obviously relevant: in unitary States the same aspects influence relations of national scope. It is certainly so in the institutions and politics of land and the rights of small property; but it is also so for the urban economic processes that link cities with the rural periphery - the relations created through migration, the role and character of smaller urban centres, and the processes of conversion of land from rural to urban uses in the process of urban growth. I have already referred to significant historical variations in the distribution and control of urban land and access to petty-ownership. Different national histories and outcomes of class conflicts over the land question and the status of petty production in present-day developing countries seem to influence significantly the political economy of urban growth and residential development, though systematic material is rare.<sup>15</sup>

An explicit recognition of a wider set of possibilities in terms of systems of housing production and distribution seems especially necessary for an understanding of early capitalist systems with a "dual" structure where a modern capitalist-speculative building economy expands in the context of extensive precapitalist petty production and relatively diffused landownership. Such a formation has wide empirical relevance, most probably greater than the more systematically studied experience of nineteenth-century European cities. Nevertheless, it has seldom been properly conceptualised in the otherwise rich literature on "Third World" cities. We now turn to an examination of the theoretical elements involved in the analysis of such urban formations.

## 2. Early capitalist modes of housing production: capitalist-speculative and popular petty owner-building

Conceptualisation of the economic structure of housing presents a number of problems due to the fact that between the initial labour process of construction and the final consumption of housing "services"

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<sup>15</sup>. A particularly important structural aspect that may vary significantly seems to be the degree of concentration of landownership.

"In Latin America, the Philippines and other areas once governed by Spain, concentration is partly a carry-over from the haciendas and large agrucultural estates in the Spanish tradition. Some of these estates have moved into the urban orbit"

(Charles Abrams, Man's Struggle for Shelter in an Urbanising World, Cambridge, Mass., 1964, p. 55).



a number of interwoven processes take place and a number of economic roles are involved. There are also wide differences in the institutional and legal arrangements that are related to particular types of housing in various countries. Lastly, the very nature of housing as a physical "good" or "use value" is not clear; this has led economists to endless disputes over whether it should be allocated to the category of capital goods or consumption goods. In current economic practice these issues are resolved by some *ad hoc* analytical or accounting definition with an aim to uniformity in relation especially to the construction of National Accounts. Usually a class of "housing producers" is assumed, owning residential capital and supplying housing "services" to consumers in exchange for payments of rent; in order to invest in new capital these producers buy structures as capital goods supplied by the construction industry and land supplied by landowners.

The division of labour thus outlined can be said to form a "pure" market economy of full commodity-exchange relations in *all* spheres of the housing process, since it is usually assumed that in construction labour and capital are similarly fully separated, the former offered in the market as a commodity in exchange for wages.<sup>16</sup>

In the real world, of course, consumers and housing investors might be the same persons (owner-occupiers) and there may be a class of capitalists ("developers") producing houses as commodities (including land). In some cases owners of urban land perform the latter role. More significantly, all four roles - landowner/producer/house-owner/consumer may overlap substantially.

For accounting purposes these complexities may be immaterial, although they create some problems in the correct calculation of imputed rents and values when these do not arise in monetary form. In terms of a theoretical model of the real process of housing and the behaviour and relations of various actors, however, such "complexities" can lead to greatly varied results. We therefore need models of precapitalist and early capitalist housing systems that diverge in specific ways from

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<sup>16</sup>. Such a "pure" set of assumptions has been most lucidly formulated by Richard Muth in his general model of the residential economy (Cities and Housing, Chicago, 1969, ch. 3).

the "pure" model of commodity exchange relations and a modern differentiation into economic roles. This necessarily involves both conceptual clarification and empirical-historical relevance. Let us proceed step by step.

To begin with, we must dispense with the notion that a systematic typology of housing economies can be based on the form of the use and allocation of urban land and housing stock. We may have a market that is "*integrated*" in the sense of being formed by interdependent segments (as in the "filtering" model) related through uniform prices (or structured differentials) and movements of people; or it may be *compartmentalised* into client-specific and localised segments with little interdependence. The relative role of rental and owner-occupation submarkets is a further basis for distinctions. Lastly, substantial areas of non-market allocation may exist, namely, simple owner-building for use. Thus, we may have an extensive variety of types according to the morphology of the system of the use and allocation of land and stock. The structure of this system, however, tells us little without a knowledge of the system of housing *production* and is to a very large extent determined by the latter. We have already spoken of the simplistic assumptions about ownership and production of the "filtering" model. The degree of "integration" is itself related to the development of commodity relations, the role of ground-rents and the mobility of speculative capital. Variations in tenure largely depend on ownership of land and capital. Lastly, non-monetary relations of allocation are but another aspect of precapitalist production. After all, prices themselves are determined mainly in the plane of production and the relative role of the various claims over the distribution of the product made by land, capital, and labour, which, in turn, depend on the particular mode of production.

Types of housing production, furthermore, tend in history to be systematically related to the social classes and geographic zones of cities. Small-scale precapitalist building is fundamentally associated with the working class or other lower-income strata - in general "popular" strata. Although independent owner-user-controlled building for middle and upper strata may exist, when a substantial speculative sector grows it will tend to be concentrated in these higher-income groups, rendering non-

speculative middle-class housing secondary in absolute numbers (albeit important for the spatial structure of urban growth).<sup>17</sup>

Thus on the level of general theoretical concepts and comparative typology, the "mode of housing production" is the important analytical unit. For the analysis of concrete historical situations and processes of change we may employ more specific units interrelating modes with parts of the social and spatial structure of the city. We may define such complex socioeconomic units as housing *sectors* encompassing alongside modes of housing production certain types of "demand", i.e. sociospatial groups, and furthermore, institutions, ideologies and interests connected to a housing mode and its related social classes.<sup>18</sup>

17. The fundamentally middle-class character of early speculative building is well known.

"The third quarter of the nineteenth century was the first world-wide era of urban real-estate and constructional boom - for the bourgeoisie... Paradoxically, the more the middle class increased and flourished diverting resources towards its own housing, offices, the department stores which were so characteristic a development of the era, and its prestige buildings, the less went relatively to the working-class quarters, except in the most general form of social expenditure - streets, sanitation, lighting and public utilities". (E.J. Hobsbawm, The Age of Capital, 1848-1975. London, 1975, paperback edition 1977, pp. 249-250).

18. Our concept of housing "sectors" has certain affinities with John Rex's later formulations of his theory of "housing classes". These are conflicting housing systems that crystallise around them housing interests, social classes, ideologies and political institutions. His description of the conflict between "property-owning democracy" (with an emphasis on the owner-occupier sector) and a system of public housing provided as a right and opposed to the capitalist process in land and housing allocation, is a case in point. In Rex, however, one cannot find the slightest reference to housing or land economics, a fact that makes his model rather weak. His earlier formulations of the concept of "housing class" were related more to the Chicago model of the city - a hierarchically stratified, competitive (and not antagonistic) system of housing allocation, with a unified system of housing valuations (essentially the usual model of the early capitalist city, as in J. Vance, Jr.). Rex has been criticised for his assumptions of an integrated social system (i.e. a universally accepted scale of housing values), and had later revised his initial concept. A similar critique can be levelled against unwarranted assumptions of social integration in accounts of early capitalist systems with substantial precapitalist sectors (the "alternative-antagonistic" system here is not provision by the State, but autonomous family owner-building and non-

A certain interconnection between modes of housing production, housing sectors and patterns in the use and allocation of land and stock may be understood as a specific housing "system".

Having introduced the concepts of housing "sectors", "systems" and their relation with modes of housing production, we must now turn to a more analytic conceptualisation of the latter in the sphere of housing and the description of those modes relevant for early capitalist cities. We may designate as a mode of production in accordance with the Marxist usage of the concept,

"the logical and mutually coordinated articulation of; 1. a determinate type of ownership of the means of production; 2. a determinate form of appropriation of the economic surplus; 3. a determinate degree of the division of labour; 4. a determinate level of development in the productive forces. This is not merely a descriptive enumeration of isolated "factors", but a totality defined by its mutual interconnections. Within this totality, property of the means of production constitutes the decisive element... (since it) determines the forms of the canalization of the economic surplus and the effective degree of the division of labour, the basis in turn of the specific capacity of the productive forces for expansion".<sup>19</sup>

On the basis of this rather demanding definition, even speculative building, utilising concentrated capital for the production of housing as a commodity (as exchange-value), falls short of capitalism proper - certainly so if our point of reference are the characteristics of industrial capitalism. Indeed, some Marxists have voiced strong doubts if, in general, commodity production organised by *merchant* capital through relations with independent small producers (as, say, in the "putting-out" system) could be called capitalist or even consi-

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commodity relations). For the initial formulation of "housing class" see, J. Rex & R. Moore, Race, Community and Conflict (London, 1967), pp. 36-41. As for the later one, see J. Rex, "The Sociology of the Urban Zone of Transition" in R. Pahl (ed.), Readings in Urban Sociology (Oxford, 1968): 211-232, and his review of criticisms of the earlier model, "The Concept of Housing Class and the Sociology of Race Relations", Race, Colonialism and the City, (London, 1973): 32-42.

<sup>19</sup>. Ernesto Laclau, "Feudalism and Capitalism in Latin America" in his Politics and Ideology, p. 34.

dered as leading to capitalist development (i.e. extended use of wage-labour *directly* organised by capital).<sup>20</sup> Speculative building, historically, has been notoriously primitive in comparison to industry; it is normally based on small work groups externally contracted, and dominated by commercial short-term motives (thus "speculative"). But we will take up these issues later.

For now it suffices to say that from the point of production as a whole, house-building for the market does not necessarily imply a capitalist mode of production. (Production for the market should be understood in contrast to the one aimed at the *use* of housing either by the labourers themselves or, more commonly, by those controlling resources and the building process: the user-producer). Most students of early capitalist cities would agree that the bulk of residential building has been based on what is termed by Marxists as a "petty mode of production" that is, an economy of independent labourers (or smallish groups for contract work), owning their tools as their own property and freely exchanging their product (in this case structures). Even when such a construction economy is utilised by small-scale capital for the building and exploitation of a few houses through rent or sale we hardly go beyond a "simple commodity economy" - essentially a precapitalist mode (though perhaps one of incipient capitalism) for residential production as a whole. Thus even in the context of full commodity relations we may have an extensive sector of essentially precapitalist petty-building, for instance the erection of two or three houses by land owners or builders of small capital in order to rent them to working-class or lower middle-class families.<sup>21</sup> Such a mode presents certain continuities with more substantial speculative building, which, after all, is itself a rather primitive form of capitalist production in the context of early industrial cities. The use of more concentrated capital and a higher level in the organisation of construction, however, set the latter apart.

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20. Kohachiro Takahashi, "A Contribution to the Discussion", in the Transition volume, and more specifically pp. 90-93.

21. Such a housing economy seems to have prevailed in early nineteenth-century Britain. See, H.J. Habakkuk, "Fluctuations in House-building in Britain and the United States in the Nineteenth Century", Journal of Economic History, 22 (1962): 198-230.

Far more radical are the differences between the speculative capitalist organisation and a widespread *non-commodity* precapitalist production where the building process is controlled by small owners of land (and capital) aiming at their own use (though some marginal elements of renting or exchange may coexist). In such a "*petty owner-building*" mode, a "petty mode or production" follows as a natural corollary; it is not, however, the most important determinant element; diffuse landownership, a family organisation of the utilisation of land and the accumulation of capital, the predominance of "use-values" and, of course, owner-occupation are also essential aspects. Land, and at some later stage even structures, may be sold and bought as private property: but their valuation lies outside the market of "factors" for speculative-capitalist production and the economic calculation of profit and ground-rent as specific economic categories.

It may be objected that we conceptualise the "petty owner-building" mode by aspects that largely involve the sphere of exchange as distinct from production. This distinction is indeed crucial for a correct understanding of modern capitalism as different from forms of mercantile capital. The relevance of this is obvious for the analysis of the speculative housing mode as distinct from modern capitalist organisation. We should not carry this rationale, however, into the problem of defining modes of *precapitalist* economy. Housing production, after all, is not limited to the construction process only. Ownership and control of land and the capital value of structures are hardly separable from the whole process of creation of housing services. A misplaced emphasis on construction sometimes leads to an equation of non-commodity production with conditions where direct family labour is predominant in the labour process. Though participation of family labour may be an important component, mainly in more underdeveloped societies, it cannot be *the* defining element, for this would limit drastically the significance of precapitalist modes in urban situations.

Petty owner-building should be sharply distinguished from petty *commodity* production in housing. This is again a matter of avoiding an excessive emphasis on the construction aspect, with respect to which both modes are more or less similar. In a broad perspective both cases are precapitalist but it is better to distinguish the second one as an intermediate type,

or as a form of primitive speculative production, since they differ in essential aspects. In addition to the absence of the sale motive in the first case, the land factor does not enter the process as a socially structured *claim* for capitalist ground rent: nor does the profit logic and the costs/returns accounting, typical to an even primitive commercial venture, predominate in the accumulation of housing capital. Though a market of land and labour may exist, the situation is not dissimilar, in the case of urban growth through petty owner-building, to a rapidly growing small subsistence agriculture of "frontier" settlements.

The significance of the distinction between a petty mode of incipient capitalist nature and a household production/consumption economy of small-holders we just made for housing, has been recognised in the long debate over the nature of the peasant mode of production. It has been rightly pointed out that the Marxist concept of a "petty mode" or "simple commodity production" applied to small-scale family agriculture, if helpful to a degree, is too general and underestimates the peculiarities of the peasant family economy, i.e. its gearing to the family life-cycle, the effects of inheritance and family intergenerational assistance (e.g. dowries), the rationale of the balance within the family of resources and the costs of increased effort in any considerations of accumulation (elements, I may add, that I find crucial for the family housing process too). It also underestimates the positive economic and social functions of the family economy and thus the forces that make for its persistence outside the orbit of the capitalist sector.<sup>22</sup>

The importance of the family economy should not be limited to rural areas. Even in Western advanced countries before the First World War a substantial part of material needs and services for the working classes were provided for by household production. The increased spread of wage labour - particularly for women - capitalist competition and public

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22. The idea of the "peasant economy" as an economic system *sui generis* has achieved quite some currency in present-day economic studies. It derives mostly from the work of A.V. Chayanov, a Russian agricultural economist of the mid-war period. For a very illuminating review of Chayanov's ideas, see, Basile Kerblay, "Chayanov and the Theory of Peasantry as a Specific Type of Economy", in Teodor Shanin (ed.), Peasants and Peasant Societies (London, 1971): 150-160.

regulations introduced either for reasons of hygiene or simply administrative control, standardisation and taxation, have largely eroded such non-commodity relations.<sup>23</sup> Popular household production outside the capitalist market network is certainly a vital phenomenon in present-day cities of developing countries. Housing, after all, by its very nature does not offer itself to great "economies of scale" or economies of standardised capitalist production, as the persistence of small-scale house-building or even family-controlled building in that most competitive and aggressively capitalist of countries, the United States, testifies (see note 3.).

Let us now turn to speculative building and modern capitalist production of housing. Two questions are of fundamental importance in our construction of a theoretical typology: can building for the market as is found in early capitalist cities be subsumed under a more general mode of capitalist housing production, or does it differ systematically from the modern prototypes of private housebuilding in advanced economies? And if, as we have already suggested, a "speculative" mode has distinctive characteristics, what are these and what are the conditions that make for the emergence and functioning of such an economy?

### 3. The small-rentier speculative mode of housing production

Even the more common and narrow definitions of "speculation" and "speculative building" convey an important part of the economic essence of this mode. For speculation we read: "to profit by the rise or fall in the market value, as distinct from regular trading or investment" or to profit from enterprises "of venturesome kind or risky nature, but offering the chance of great or unusual gain"<sup>24</sup>. For speculative building: "building houses in anticipation of the demand for them".<sup>25</sup> It is the

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<sup>23</sup>. For the story of these changes in the U.S., see, Harry Braverman, Labor and Monopoly Capital (New York, 1974): ch. 13.

<sup>24</sup>. The Shorter Oxford English Dictionary (Illustrated Edition, Oxford, 1964).

<sup>25</sup>. Dyos, Victorian Suburb, p. 122.



derogatory "distinct from regular trading or investment" that points to the reasons for which speculative building in the context of the nineteenth century has been considered more of a social problem than a particular form of economy the emergence of which transformed urban growth. In the first years of the last century very little was built on speculation (i.e. for unknown demand) even in London: by 1850, in contrast, very little was built on order.<sup>26</sup> And by then, as Marx quoted from a testimony of 1857,

"...a man who wishes to rise in the world can hardly expect to rise by following a fair trade... it is necessary for him to add speculative building to it, and that must be done not on a small scale".<sup>27</sup>

What are the conditions for the emergence of an extensive speculative housing sector and what are its particular characteristics that distinguish it from the modern capitalist organisation of residential development?<sup>28</sup> Let us list a number of essential points:

26. Karl Marx, Capital, vol. 2, p. 238. The English case should be viewed as rather untypical. A speculative residential and land economy has risen exceptionally early in English history. In London, speculative building could be found even at the time of the Great Fire. It has expanded rapidly during the later part of the sixteenth century and onwards (M. Dorothy George, London Life, p. 87).

27. Marx, Capital, vol. 3, p. 774.

28. In my account of the general and systematic traits of early speculative residential production, I have drawn from a number of studies on the economic history of housing in Britain and the U.S. and my study of the Greek residential economy. I will not try to give detailed references for all the propositions advanced in this chapter (the Greek case will occupy us, anyway, in the rest of this work). After all, at this stage I am mainly concerned with the construction of a tentative "theory-model" of speculative and "dual" economies. Such an operation (which is a prerequisite for systematic research aiming at more general conclusions), is, by nature, somewhat eclectic with empirical material and more concerned with theoretical consistency and elaboration of convincing concepts. Research will demonstrate *afterwards* the capacity (or lack of such) of theory to generate more convincing arguments or more fruitful new problems than other theoretical alternatives. This concept of theory as "research program" aiming at a "progressive problemshift" in a given field (vs. a "degenerating" one) is advanced in Imre Lakatos, "Falsification and the Methodology of Scientific Research Programmes", in I. Lakatos & A. Musgrave (eds.), Criticism and the Growth of Knowledge (Cambridge, 1970): 91-196.

The most helpful sources on the economic history of speculative building have been the following: Marx, Capital, vol. 2, pp.237-239; vol.3, pp.773-81;

1. Speculative building as an established economic activity is essentially the production by a class of entrepreneurs of houses as finished commodities for exchange in the market as a response to a demand for real estate investment or owner-occupation. A mature sector of building businesses presupposes a certain separation of the capital that organises residential development, and partly finances it, from the mass of small one-time ventures of investment in and development of rentable property. By the same token it implies a certain level in yearly activities - reflected in the increased size of the building projects or the number of projects undertaken - in order that speculative builders qualify as an effective category of "capital".
2. Therefore, some concentrations of capital with regard to both the organisation of the building process and the financing of development, either personally accumulated or based on savings mobilisation mechanisms (which may be informal, associational, or institutions of mortgage credit), is a historical precondition for the growth of a speculative sector.<sup>29</sup>
3. It is a fundamental characteristic of early "capitalist" building, however, that concentration of capital either in firms or in social institutions - like mortgage and savings associations - and the concentration of capital in utilities and infrastructure development (public or private), remains at low levels for the greatest part of the residential sector.<sup>30</sup> That, furthermore, this capital is *local* and *autonomous* in that it is not integrated in a developed capital-market (which is, of course, partly a corollary of its low level of

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Grebler et al., Capital Formation; Dyos, Victorian Suburb; Habbakuk, "Fluctuations in House-Building"; Pribram, "Residual, Differential and Absolute Urban Rents"; These I have already mentioned. Of great interest are also, M. Bowley, The British Building Industry, (Cambridge, 1966), A.A. Nevitt, Housing, Taxation and Subsidies (London, 1966): chs. 1-3, Lloyd Rodwin, Housing and Economic Progress (Cambridge, Mass., 1961) and the exhaustive monograph by H.W. Richardson & D.H. Aldcroft, Building in the British Economy Between the Wars (London, 1968).

29. Marx, Capital, vol. 2, p. 238.

30. Even in the 1880's in a London suburb, 80% of speculative housing projects were of less than 18 houses each (Dyos, Victorian Suburb, p. 125).

concentration). This situation, where on the whole there are substantial capital resources easily mobilisable for fast speculative growth yet fragmented, localised and autonomous from organised finance, is, to a large degree, the determinant feature of a "speculative mode" as distinct from a modern capitalist economy of housing.

4. Fragmentation of capital means small units in the building industry and the business of residential development. Small size, little specialisation and limited requirements of capital, coupled with sub-contracting arrangements, permit the easy entry of new "firms" and produce a highly competitive economy. By its nature residential development requires large initial capital. In a financially underdeveloped, highly competitive, risk-ridden economy, *a fortiori*, the need to keep capital requirements low is a major imperative. This, among other things, reproduces a low rate of *internal* growth of firms, limited development of rational organisation and a limited division of labour. Whereas internal growth may stagnate, the very same conditions (easy entry etc.) in connection with the autonomous and "elastic" supply of capital mentioned above can sustain major long term swings of speculative development and urban change.<sup>31</sup>
5. Because of the relative underdevelopment of housebuilding capital which intensifies the intrinsic problems of finance of urban development, the "speculative" mode in early capitalist cities has been dependent on small and middle *rentiers*, and thus economically linked to the broader social stratum of the old-type urban petty-bourgeoisie. Dependence on

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31. The formation of a relatively independent and decentralised base of savings institutions and housing finance in the later part of the nineteenth century has most probably been an essential precondition of the rise of the first major long cycles of speculative building in Britain and the U.S. which moved relatively independently from the overall economy (see, Habakkuk, "Fluctuations", Pribram, "Residual, Differential and Absolute Urban Rents"). In earlier periods when only small personal or petty-builders' capital was available, house-building reflected mostly the ups and downs of the economy at large, that is, it was "cyclical". In a modern financial context, in the other extreme, the control of semi-centralised financial and state institutions over house-finance, will most probably make house-building "residual" to industrial finance requirements, hence, when total credit is limited, short-term "counter-cyclical" (see J.M. Guttentay, "The Short Cycle in Residential Construction", American Economic Review, 51, 3, 1961).

a diffuse category of asset-owners interested in real estate placements or personal accommodation of some substance is but one aspect of this relation. More important in its implications for the productive character of the speculative mode in contrast to capitalism proper is the resultant role of land, ground-rents, and rentierist motives. For one, despite a certain separation of speculative builders' capital from localised landed capital, landowners play a decisive controlling part in the development process which tends to be geared to the considerations of maximum improvement of property estates. Landowners' control usually involves both the decision to build, the type and quality of building, and certain exchange or lease and sub-lease arrangements made between builder, landowner and investors. Thus, land participates in financing as an effective and distinct category of capital and is not simply bought as another "factor" in the development process. This is essential in keeping capital requirements low by removing the need for a substantial lump sum for land.<sup>32</sup>

The above points lead to a major principle that seems to govern speculative urban growth, namely that the main object of such an activity is not profit but ground rents, or more appropriately the realisation of higher "development values" created by urban growth and changes in spatial patterns.<sup>33</sup> Limitations to long-term builders' finance and the imperative to shorten the "working period" of production, i.e. sell as early as possible in order to reduce the need for own-financing on the part of the speculative builder, make for a tendency towards areas that are relatively urbanised, with well-formed investment demand responding to rising ground-values and opportunities

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32. Lease and sub-lease arrangements between the owners of capital and land were essential aspects of the structure of finance in nineteenth-century English housing. (Nevitt, Housing, Taxation, ch. 2, Dyos, Victorian Suburb, pp. 87-88). Dyos stresses also the fact that speculative building was more in the nature of *estate improvement* under the landowners' initiative (Victorian Suburb, *loc. cit.*)

33. The fundamental tendency of the speculative building economy in the context of early capitalism to aim mainly at ground rents and the realisation of development values and less at normal profit on capital has been noted by most observers. It has been forcefully stressed also by Marx (Capital, vol. 2, p. 238). Marx's great emphasis on the significance of such distinctions is well known, a fact that adds authority to the proposition.

for intensive land exploitation. This, in turn, strengthens the role and monopoly power of landowners of such "ripe" land and reinforces the specifically "speculative" element in this mode of residential development.

The composite picture of speculative residential development we have just outlined contains a number of elements that as a mode of production distinguish it sharply from capitalist production proper. Thus the adjective "speculative" can be seen as referring to real structural properties of such an economy and not to any superfluous moralistic allusions to profiteering and market orientation, which are after all natural in a capitalist society. The "speculative" mode is basically a "mercantilist" economy, geared to classes of owners-rentiers of money-capital and land, and commercial intermediaries that explore movements of prices and demand effected over particular urban areas and largely dependent on conditions of favourable public regulations and urban growth policies.

Certain long-term changes in the twentieth century in the wider economy and the policies of states in the advanced countries of Europe and North America have generally brought about the decline of speculative structures in the economy of urban housing and the secular growth of modern capitalist systems. The most significant of these have been the concentration of financial resources for housing in mortgage banks, insurance companies and similar institutions, and their integration into a national "capital market". Similarly important has been the development of public policies towards the support of and/or the direct distribution of mortgage credit and the finance of large-scale housebuilding operations, a general trend towards increased control of private property of land, land-rentierism and speculation, and the growth of urban planning and organised urban development, though with varied degrees of effective application in different countries.

The resultant increase in financial power, centralisation and size of operations in residential production has permitted a diminution of the role of landowners and a capacity for the mobility of capital away from excessive land values with the help of comprehensive new developments. We can also observe a greater capacity on the part of capitalist builders for expansion beyond particular local markets, as well as an

increased emphasis on building technology, capital-intensive operations and innovations in organisation.<sup>34</sup>

Undoubtedly housing production and distribution even in the most advanced countries preserves a substantial segment of primitive speculative builders and strong elements of land and property speculation. But we must always keep in mind the specific character of housing as a product. Housing does not offer itself to easy modernisation and a "pure" capitalist organisation of production; housing markets are local and particularistic; housing has high unit-costs and presents limited opportunities for "economies of scale" and "vertical integration" of production; lastly, capital gains and ground rents are ever-present in the economics of urban development. In the perspective of these limitations, the significance of the changes we have described cannot be underestimated. A recognition of the fundamental difference between a modern capitalist and a speculative mode of housing production is even more important, however, for the theory of residential growth and distribution; it points to significant differences in motives and behaviour over technological change, public policies, the dynamic of investment, spatial distribution, and the formation of costs and prices.

The more sensational aspects of modern building, such as the large-sized oligopolistic organisation, the dominant role of financial institutions and "managerialism", though an integral part of the picture, should not lead us to any "sociological" understanding of the modern capitalist housing economy as a distinct type. I find the distinction between a "competitive" and a "monopolistic" economy theoretically misleading insofar as it purports to define different modes of production: the above distinction simply refers to the *morphology* of supply and demand. The theoretically

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34. For the structure of modern capitalist house-building and particularly the increasing role and form of large-scale housing producers, the following studies are indispensable: Leo Grebler, Large Scale Housing and Real Estate Firms (New York, 1973); J.P. Herzog, The Dynamics of Large Scale Housebuilding (Berkeley, 1963); S.J. Maisel, Housebuilding in Transition (Berkeley, 1953); Topalov, Les Promoteurs Immobiliers. For long-term trends in the size distribution of construction firms in Britain, see Bowley, The British Building Industry. For historical developments in the structure of capital financing of building firms and "consumers" in general, the exhaustive study by Grebler et al., Capital Formation in Residential Real Estate has a wealth of material and ideas. It is very unfortunate that it is the only one of its kind.

essential attributes of a capitalist mode of residential production lie on the level of the division of labour and the "logic" of production. They involve an economy of capitalist producers distinct from land or real estate rentiers, conforming to the prototype of medium and large-scale profit-oriented organisation of capital and wage labour. They are subject to the rules of spatial and inter-branch mobility of capital and the drive for continuous expansion. In such an economy land and labour are normally considered as costs, i.e. as antagonistic claims on the product with the dynamic consequence of an intrinsic drive for their reduction through changes and "innovations" in the production process and the product itself. It is in these respects that a modern capitalist mode differs significantly from the forms of "speculative" building found in cities in the early stages of capitalist urbanisation.

#### Conclusion: A Typology of Modes

Having discussed the various modes of housing production relevant to the study of structure and change of the residential process in early capitalist cities, we can summarise their main characteristics in the following typology. The four types presented should not be considered as necessarily signifying "stages" in a process of gradual evolution from one to the other in the order they are arranged. Each contains elements that are fundamentally opposed to other modes, and thus changes, instead of evolving "naturally", will always involve radical transformations and conflicts. Though a sequence that begins with a mode of family petty production based on use values continues with simple commodity production, speculative capital, and ends in modern capitalist production may seem a highly probable one for a country intent on capitalist modernisation of its housing economy, it is not the only possible one nor is it necessary. Usually various modes will coexist or be combined into intermediate types. The concept of "modes of production", after all, is an *analytical* device of relatively high generality for the historical and comparative study of structure and change.

The occurrence of complex or even "anomalous" cases is made very probable by the fact that housing production is an extremely complex process involving a number of separate economic activities: construction, the utilisation of land, the preparation and distribution of units of

housing property as a finished product complete with land, and, often, the further utilisation of the latter by rentiers as a form of capital investment. The most important division is, of course, that between the construction sphere and the sphere of the organisation of land, structures and forms of tenure into a certain type of final "product". The development of capitalism in the two spheres may proceed along different paths and thus produce combinations that are difficult to categorise. Consider a case where a fully capitalist, modern construction industry supplies a range of mass-produced types of houses to individual households that own land plots and build for use rather than exchange. Such a "perverse" case is quite probable in contexts of advanced capitalist economies with an extremely diffuse ownership of developable land; France is a case in point. Certain trends in the supply of summer houses in Greece point to the same direction. A more familiar "anomaly" is the combination of a public housing sector with a fully capitalist construction industry and financial system, as in Britain. Such cases, and a multitude of other imaginable ones, are not covered by the following typology. The reasons are straightforward: we are not concerned here with "mixed" housing economies having substantial public housing sectors. More importantly, we are not interested in exceptional cases and marginal economic forms but in broad patterns in the political economy of housing when conditions in the various relevant spheres should be expected to be correlated.

A "mode of housing production", thus, in the following typology should be understood as a complex concept involving a systematic combination of more specific "modes" describing relationships in the various aspects of the housing process. Similarly, the "development of capitalism" in housing is but a synthesis of the movement towards capitalist relations in these same aspects. It is useful, then, to delineate the various sub-processes that our concept of the development of capitalism in housing involves, and on which we have based our composite historical types. These are:<sup>35</sup>

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35. We do not include in these processes the fundamental passage to commodity exchange, monetary relations and control by private ownership in the spheres of land, labour and use-values at the *societal* level, for we restrict our discussion to societies that, though they may be underdeveloped, are essentially dominated by capitalist relations. Such a



1. The passage to a system of production of housing as a commodity, i.e. as exchange-value instead of use-value (building for sale and/or renting), and the consequent formation of the social categories of capital involved in the financing and control of housing production: the land as developer, the builder-entrepreneur, and the rentier-investor.
2. The expansion of wage labour and the concentration of capital in the construction industry.
3. The concentration of capital in the sphere of housing production as a whole (the "residential development" process) and in its financing (i.e. the growth of medium and large developers and organised finance to households and building enterprises).
4. The increased division of labour between the various forms of capital involved in residential development and the increase in the influence of modern house-building companies and financial institutions at the expense of landowners and rentier-investors (which represent an intermediate stage of "mercantile" capitalism).

The types that follow combine different stages in the above processes into major composite modes of housing production that, as we have argued, are theoretically and empirically relevant for the historical analysis of capitalist cities.

a. Precapitalist Mode I: Petty Owner-building

In this mode, housing is not produced as a commodity to be exchanged in the market, but in order to be used by the immediate producer. The "producers" here are households that own land plots and control the resources invested in residential development as well as the production process itself. In many respects then, this mode resembles a peasant subsistence household economy. In contrast to the latter, however, in urban contexts at least, the material process of production, i.e. construction, is mainly carried out by wage labour or by independent (self-employed) labour. Though extensive use of family labour may be found in underdeveloped societies, this is not a necessary aspect of this mode. The overall character of the corresponding

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passage, therefore, has either permeated the whole of the society or takes place automatically with the move to cities.

economy of construction, however, is essentially precapitalist, since it constitutes a form of "simple commodity production": construction is kept at a petty scale and is carried out by independent labourers or very small work groups in exchange for wages or, more usually, a price for the product. With respect to land, we should expect a fully developed system of ownership and market exchange, since we are talking about capitalist societies: but landowners as a class distinct from household-users are not determinant participants in the process of production, neither should we expect to find a developed system of ground rents and land values as important considerations in the formation of production decisions.

b. Precapitalist Mode II: Petty Commodity Production

This mode results from the predominance of commodity exchange relationships - a "housing market" - over the productive infrastructure of the previous one. Housing is produced as a commodity to be sold or rented. The locus of capital and production control is a combination of small speculative builders, small rentiers, landowners that participate in the development process, and small contractors. Land acquires a major role in building and finance and there is a development of a system of ground rents and land development values as integral aspects of the dynamic of residential development. The economy of construction, however, remains one of "simple commodity production" with minimal differentiation between labour and capital and the scale of each separate "business" undertaking is hardly larger than the one in the previous mode: a handful of houses compared to the one or two usually built by households outside the market. It is in these respects that this mode is essentially a precapitalist one. It could be argued, however, that this form constitutes in essence an intermediate case between precapitalist owner-building and speculative building proper and therefore, should not be treated as a separate mode at all. The argument is valid, but under conditions of capitalist urbanisation at low levels of economic development, this form of housing economy will most probably be quite widespread or even predominant. There are very real reasons, therefore, for considering it a distinct category. In some cases, on the other hand, it may be more practical to incorporate this form as a whole or in part into either a broad precapitalist sector or a speculative one. The

decision depends on the emphasis of the analysis: in this study, where the demarcation between modes mainly rests on the existence of market relationships, we usually incorporate petty commodity forms into a broader speculative sector.

#### c. The Speculative Mode

Though the concept of "speculative building" as used in Britain and America refers generally to the production of housing as a commodity for an unknown market, we restrict here this concept to its original (and theoretically more consistent) historical referent: an economic form that is more akin to a merchants' and landowners' capitalism than more advanced forms that follow the lines of modern industrial and financial capitalist organisation and rules of operation. In terms of elementary components, the "speculative" mode resembles the previous one. It differs radically, however, in that, first, the capitalist division of labour between capital and labour and between production, distribution and use is far more advanced and, second, the concentration of capital and the size of economic operations is far greater. These differences from petty commodity production concern all main aspects of the residential development process: construction, the organisation of capital and production as a whole, and the role of landed capital. On the other hand, the process of concentration of capital and division of labour in the construction industry, the business of building and selling houses, and in finance, have reached only a medium level. This produces a fragmented, localised and competitive economy heavily dependent on the classes of landowners and small rentiers, and thus a rather primitive commercial form of capitalism.

#### d. The Modern Capitalist Mode

In contrast to the above, this mode, familiar to us from postwar conditions in the advanced countries of the West, is dominated by the large, organised and supra-local capital of housebuilding companies and financial institutions. It is these agencies that have control over capital resources and the decisions involved in housing production, while the classes of landowners and rentiers-investors have been separated from housing production and their influence has decreased. Thus, in terms of scale of operations, extent of the division of labour, concentration and rationalisation of capital, and the determinants of housing production decisions, this mode

differs substantially from the "speculative" mode found in early cities and should be clearly distinguished.

Typically, the question of the development of capitalism in housing should involve either one of the two following transitions, depending on the particular context: the transition from a dominance of precapitalist modes to the speculative, or a combination of speculative and modern-capitalist modes, or the transition from a system dominated by "primitive" capitalist modes (types b and c above) to a system dominated by the modern-capitalist mode. In this study we will be concerned with the first type of transition: the expansion of speculative housebuilding in both relative and absolute terms and the determinants of this expansion.

## 2 ■ The Dual Economy of Housing in Greek Cities: Structure, Extent, and Distribution of Speculative and Precapitalist Building

This chapter concerns the sectoral composition and social relations of housing production in postwar Greece. The main argument will be that the system of residential production was not of a homogenous character, but was composed of two essentially different modes. These can be characterised as an early speculative mode and a precapitalist one, the latter based on non-commodity household production by petty owner-builders. The analysis will be limited to the aggregate level and its aim will be the narrow but necessary one of establishing the extent and relative role of each mode of urban housebuilding and its social and geographical corollaries. A statistical description seems essential at this stage of the argument in the light of the prevailing misconceptions and lack of realistic assessments of the nature of Greek postwar housing, particularly with regard to the extent and significance of precapitalist housing. I will leave for the next chapter the examination of the controversial issues of the origins and functions of petty owner-building, legal or illegal, and of the "dual" housing economy in general.

The chapter is divided into two parts. In the first I will advance definitions of speculative and non-speculative private building that seem appropriate for Greek conditions and the available statistical material will be given. With the help of these, the share of each mode of housing production in urban housebuilding will be estimated for a number of years during the 1950-1974 period. Thus, we can have a systematic demonstration of both the extent of "dualism" in Greek housing and the trend towards the predominance of the speculative mode. In the second part the existence of systematic relationships between each building mode and the socioeconomic and spatial structure of Greek cities will be shown, namely, the association of modes with social classes, tenure patterns and the socio-spatial structure of cities (in this last case with reference to Athens where the necessary data are available). We

shall thus establish a strong case for analysing the Greek housing system not only in terms of modes of housing production, but also in terms of broad housing *sectors*: components of the housing system where social classes, modes of housing production and distribution, types of land allocation, social institutions and values are interconnected into a meaningful whole.

Besides its analytical value, the concept of a "dual" sectoral system is essential for two reasons: first, most accounts and current conceptions about Greek non-capitalist housing and, at that, about similar forms in developing countries in general, tend to attribute a marginal and residual character to it - a conception that follows from the reduction of this sector to the category of "squatter" housing and primitive types of "self-help", that are supposedly the by-product of the insufficient expansion of house-supply "proper", i.e. the market sector or public housing. This certainly provides a biased approach and a distorted picture in the Greek case; more generally, it forbids the consideration of significant alternatives in the study of developing cities. Second, a "strong" thesis of the existence of a "dual" system, i.e. one that involves alternative sectors, is essential for the understanding of the nature of economic change and institutional modernisation in housing. For it leads naturally to the legitimacy of viewing these changes in the light of actual or potential *conflicts* and relations of domination and incorporation involved in the process of the expansion of capitalist relations in housing and land, and in the relationships between social classes that are connected with different modes of housing production. Such processes and relationships may be important in varying degrees, a question which can be settled only empirically. But they are an integral part of the issues that a study of capitalist development and modernisation must confront.

#### 1. The problem of the operational definition of housing modes

Any effort to estimate the share of speculative activity in the production of new housing encounters a series of problems. These stem from the complexity and institutional particularity of housing itself. An additional important problem is the lack of appropriate statistics of

dwelling construction. We must therefore approach the problem in a pragmatic manner, selecting "minimum" criteria of definition in order to at least arrive at a fairly realistic magnitude of the extent of speculative and non-speculative building.

Given our theoretical definitions (chapter 1), the necessary criteria that distinguish a speculative/capitalist mode of housebuilding are:

(a) The residential development unit or project must exceed a minimum size. It must certainly exceed one dwelling, but more realistically, it must also exceed three or four dwellings. Developments of the latter size should be more properly characterised as building by very small owners for use or petty-capitalist purposes. In such cases, the role of capital and commodity production is *de facto* limited. Depending on the role of joint housebuilding by members of the extended family, provision for one's offspring, the rule of dowries etc., which are certainly important in Greece, even substantial multi-family units may be built outside market relations, that is, without any aim at selling or renting the property or parts of it.

(b) We must establish the existence of private agents in the control of the production process. These must be the owners of the main part of the necessary capital (working capital at least), and mainly aim at the exchange of the product in the market: rent it to users or sell it to owner-occupiers or rentier-investors. This may not be as easy as it appears. As we said before (first chapter), housing by its very nature tends to be built *to order* during periods of underdevelopment in housing finance and in the concentration of capital, with the help of installments advanced by the prospective owner to the builder before completion. Thus, even in cases of multi-family developments some association of users/owners may be the agent of production. In fact, in an early capitalist housing economy such a component is *bound* to exist and play a significant role. This was the case with the first building societies and housing co-ops in Britain and the U.S. and is also partly the case with Greek speculative apartment buildings, particularly those of smaller size and lower quality. In order to establish the character of production, therefore, and more specifically the role of commodity exchange and private business capital in medium and large-sized projects, we must necessa-

rily examine the extent of involvement of user-oriented, non-profit, public or private agents and associational and cooperative arrangements. Greek housing and building statistics are of little help in this point. Problems are added by the fact that from a legal viewpoint apartment buildings in Greece have some affinities with English *housing associations*, though members may freely dispose of their share of the property (the nearest example of a similar Anglosaxon institution would be condominiums in the U.S.). The criterion of size, however, is of great help here, since we know that such non-speculative components are very limited in larger developments within urban areas.

It is evident from the above that we do not consider the social relations of land allocation and the mode of the construction process as necessary elements in a minimum definition of speculative (and thus non-speculative) housing production. This is partly true for any strict specification of tenure relations, too. A few points elaborating on the analysis of the first chapter will make clear why this is so.

Let us restrict ourselves to private forms of housing economy. No particular type of tenure is necessarily associated with speculative building. In the case of precapitalist small owner-building for use, tenure follows from the definition itself: it is owner-occupation. If we use a more general concept of small-owner petty-production, oriented mainly to use, we can allow for a certain extent of petty-speculation. But we still deal with precapitalist modes of housing production (precapitalist types I and II in the typology of the first chapter). Moreover some renting, especially in older structures, is not inconsistent with a fundamentally petty-owner family economy. Thus tenure is important only in non-speculative housing and even there not in a very strict sense. With regard to the process of production, commodity exchange in land and labour (wage labour) may or may not be generalised without altering the essential character of housing production. After all, in cities where capitalist relations, private property and wage labour are fairly advanced in the social structure as a whole, they should be expected to involve the productive factors of the residential economy, too. In capitalist societies, any definition of pre-capitalist production (in housing at least) based on user-labour and *social* arrangements of land allocation would have been extremely limiting and of little analytical importance.



On the other hand, particular modes of land allocation and organisation, though not strictly necessary for the definition of the precapitalist mode, are historically associated with and follow logically from the existence and expanded reproduction of precapitalist housing in a given urban system. Certain characteristics can be shown to be either corollaries of such a mode or its historical preconditions; first, a "petty mode of production" in construction, i.e. independent small workgroups, a small size of operations, simple methods, a limited separation of capital from the direct producers etc.; second, a particular land economy, namely a diffused pattern of landownership, limited public controls on development, and a limited spatial expansion of speculative/capitalist production of housing. To include such aspects, however, in an operational definition of modes would amount to assuming beforehand what has to be demonstrated empirically in a concrete historical situation. Thus, most of these issues will be left to be examined in the next chapter where the problem of the origins and social foundations of precapitalist Greek urban housing is examined.

We may argue in the same vein with regard to the speculative mode. There certainly exists a number of distinct aspects and economic roles that can be distinguished within the speculative development process. Landed capital, which may or may not participate effectively in control and finance; the role of the merchant-capitalist and that of the capitalist-producer (the building contractor) differentiated along the finance - production - distribution phases; these may or may not coincide, and each one of these may control the capital necessary for production. Lastly, the produced stock will be distributed either to investors in property, or to owners-occupiers, or be kept by the producer and rented to tenants. Normally, we will have some combination of types of owners. The particular structure or allocation is a matter of concrete historical conditions. Some aspects may be *deduced* from the more general characteristics of the level of capitalist development in housing finance and the construction "industry". It is in these relations that we find the basis to distinguish further between speculative and capitalist modes in housing systems as we argued in the first chapter. To delineate the component of modern capitalist housing production in Greek housing, however, even if such a task was meaningful given the notoriously primitive character of Greek market hous-

ing production as a whole, is not of immediate interest. A rough estimate of the extent of commodity production based on a distinct - if primitive - category of capital and that of non-capitalist housing modes concerns us here. For the first, the two general definitional criteria we gave above, i.e. the size of the residential development unit and the lack of control by the final users, will suffice. Since we know that the business character of medium and large developments in Greek cities can be considered as a matter of fact, the criterion of size becomes all-important.

## 2. Composition of housebuilding activity by mode

Given our concept and definition of speculative housebuilding, the task of measuring its extent in Greek cities appears simple. In fact, it is rather complicated since the relevant Greek statistics have serious limitations. Although permits for new dwellings are available (actually finished structures are not recorded), and there are some official sources with estimates of public and unauthorised housing activity, they are of little help for our problem. Permits for new *buildings*, (number and volume), which are more relevant, are only available since 1961. These, however, are not broken down into residential and other uses, though there exist separate time-series of permits for business premises (number and volume). This is only partly to be blamed on the Statistical Service: residential and other uses are usually mixed within the same building, thus making an exact definition rather difficult. The only period for which we have information about the structure of actually built stock in cities, both legal and illegal, is 1951-1958 (more precisely, 7.4.1951 to the middle of 1958). This material was gathered by a specially commissioned survey of urban building and, unfortunately, remains the only one of its kind.<sup>1</sup> Residential and other uses are again not separated.

A particular characteristic, however, of speculative building in Greek cities makes our task easier; such residential developments take

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1. Construction and Housing in Urban Areas - Sample Survey 1958, (Athens, 1962) National Statistical Service of Greece (N.S.S.G.), (in Greek and English).

always the form of *single* apartment buildings.<sup>2</sup> Speculative developments consisting of more than one building are extremely rare. The phenomenon of speculative projects consisting of a number of single-family detached or semi-detached houses, so common in Anglosaxon countries, is simply nonexistent in Greek cities. The size of individual buildings, therefore, measured in volume and number of dwellings provides an accurate index of the size of speculative projects. Irrespective of the particular housing mode, one building, be it large or small, signifies *one* residential development project in Greek conditions. Thus, small buildings, say of one to three dwellings, signify non-speculative activity. Residential developments consisting of a number of detached or even side-by-side buildings, on the rare occasions they occur, are either the product of the public sector and the few semi-public housing cooperatives, or summer vacation housing outside urban areas. Housing cooperatives aiming at peripheral residential development, though limited in numbers and role, are not rare in urban Greece; their history goes back to 1915. They are formed, however, with the exclusive purpose of appropriating and distributing urban land-plots to their members.<sup>3</sup> Actual housing production takes place in the form of independent building on these plots.

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2. This is taken as a matter of course to such a degree that we can hardly find any explicit reference to it in Greek sources or, worse, any evidence to corroborate it! It has been observed, however, as one of the important peculiarities of the Greek housing market in G.F. Break and R. Turvey, Studies in Greek Taxation (Athens, 1964), references to the Greek translation (Athens, 1966), p. 246.

3. There are very few recorded cases of cooperatives actually going beyond the land-distribution stage and building houses for their members. See, D.T. Panos & A.N. Klemes, Housing and Building Cooperatives, (Athens, 1970), p. 69 (in Greek).

A general point on sources and documentation: since there is a noticeable lack of published studies on the organisation and institutional features of Greek housebuilding, I often had to turn to informal sources; first, my own knowledge of these matters as one professionally involved in building and housing affairs, and, second, material gathered in a series of informal interviews with building entrepreneurs, civil engineers active as developers (a most widespread phenomenon), and realtors and lawyers specialising in building and property law, carried out during 1974-1976. Whenever possible, however, I have tried to supply references to official sources or other relatively authoritative opinion.

Thus the problem of the extent of the speculative sector boils down to an estimation of the extent of apartment-building and its share in the total of new (private) housing production of all types. We will examine three periods in some detail, in order to arrive at some idea of postwar trends; 1951-58, 1964-66 and 1970-72.<sup>4</sup> The first period presents few problems given the suitability of the statistical material. We have, however, to separate the substantial volume of non-residential uses from new building as a whole. Now, at first glance, it might appear more plausible to allocate this non-residential activity disproportionately to higher buildings. There is, however, a strong case against such an assumption if we take into account the extreme fragmentation (i.e. the predominance of small units) of Greek commercial and industrial activity. Moreover, the first assumption may introduce a bias in favour of the argument we are trying to advance, namely that, contrary to widespread beliefs, the share of the speculative sector has been rather limited in the post-war residential economy. I assume therefore that non-residential activity is more or less equally distributed among the various size-classes of new buildings.

Table 2.1 presents the size-distribution of all types of buildings constructed during the period from 7.4.1951 to the middle of 1958 in the Greater Athens Area (G.A.A.) and the rest of urban areas (settlements of more than 10.000 persons). From the same report we know that the average number of rooms per dwelling was 2.8 and 2.9 for the G.A.A. and the other cities respectively. It should be noted that the concept of "room" as used in the report refers to a wider category of built units than strictly residential rooms; given our assumptions, however, the pattern of sizes in 2.1 should be viewed as reflecting residential building. It

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4. A historical note is in order here. Apartment building as a substantial category of residential production emerged in the 1930's. It was during that decade that the architectural, technical and economic formulas for such buildings were developed. See, K. Biris, Athens from the 19th to the 20th Century (Athens, 1966) (in Greek) and A. Damalas et al. "The Urban Apartment Building: Athens 1920-1940", Architecture in Greece, 12, 1978, pp. 125-130 (in Greek with English summary). The latter includes some statistics on the number of new apartment buildings in the 1930's.

is evident from 2.1 that only size-class D exceeded on the average a size of six dwellings and therefore could be certainly characterised as one of speculative character. Size-class C (3-6 dwellings) must be considered as an intermediate category, with strong elements of petty-speculation but hardly the object of regular business activity.

Table 2.1: Size distribution of urban building, 1951-1958

Size-class of Buildings	Athens Area				Rest of Urban Centres			
	Buildings	%	Rooms	%	Buildings	%	Rooms	%
<u>1. Entirely New</u>								
A. 1-4 rooms	41,900	(72)	115,100	(35)	40,000	(73)	106,000	(42)
B. 5-9 "	12,500	(21)	80,100	(24)	11,500	(21)	70,600	(28)
C. 10-19 "	2,700	(5)	31,600	(10)	2,200	(4)	29,200	(12)
D. 20 & more	1,400	(2)	101,900	(31)	900	(2)	46,900	(18)
<b>Total</b>	<b>58,500</b>	<b>(100)</b>	<b>328,700</b>	<b>(100)</b>	<b>54,600</b>	<b>(100)</b>	<b>252,700</b>	<b>(100)</b>
<u>2. Extensions or Reconstructions</u>								
aa. 1-9 rooms	16,400	(99)	48,800	(96)	19,500	(99)	44,600	(82)
bb. 10 & more	100	(1)	2,000	(4)	200	(1)	9,600	(18)
<b>Total 1-2</b>	<b>75,000</b>	<b>(100)</b>	<b>379,500</b>	<b>(100)</b>	<b>74,300</b>	<b>(100)</b>	<b>306,900</b>	<b>(100)</b>

Source: N.S.S.G., Construction and Housing, 1951-58, p. 16, percentages rounded.

Table 2.1 describes essentially the structure of private activity (legal and unauthorised); though public construction is also included, its effect is certainly marginal. New dwellings constructed by various public agencies - the Ministry of Social Services responsible for slum clearance and refugee housing, the Workers' Housing Organisation and the Officers' Building Organisation - were less than a 7% of all the entirely new dwellings in the G.A.A.; this share was somewhat larger in other urban centres.<sup>5</sup>

5. See the series in General Appendix A.5. New dwellings built by public housing programs in Athens during 1951-58 were small in number

The evidence shows clearly that in the early part of the postwar period the share of speculative activity in the strict sense of substantial commodity production did not exceed 30% of the supply of new housing stock for the Athens Region and 20% for other urban centres (mainly concentrated in Thessaloniki). Even when we include intermediate and marginal forms of speculation, these shares do not exceed 35% and 25-30% respectively. Non-speculative building was in small part public, but predominantly small owner petty-production for family use and to some extent petty-rentierism (though this latter point must await the analysis of tenure conditions in the precapitalist sector). About *half* of this sector was unauthorised housebuilding, that is new housing in the urban periphery built by low-income populations, mostly on owned land, but outside the limits of the official plan for urban building and thus in violation of housebuilding regulations and formal procedures for the issue of permits, building taxation etc.<sup>6</sup>

Few things can be said with the help of the previous statistical material about the *structure* and *agents* of speculative production in this early part of the postwar period. A number of basic points about the primitive and fragmented character of speculative residential businesses, however, can be immediately established, with indirect evidence.

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(6.344) compared to a total for the same period of 98.900 (counting only entirely new ones - see table 2.1). Public activity was more extensive in the countryside during these years due to the programs of reconstruction following the period of German occupation and the civil war (1941-44 and 1946-49) and programs of assistance to victims of earthquake disasters. Between 1945 and 1953 about 200.000 rural houses were constructed through various programs of self-help, core-housing etc. This high rate of public activity in the countryside lasted until 1958 (1951-58: 155.540 new dwellings built by the State in areas outside Athens). Since then it has fell to an insignificant level. See, also, Technical Chamber of Greece (T.C.G.), Housing in Greece, (Athens, 1975): part I (1920-1960), pp. 150-160 (English Translation), and C.P.E.R., Housing (Athens, 1967) (in Greek).

6. For descriptions of Greek illegal housing and its similarities and differences with the well-known phenomenon of "squatters" in the Third World, see L. Leontidou and D. Emmanuel, Life Patterns in an Illegal Housing Area, (Athens, 1972, mimeo); A. Romanos, "Illegal Settlements in Athens" in Shelter and Society, ed. by Paul Oliver, (London, 1969) and his "Unauthorised Settlements and the Housing Problem", in Architecture in Greece, 4, 1970, pp. 25-30 (in Greek with English summary); D.A. Fatouros & C. Chadji-michalis, "Self-Generated Settlement in the Thessaloniki Area", pp. 138-158 in C.D. Doumanis & P. Oliver (eds), Shelter in Greece (Athens, 1974),

We know that speculative apartment-building was restricted to the two major cities, Athens and Thessaloniki, where the majority (or rather the totality, at this period) of established building enterprises was found. We also know that throughout the postwar period the great majority of apartment-building has been based on small-scale unincorporated enterprises that would normally undertake one or two buildings a year. Even at a later period, the small scale of business operations was striking; in 1971, the Panhellenic Association of Building and Construction Enterprises (PEEKOTE), with a membership that was certainly dominated by the more substantial and established businesses, had a total of six hundred members.<sup>7</sup> During the same period, as we shall soon see, the annual number of new buildings of more than four floors for *all* uses in urban areas was less than 3.000; this means five buildings per member yearly, whereas a substantial part (most probably a majority) of small speculative builders were not members. Thus the scale of operations of individual builders is certainly much lower. In the 1974 Yellow Pages for the Athens Region, 904 entries came under the heading "Building Enterprises"; these did not include contractors or civil engineers who most often undertake speculative developments. Nevertheless, in 1973, a year of an unprecedented speculative boom, 2.453 buildings of more than four floors started in the same region (1976 Statistical Yearbook); this again implies a yearly scale of 2.7 buildings per enterprise *including* non-residential construction. It is more than obvious, therefore, that even in Athens in the early 1970's less than two buildings a year has been the normal scale of individual speculative operations. I have restricted the discussion to buildings of more than four floors that are the normal object of speculative developers. Even such buildings, however, are fairly small; in the late 1960's and early 1970's they had an average volume of 5.000 m<sup>3</sup> or the equivalent of 17 medium-sized dwellings (300 m<sup>3</sup> per dwelling). Lower buildings were in general smaller.

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(in Greek, with English summary); D. Emmanuel, Three Studies on Popular Housing, (Athens, 1977, mimeo) (in Greek), part 2, and the most comprehensive, L. Leontidou Emmanuel, Working Class and Land Allocation: The Urban History of Athens 1880-1980 (London, 1981), PhD Thesis, Department of Geography, London School of Economics (ch. 6). See the General Appendix, A.4 for illegal housing time-series.

7. See, "Study Group", Construction Workers and Building in Greece (Athens, 1975), p. 29 (in Greek).

If these observations are valid for the later part of the postwar period when the concentration of capital in building was more advanced, they are, *a fortiori*, true for the decade of the 1950's. Seen from another angle they point to another interesting aspect of the postwar speculative economy: a very small share of apartment building could have been undertaken on an exclusively personal, *ad hoc* basis - e.g. by the landowner. Otherwise we must accept that a substantial part of the numerous building enterprises were operating on less than a building a year; this is not impossible but rather improbable. The share of personally initiated and controlled production has been quite probably larger for smaller buildings and for the earlier part of the postwar period.

The share of speculative housing production rose during the later parts of the postwar period. The rising trend started essentially after the mid-1950's (see General Appendix Table A.1) and in this respect the decade of the 1950's is somewhat exceptional. To what extent did the composition of housing production change up to the early 1970's? In spite of inadequate building statistics we will attempt to give a roughly realistic answer to this problem. I have chosen two points, one in the middle and one near the end of the period, in order to make a rough estimate of the trend of change. The years chosen were ones of normal conditions, with no abrupt changes or fluctuations. After 1967 illegal housebuilding was reduced to a minimum and speculative building was strongly encouraged through various policy measures; thus, 1967 and 1968 are somewhat transitional. 1973 and 1974 were years of a severe building slump and therefore unrepresentative. Given these anomalies 1965 and 1970 have been picked as suitable points. In order, furthermore, to reduce the effects of short-term fluctuations we made estimates for the average composition of building (weighted) for three-year periods at these points in time.

Table 2.2. presents the size-distribution of buildings started during periods 1964-66 and 1970-72 (based on permits). Since these statistics, however, do not include illegal housing in general or legal extensions of existing buildings, they are not directly comparable with those for 1951-1958. They refer more specifically to legal, private construction. Furthermore, a substantial part of these buildings is intended for non-



residential uses. The latter's volume for the 1964-66 three-year period was 17.908 m<sup>3</sup> in all urban areas which amounts to a 32.5% of total building volume (1968 Yearbook). We had to assume again that such building is found in the same proportion in each size or height class.

Table 2.2: Size-distribution of private building activity in urban areas, 1964-1966 and 1970-1972 (building permits)

1964-1966		Greater Athens Area			Thessaloniki			Other Urban Centres		
No of storeys	Buildings	Volume	%	Buildings	Volume	%	Buildings	Volume	%	
1-2 storeys	17,559	10,260	(31.6)	1,185	1,562	(15.0)	17,047	9,101	(75.0)	
3-4 storeys	1,735	5,188	(16.1)	1,093	2,955	(28.3)	891	2,155	(17.7)	
5 and more	2,818	16,998	(52.3)	1,033	5,910	(56.7)	163	885	(7.3)	
Total	22,112	32,446	(100.0)	3,981	10,427	(100.0)	18,101	12,141	(100.0)	
1970-1972										
1-2 storeys	16,804	13,797	(23.8)	1,125	1,284	(10.4)	26,842	14,990	(60.7)	
3-4 storeys	3,626	10,714	(18.5)	1,521	3,675	(29.9)	1,776	4,405	(17.8)	
5 and more	6,184	33,479	(57.7)	1,482	7,333	(59.7)	924	5,314	(21.5)	
Total	26,614	57,990	(100.0)	4,128	12,292	(100.0)	29,542	24,709	(100.0)	

Source: Statistical Yearbooks of Greece, 1968 and 1973 and General Appendix, A.1; volume in thousands of m<sup>3</sup>.

Assuming that table 2.2 depicts the structure of private, legal residential production, what is the share of speculative activity according to our simple criterion of size? This calls for some examination of the relation between size and number of storeys during these periods. In addition, in order to arrive at the overall structure of private building, we have to add illegal residential activity and the substantial volume of new housing produced by *extensions* on existing buildings. We may thus arrive at a fairly realistic picture, comparable to the evidence for the 1951-1958 period. Let us proceed by steps.

The characteristics of new dwellings for the two periods we study (based on separate statistical series), were the following (table 2.3):

Table 2.3: Characteristics of new dwellings built privately, 1964-66 and 1970-72 (building permits)

1964-66			
New Dwellings	Greater Athens Area	Thessaloniki	Other Urban Centres
1. No of Dwellings	114,006	34,914	32,444
2. No of Rooms	329,520	103,735	116,027
3. Volume (000 m <sup>3</sup> )	33,195	8,449	10,277
4. Average size of Dwelling (m <sup>3</sup> )	291	242	317
5. Average number of Rooms per Dwelling	2.9	3.0	3.6
1970-72			
1. No of Dwellings	192,493	36,076	67,865
2. No of Rooms	557,814	118,443	223,795
3. Volume (000 m <sup>3</sup> )	55,601	10,530	20,819
4. Average size of Dwelling (m <sup>3</sup> )	289	292	317
5. Average number of Rooms per Dwelling	2.9	3.3	3.3

Source: Statistical Yearbooks of Greece, 1968 and 1973. Averages are rounded. The figures include dwellings formed by extensions of existing buildings. The enumeration of rooms follows the definition of "habitable or regular room" as set by the N.S.S.G.: a minimum area of 4 m<sup>2</sup> and a height of 2 m, lighting from a window or a glass door, and intended for residential purposes. WCs, storage rooms and kitchenettes smaller than 7 m<sup>3</sup> are not counted as "rooms".

On the basis of table 2.3 we can examine the relationship between the height of buildings (in terms of storeys) and their size (in terms of volume and rooms) on the average. Since no significant changes took place between 1964-66 and 1970-72 in this respect, table 2.4. giving the average sizes for the first period may suffice.

Table 2.4: Average size of buildings by number of storeys, 1964-66

No of storeys	Greater Athens Area		Thessaloniki		Other Urban Centres	
	Average volume	Average No of rooms	Volume	Rooms	Volume	Rooms
1-2 storeys	586.3m <sup>3</sup>	6	842.0m <sup>3</sup>	10.5	533.8m <sup>3</sup>	6
3-4 "	2,990.2	30	2,703.5	33.5	2,418.6	27.5
5 and more	6,301.9	60	5,721.2	71	5,429.4	62

Source: Tables 2.2 and 2.3

It is obvious from the previous tables that only buildings of three storeys or more should be properly considered as belonging to speculative builders' activity. These correspond to size-class D in our analysis of the 1951-58 data (that is, sizes of more than 20 rooms or 6 dwellings). It is also obvious that such buildings of three or four storeys, given the small size of urban plots, are really very small: a fact that goes a long way in explaining the widely known reluctance of building enterprises to venture into areas where building of such a limited height is only permitted. An average size of ten dwellings, given the various fixed overhead costs and time-consuming procedures of apartment building, makes for significant diseconomies of scale. Such developments are thus usually left to the marginal speculator and the interested landowner to undertake, unless the extreme landownership fragmentation in Greek urban areas (which limits building sizes in cases of restricted building height) can be somehow overcome and some consolidation of larger plots be effected (which is seldom the case). (For the piecemeal character of Greek speculative developments and the role of landownership fragmentation, see chapter 3, appendix 3.1).

We must examine now the extent of illegal housebuilding which should be added, of course, to the lowest size-class. Official estimates of its magnitude, however, differ widely. A time-series of illegal building supplied by the Ministry of Public Works in 1971 gives an estimate of 34.777 new dwellings for the G.A.A. for the period 1964-66 (see General Appendix, Table A.4). Later Government reports (1973) give figures that are much lower: the share of illegal new housing has been estimated as 10% of total new dwellings in Athens and Thessaloniki during 1961-66, a 3% for the 1967-68 period and a negligible share for the 1968-1974 period.

(due to strict police control).<sup>8</sup> The latter estimates are not in dispute; a share of 10% for the earlier part, however, would mean that the 1971 official estimate for 1964-66 must be lowered to a level of 16.500-17.000 units for the G.A.A. This is obviously unrealistic, since years 1964-66 were peak ones of illegal activity compared to the ones immediately preceding them.<sup>9</sup> Furthermore, the later (1973) estimate of the share of illegal housing seems of a rather qualitative sort and in contradiction to data from the very same sources. During 1964-66 a total of 165.960 dwellings were reported as having been built in G.A.A. (General Appendix, Table A.3); this, subtracting private legal activity, leaves a figure of more than 50.000 dwellings of which a very small part were the product of the public sector.<sup>10</sup> In addition, a certain underestimation of illegal housing might be more or less naturally expected from official qualitative estimates; mostly because unauthorised housing is often of a rudimentary nature and the longer-term formation of housing stock in illegal areas is hampered by demolitions by the authorities, fast depreciation of housing capital and a large rate of abandonment of the poor and extremely small dwellings. Thus, the higher estimates of the 1971 time-series data should be chosen as the more realistic ones for illegal new housing activity. These give a figure for G.A.A. for the 1964-1966 period of 34.777 units that, added to total legal private dwelling construction (extensions included) for the same years (114.006, 1968 Yearbook), makes for a share of illegal housing of 23% - substantially larger than 10%. For the rest of urban areas exact figures are lacking; there

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8. See, United Nations, Economic Commission for Europe, Housing, Building and Planning Problems and Policies in the Less Developed Countries of Southern Europe: Greece, 1973, National Monograph, (Athens, 1973) p. 211 and p. 101 (henceforth U.N., E.C.E., "National Monograph").

It is worth stressing that it should be considered as an unquestionable fact that illegal building activity in urban areas and Athens in particular was not taking place to any significant extent during the military dictatorship; this includes any form of building in illegal residential areas (extensions, improvements, etc.). Quite a few students of Greek housing are not aware of this important fact. The official evidence, however (which was received with certain scepticism during these years), is corroborated by direct local research in a number of municipalities and communes in the western fringe of Athens. See, Leontidou and Emmanuel, Life Patterns, passim.

9. For the time-series of illegal and public dwelling construction, see, General Appendix, Tables A.4, A.5.

10. U.N., E.C.E., National Monograph, p. 101 and General Appendix, A.3.

are not, however, any particular reasons for assuming any great difference in this respect. Since the greatest part of unauthorised dwelling construction is located in urban areas, the extent of illegal activity outside Athens in comparison to legal dwelling-building in other urban centres is a reasonable indication of the share of the former. The relevant figures for 1964-66 point to a share in the order of 20% or an equivalent of a quarter of legal private dwelling construction for cities other than Athens (see General Appendix, Tables A.2, A.4). With regard to the 1970-72 period, illegal building was at most marginal in extent and can be safely disregarded.

Whereas the above may suffice for an idea of the magnitude of illegal housing in terms of new dwelling *units*, it is a different problem altogether to make an estimate of its real share in the production of residential capital even in the simple terms of physical volume we examine here. Needless to say, statistical material is completely lacking. There are, moreover, significant variations in the size and quality of dwelling units among illegal housing areas and, quite often, within a single area. We know, of course, that on the whole illegal houses are small, sometimes extremely so in comparison to "normal" private housing. On the basis of experience with such areas, descriptions and ground-plans of a number of units in a few fairly representative neighborhoods,<sup>11</sup> we may say that a more or less realistic (though conservative) figure for the average size of such houses should be in the order of 150 m<sup>3</sup>; this amounts to about half the size of the average dwelling unit built legally (300 m<sup>3</sup>). Thus the share of illegal housing in residential production is in effect substantially reduced if we consider its volume in physical terms.

Lastly, the substantial volume of additions to existing buildings should be added to the residential production taking place outside the speculative sector. This form of private (legal) activity consists almost in its entirety of works of very small size; the average volume of an extension work in urban areas during 1964-66 and 1970-72 was 364 m<sup>3</sup> and 428 m<sup>3</sup> respectively (1968, 1973 Yearbooks). They constitute, moreover, a form of residential production of major proportions. It is

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11. Layouts of illegal residential areas and a number of ground-plans of houses built there can be found in the works on Greek unauthorised housing cited in note 6.

a well-known fact that in Greece the addition of rooms or complete dwelling units to existing structures (usually to single or two-storey houses) is a normal and widespread method of expansion of popular residential capital. The real extent of this activity, however, has seldom been realised. Attention to the more sensational unauthorised housing activity has hidden the fact that the regular and legal process of residential growth through extensions is usually more important in terms of volume even in periods of peak growth of illegal building (as, for instance, during the 1964-66 period);<sup>12</sup> this is obviously so during periods of limited illegal growth and most certainly for the post-1967 years. Of course, the illegal development of residential areas and the process of incremental growth of housing through extensions are organically connected, though the latter is not restricted to such areas only. After all, probably a majority of low-income peripheral areas in cities have initially grown through illegal house-building and have developed more fully after their incorporation into the City Plan and regulation by building codes. Thus a proper recognition of the major role of residential extensions in non-speculative petty-building is in order. Unfortunately, the Greek Statistical Service distinguishes only between "entirely new buildings" and "extensions on buildings" in general; the distinction is not made for the series on new *dwellings* built privately which are given in aggregate form. Thus some assumptions must be made about the role of extensions in residential and other uses. The clearly more realistic one would be to assume that extensions are more heavily concentrated in building for residential purposes. Extensions are usually additions of storeys to existing buildings; commercial premises and workshops, though commonly incorporated in mainly residential buildings, are restricted to the ground floor at street level. Still, there is no evidence whatsoever by which we could arrive at some corroborated estimate. We are thus forced to assume that *at the least* the share of extensions in the volume of residential production is equal to their share in building as a whole.

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12. A major exception is the 1949-54 upswing in illegal building where almost half of new dwellings were illegal. See General Appendix, A.2, A.4.

Based on these assumptions I have constructed table 2.5 representing the distribution of private legal residential production (based on permits) among entirely new structures and extensions for years 1964-66 and 1970-72. I have added the volume of illegal housing to which we arrived in the previous discussion in order to provide the structure of private activity as a whole and, furthermore, illustrate the relative role of the latter in comparison to extensions.

Table 2.5: The role of entirely new structures, extensions and unauthorised buildings in private dwelling construction, 1964-66 and 1970-72

Volume in thousand m <sup>3</sup>						
1964-1966						
Urban Areas	Entirely new	Legal extensions	Illegal building	Total	% Extensions	% Illegal
Greater Athens	24,963	8,232	5,216	38,411	21.4	13.6
Thessaloniki	7,596	853	1,309	9,758	8.7	13.4
Other cities	7,739	2,538	1,216	11,493	22.0	10.6
1970-1972						
Greater Athens	44,426	11,175	-	55,601	20.1	-
Thessaloniki	9,256	1,274	-	10,530	12.1	-
Other cities	16,302	4,517	-	20,819	21.7	-

Source: General Appendix, Tables A.1, A.2, A.4 and text; the shares of extensions in total building used in the breakdown of authorised activity are calculated from the figures of new buildings and extensions in the Statistical Yearbooks of Greece 1968 and 1973.

Though the previous statistical detour may have been somewhat tiresome, it offers a more or less realistic description of the structure of residential production by private agents in the postwar period. With the help of this material we can construct a comprehensive picture of the relative role of residential building by speculative builders for the market (apartment-building in this case) and marginal speculative individual developments of small size, as well as the role of precapitalist private petty-production.

Table 2.6. summarises the previous analysis. It distinguishes three categories (modes) of private residential building, mainly based on building size, which, as we pointed before, is equivalent under Greek

conditions to *project* size. Size is measured by the number of storeys and physical volume. The shares in table 2.6 include residential development by illegal building and residential extensions. The modes of residential production which the categories distinguished in table 2.6 represent are precapitalist housing production or small owner-building and a broad capitalist/speculative building mode; the latter is divided into an intermediate category of housing production with marginal elements of rentierism and speculation (a size-class of 3-4 storeys or 5-10 dwellings) and apartment buildings of relatively more substantial size and height (in the context, of course, of the spectrum of sizes found in the Greek housing economy). A number of assumptions were made in the process of estimating the shares presented in table 2.6. Non-residential building was assumed to be distributed in similar proportion in each height-class.<sup>13</sup> We have also assumed that the share of extensions in total built volume was similar in residential and non-residential construction. Lastly, we had to introduce some assumptions about the characteristics and distribution of illegal housebuilding. The latter was not necessary for the 1951-1958 data, but had we added illegal housing in the way we did for the later periods, it is probable that the share of non-speculative petty-production would have been somewhat larger. We have already examined the reasons that justify these assumptions, and though it is clearly unfortunate that we lack exact information on these matters, it is also clear that a further refinement of data would not change the patterns and trends presented in table 2.6 in any important sense.

To return to our initial thesis in the light of these results: urban residential production in the postwar period shows the twin characteristics of an early capitalist "dual" structure: the persistence, on the one hand, of a substantial volume of pre-capitalist petty-production, and on the other hand a pronounced trend of structural change, that is, an

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13. The realism of this assumption, as we pointed before, is based on the well-documented fragmentation of economic activity in postwar Greece and the predominance of units of extremely small size in commerce and industry. For English-language accounts of the size-distribution of establishments in industry and trade, see, respectively, G. Coutsoumaris, The Morphology of Greek Industry, (Athens, 1963): ch. 2 and L. Preston, Consumer Goods Marketing in a Developing Economy, (Athens, 1968), pp. 83-87 and *passim*. For Athens see L. Leontidou Emmanuel, Working Class and Land Allocation.



Table 2.6. Sectoral composition of private urban residential building, 1951-72

Sector/Urban Area	1951-1958	1964-1966	1970-1972
<u>Greater Athens</u>			
1. Small Owner-Building (1-2 storeys, extensions, illegal housebuilding)	67%	56%	39%
2. Speculative Building	33%	44%	61%
2.a. Intermediate, Small- Scale (3-4 storeys)	( - )	(10%)	(15%)
2.b. Speculative Apartment Building (5 storeys and more)	( - )	(34%)	(46%)
<u>Rest of Urban Areas</u>			
1. Small Owner-Building	81%	61%	53%
2. Speculative Building	19%	39%	47%
2.a. Intermediate	( - )	(16%)	(18%)
2.b. Apartment	( - )	(23%)	(29%)
Of which:			
<u>Thessaloniki</u>			
1. Small Owner-Building	-	34%	21%
2. Speculative Building	-	66%	79%
2.a. Intermediate	-	(22%)	(26%)
2.b. Apartment	-	(44%)	(53%)
<u>Other Cities</u>			
1. Small Owner-Building	-	83%	69%
2. Speculative Building	-	17%	31%
2.a. Intermediate	-	(12%)	(14%)
2.b. Apartment	-	( 5%)	(17%)

Source: See text. Per cent composition in terms of building volumes in m<sup>3</sup>. Percentages rounded.

expansion of commodity production based on capital, mainly in the form of speculative apartment-building. Intermediate, smaller-scale forms of housing production show stability or slow growth in relative terms. Though the relative growth of larger-scale building does not in itself signify the parallel expansion of commodity *exchange* in housing, such a trend can be easily corroborated by an inspection of the rising volume of apartment property transfers (recorded in a different series for taxation purposes), especially when the latter are compared to the number of total new dwellings of all types built annually (see General Appendix, Table A.6). In Greater Athens their ratio rose from 0.31 for 1958-60 to 0.34 for 1964-66 and, in a much faster pace, to 0.52 for 1970-72. This fastly growing volume of apartment sales relative to housing production as a whole should be viewed as an integral part of the processes described in 2.6.

The composition of housing production and the trends of change differ according to the place in the urban system; whereas the speculative sector is more concentrated in the Capital and the next major city, Thessaloniki (population in 1971 2.540.241 and 557.360 respectively), small owner-building clearly predominates in the smaller urban centres, although there is an evident trend of "diffusion" of speculative forms.<sup>14</sup> It is interesting that Thessaloniki, though a smaller city than Athens, shows throughout the period a stronger speculative component than the latter, apparently based on a more rapid speculative expansion during the 1950's, as well as a more limited and weak sector of independent popular petty-production in those years.

In the smaller urban centres and for the major part of the postwar period the role of speculative housebuilding has been minimal. As much is evident from the trends we reviewed in the previous part of this chapter. This is also apparent in the composition of building stock, mainly formed during this period, as table 2.7 based on the 1970 census of buildings demonstrates. It is unfortunate that the buildings of five storeys are placed within the intermediate category by the

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<sup>14</sup> Urban centres other than Greater Athens and Thessaloniki are substantially smaller than the first two in the urban hierarchy: Patra and Volos which follow as the third and fourth in size had a 1971 population of 120.847 and 98.096 respectively. The rest had in 1971 an average size of 26.170 (52 cities with a total population of 1.360.945).

statistical authorities, but this has little effect on the general pattern, since such buildings are usually of a limited number. Higher buildings, which form the core of speculative activity, are almost wholly concentrated in Athens and Thessaloniki - the two largest cities. A certain amount of higher buildings can be seen in the larger regional centres. In the largest part, however, they are aimed to non-residential uses. The intermediate category of building sizes, on the other hand, is more evenly distributed in the hierarchy of cities. Though adequate information is lacking we know that new buildings of this type, when residential, are usually aimed at or are controlled by local middle-class strata. Their share in the 1970 stock, however, does not necessarily signify the emergence and expansion of *new* semi-speculative activity: non-residential buildings and houses of three and even four storeys have been a regular feature of the central areas of smaller Greek cities since the nineteenth century, especially in the case of sea ports and towns in the islands.

Table 2.7: The distribution of medium and higher buildings within the hierarchy of Greek cities, 1970

Urban Areas	Population (1971)	%	3-5 Storeys	%	6 and more	%
Greater Athens	2,540,241	54.4	31,008	53.5	11,423	70.4
Thessaloniki	557,360	11.9	8,117	14.0	3,528	21.7
50.000 to 120.847 (5 cities)	419,015	8.9	4,723	8.1	704	4.3
20-50.000 (25 ")	754,965	16.1	10,543	18.2	523	3.2
10-20.000 (24 ")	395,908	8.4	3,518	6.0	31	0.2
Total (56 cities)	4,667,489	100.0	57,909	100.0	16,209	100.0

Source: Statistical Yearbook of Greece 1976. Data for individual cities; my aggregations.

Thus, for medium and smaller urban centres we can safely say that small-scale building outside the market was the predominant source of supply of new residential capital throughout the postwar period. Such petty production must have been the exclusive form of private housing development for "popular" strata, i.e. that broad social category of

peasant small-holders, workers in industry, transport, handicrafts, construction and services, as well as self-employed of small income in trade, handicrafts and the service sector. Such a category is particularly extensive in Greece, a fact that, in turn, makes "popular strata" a meaningful and useful concept in social analysis.

### 3. The sectoral structure of the housing system: social classes, modes of housing production and the socio-spatial structure of the city

The mechanism and corollaries of the change in the structure of the postwar housing system shown in Table 2.6 will occupy us for the rest of this study. In order, however, to establish the full significance of the different housing "modes" as parts of a social and spatial system and thus the character of postwar change, we must inquire into their relations with social classes, tenure patterns and the spatial structure of cities. Although, for instance, the institutional and economic character of speculative apartment-building is more or less homogeneous and relatively known, its social distribution and tenure structure is less so. This problem is compounded by the fact that this mode is in a state of rapid expansion and change. Even less is known about the specific structure and social distribution of non-capitalist petty-production; the latter has received, surprisingly, limited attention, certainly not equal to its significance as a means of popular housing - the attention paid to "problem areas" like illegal housing notwithstanding. It seems necessary, therefore, to further explore the hypothesis of the operation of a precapitalist *sector* of popular housing as a distinct economic, spatial and social *system*. By using this particular sector as a vantage point, we may acquire a picture of the overall sectoral structure, thus also establishing the social character and role of speculative housing production and distribution.

It is in the context of the two largest urban centres that the question of the social character of housing sectors raises more complex problems. It is there, after all, that the process of capitalist transformation in housing and the dynamic and antagonistic relationships of housing sectors are more advanced. We will spend some time, therefore, examining the social structure of different housing situations in the Greater Athens Area. As it happens, it is only for the Athens

area that sufficient analytical information relevant to this question exists. Still, with a population of 2.540.241 in 1971, the G.A.A. comprised more than half the urban population (54%); together with Thessaloniki, the two thirds (66%). Whenever possible, references to the whole spectrum of urban areas will be made. The conclusions arrived at for Athens, however, should be always qualified with regard to their applicability to other cities in the light of the different sectoral composition prevailing there as described in the previous discussion. Thessaloniki presents the opposite case: the share of speculative building in the housing economy has been greater compared to that for G.A.A.

In summary form, the points we will try to establish with material from the Athens Area are the following: residential petty-production in Athens during the postwar period was predominantly connected with popular strata and their areas in the inner and outer suburbs of the city; it has generally been based on building for use by small holders of land and older housing stock; areas formed by this process are mainly populated by owner-occupiers, though a marginal market for rent also exists (the incidence of lower-income rental markets, however, increases in concentrations of older housing stock). Thus, we may justifiably conceptualise the petty-production housing mode as precapitalist petty owner-building and as part of a housing socioeconomic sector with a distinct character within the housing system.<sup>15</sup> In contrast, speculative apartment buildings are mainly associated with more central areas, and middle-class and higher-income groups; though, with regard to tenure, owner-occupation forms a substantial share of the apartment market, the rental sub-market is of equal if not greater importance and most certainly an integral part of the speculative economy. Intermediate forms of housing economy (defined in terms of size) take a place between these two extremes in matters of social and spatial character and tenure type. This last point, however, is more difficult to substantiate, since new buildings of intermediate

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15. Since, as will become more clear with further analysis of non-speculative petty-building, this mode is a mixture of "simple commodity production" and a much larger component of non-commodity household-controlled production, we are justified to employ the concept of a *precapitalist* mode (see the theoretical framework in chapter 1). It should be remembered (ch.1) that such a theoretical description does not necessarily imply that the wider society and economy is precapitalist or "dual", though this may very well be the case. It specifically refers to the economic and social organisation of housing as a relatively autonomous social sphere.

size are usually intermingled with older stock of similar physical type which generally shows higher concentrations of rental housing and low-income groups. Though the previous picture of the Greek housing system is realistic in broad terms, a qualification must be made: a certain share of residential petty-production in the inner and outer suburbs consists of more substantial houses for owner-occupation by middle-class and higher-income groups in more expensive and better-served areas. This is certainly owner-building outside the speculative sector, though some elements of business-organised, contract-building are involved (which must be seen as an incipient form of speculative economy). This category of residential development is limited in quantitative terms; its distinct social, spatial and institutional character, however, and its disproportionate social and ideological importance and influence within urban society makes necessary some qualifications in the broad correlations of social structure and the physical and economic forms of housing we have just introduced. It necessitates, moreover, its separate treatment in a schema of the housing system; less so in economic terms than in terms of the spectrum of effective housing *sectors*. In other words, this higher-income residential sub-system must take the place of a third significant sector in new housing formation in postwar Athens (and to a smaller extent in the other large urban centres). Let us now examine the evidence in relation to the schema we have just advanced.

Most information about the relationship between housing types, social classes, and the socio-spatial structure of cities is usually of a cross-sectional nature. Thus, the necessary distinction between the allocation of new housing and that of the existing stock as a whole cannot be easily made. Still, cross-sectional information sheds some light both on the pattern of past accumulation and the context within which new building takes place. Change, after all, in the pattern of use of housing types and their location is gradual in the longer term. We can place, moreover, cross-sectional material in the context of the long-term trends we have been reviewing, thus deriving by implication some conclusions about the pattern of growth of residential capital.

The role and social character of housing modes in Athens for the greatest part of the period we study can be established with the help

of a number of studies of the mid-1960's. A survey conducted during 1967 found that only 27.5% of households lived in apartment buildings. What is more important, only 9.1% of the sample chose apartments as their *desired* form of accommodation.<sup>16</sup> This shows clearly the limited extent of the speculative sector but also points to the largely "objective" and imposed character of its subsequent growth. The "dual" structure of the housing system at the time was closely connected with social class differentiation: a 1964 study of employees in industry (from a sample of establishments employing more than 50 persons in Greater Athens) found that managerial and higher-paid white-collar staff were more concentrated in apartment housing (about half of the sample) than in single-family houses (under 30%). In contrast, workers, regardless of skill, mainly resided in single-family houses (50-60%); only a very small part of them lived in apartment housing (less than 10%). The concentration in single-family housing was even greater for higher-paid workers of supervisory and technical capacity. Intermediate social strata like clerical workers occupied a place somewhere between these extremes: small shares resided in either single-family units or apartments (both under 30%). Their largest part, as well as the remaining shares of the higher and lower social strata, occupied intermediate housing types in relatively low-rise, higher-density, continuously built areas.<sup>17</sup>

Direct and detailed evidence describing these relations for the whole of the city and for a number of successive periods is not available. However, a comprehensive and dynamic conception of the social structure of housing growth and distribution by different modes can be gained through an ecological analysis of the Greater Athens Area for the period under study. We will classify the communes and municipalities of the Athens agglomeration according, first, to their social character in terms of the socioeconomic class of residents and, second, according to the predominant mode of housing production as reflected in the composition of buildings in the area in terms of size. As we have pointed above, the number of storeys of buildings is a good index for distinguishing

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16. N.C.S.R. Sociological Study of the Athens Master Plan, vol. 2, (Athens, 1973), Table 47 (study undertaken by the National Centre of Social Research for the Athens Master Plan Service, Ministry of Public Works).

17. Guy Burgel, La Condition Industrielle à Athènes (Athens, 1970) vol. 1, p. 152.

between speculative housing and petty owner-building. This double classification will provide a first rough correlation between modes of building and social class, albeit in static terms, and laden with the influence of the old housing stock which reflects poorly the structure of housing production. This cross-classification of areas, however, offers a meaningful framework for the analysis of the socio-spatial structure of urban *growth* in the postwar period: the pattern of growth shows decisively the operation of two distinct housing sectors as well as the change towards the increased role of speculative building in the 1960's.

In Appendix 2.1 we present data on the spatial distribution of occupational categories in the Greater Athens Area in 1971. The occupational category of heads of households offers a sufficient index for a broad division of households into socioeconomic classes. For our purposes, we can take as an index of the socioeconomic class-situation of a certain category the level of total consumption expenditure per household member. This is directly determined by the level of "normal" income (as opposed to transitory income) or the level of structurally determined resources over the life of a household and hence can serve as a composite index of economic class level.<sup>18</sup> The levels of consumption per household member for each occupational category found in a survey of all urban areas in 1974 are shown in the following table.

Table 2.8: Total consumption expenditure per household member by occupation of the head of household, all urban areas,\* 1974.

Occupation of head of household	Monthly consumption expenditure per household member in drs.
1. Professions, Managers Higher Administrative	6,216
2. Clerical Occupations	4,431
3. Tradesmen and Sales Workers	3,903
4. Service Workers*	3,320
5. Workers in Industry and Transport	3,175

Source: Calculated from N.S.S.G., Household Expenditure Survey, 1974, (Athens, 1977). \*: Category 4 includes the non-classifiable and workers in Agriculture.

18. This is a fundamental proposition of modern theories of household behaviour. For this argument and the relationship between "normal" income, consumption and occupational classes, see chapters 4 and 5.



For the purposes of this analysis a simple schema of socioeconomic classes based on the data in table 2.8 will suffice. Our schema is mainly based on the occupational category of the heads of households. The differentials in per capita consumption levels shown in 2.8 taken as reflections of the differentials in normal income and the life-chances of given categories, provide the objective ground for the grouping and hierarchical ordering of occupational categories.<sup>19</sup> We will distinguish three broad socioeconomic classes: an upper class/upper middle class, a middle class, and a working class. These correspond roughly to categories 1, 2-3, and 4-5 in Table 2.8 though a small part of 2-3 consisting of low-skill employees belongs more properly to 4-5.

Appendix 2.1 shows the occupational composition of the resident labour force in the communes and municipalities of Greater Athens in 1971. Assuming that heads of households by occupation are distributed similarly and that the consumption differentials observed for all urban areas apply to the Capital also (though absolute levels are higher), we have calculated the average consumption level per household member for each area. With the help of this composite index we have classified the areas of Athens in terms of predominant social character. The resultant spatial pattern is shown in Figure 2.1. In the construction of this socio-spatial model of Athens the consumption index supplies only the basic guideline. The choice of the specific dividing lines between categories of areas had, of course, to be based on more comprehensive information about the social character of areas. Thus, we also took into account a number of social-geographical studies of Athens for the same period.<sup>20</sup> It must be stressed that in some areas there is less homogeneity and greater internal differentiation than

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19. Our concept of economic class mainly derives from Weber's definition stressing market-situation. See H.H. Gerth and C.W. Mills, (eds) From Max Weber: Essays in Sociology (London, 1948, 1970): 181-183. See, also Chapter 4 in this study.

20. See, L. Leontidou Emmanuel, Working Class and Land Allocation, Chapter 6; E. Crueger, "Sociogeographic Study of the Greater Athens Area", in Sociological Study of the Greater Athens Area, Report by the National Centre of Social Research to the Ministry of Public Works, Housing Service, vol. 2 (Athens, 1973): 208-310, (in Greek) and the accompanying series of maps with the distributions of socio-economic characteristics held in the Library of the N.C.S.R.; O. Zarnari et al. "Socio-Ecological Study of the Capital's Area", in Sociological Study, vol. 1 (Athens, 1973),

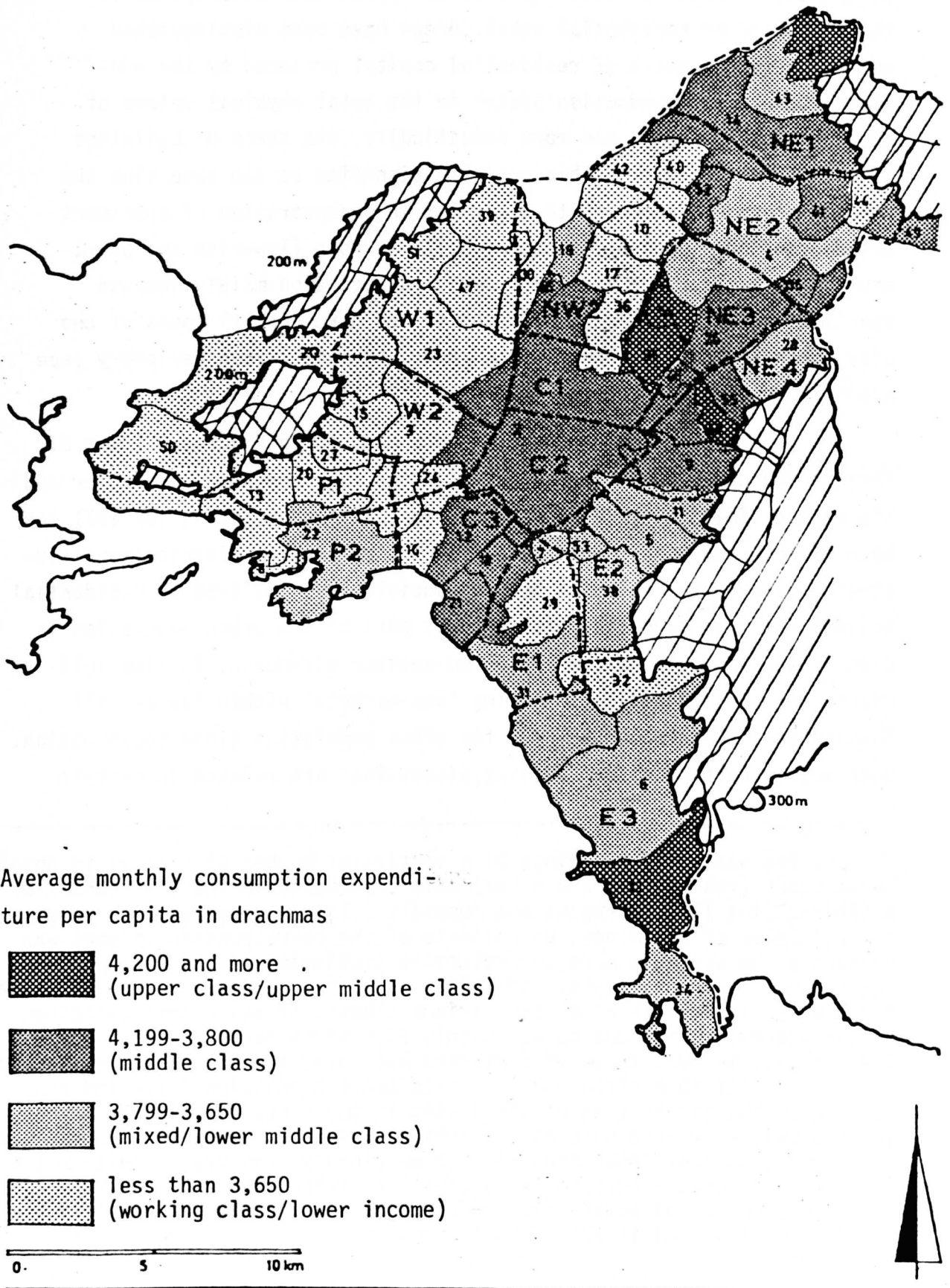
desirable. To a large extent this is natural for a city in flux like Athens during this period. After all, areas of mixed use and mixed social and physical character are an endemic aspect of Greek urban structure.<sup>21</sup> For these reasons, areas with particularly mixed social character were explicitly recognised as such and in terms of the ordering of socio-spatial areas were placed between categories B (middle-class areas) and D (working-class areas). While far from being satisfactory, such a rough division of the city area is sufficient for the understanding of the broad outlines of the housing system. The reader should keep in mind, moreover, that the central zones of Athens and Piraeus comprise the older section of the city, i.e. the built-up area formed in the years before the 1920's and the influx of the Asia Minor refugees; these zones have reached high densities even before the war and consequently contain concentrations of old building stock, older industrial areas, working-class neighbourhoods and elements of what geographers call the "transition" zone - wholesale commerce, warehouses, transport stations, workshops, transient and cheap rental housing and enclaves of prestige housing, government and professions. Added to the two business centres of the conurbation, these elements make for significant contrasts in social and physical terms. Though most of these aspects of the urban structure are not relevant to our classification of social areas, which is based on occupational and income criteria, they are factors that influence to a large extent the latter and should be kept in mind in view of our rather crude characterisation of the two central zones.

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and more specifically Table 37; Guy Burgel, *La Condition Industrielle à Athènes*, vols 1 & 2, (Athens, 1972) (in French), and in particular pp. 112-118 and map 11.72 in the second volume, and his "Aspects de la Structure de l'Agglomération Athénienne", *Sociological Thought* (2, 1966) (in Greek and French), pp. 177-239; P. Mandikas, *Economic Analysis of the Athens Master Plan*, Report to the Ministry of Public Works, Housing Service, vol. 2 (Athens, 1972) and vol. 4 (Athens, 1973), (in Greek), in particular the Appendices of the two vols.

21. The prevalence of mixed uses and physical heterogeneity in Greek cities are factors that, in turn, create conditions favouring certain social and income-class heterogeneity, particularly in more central urban areas. For the low degree of spatial specialisation, see, N. Georgoulas and A. Markopoulou, "Mixed Uses in Athens Urban Area", *Built Environment*, March 1977: pp. 73-78 and Liia Leontidou Emmanuel, "On Urban Structure and the Role of Planning in Contemporary Greece", *Architecture in Greece*, (11, 1977): 94-101 (in Greek with English summary).

Figure 2.1. Socioeconomic class character of Municipalities and Communes in Greater Athens, 1971



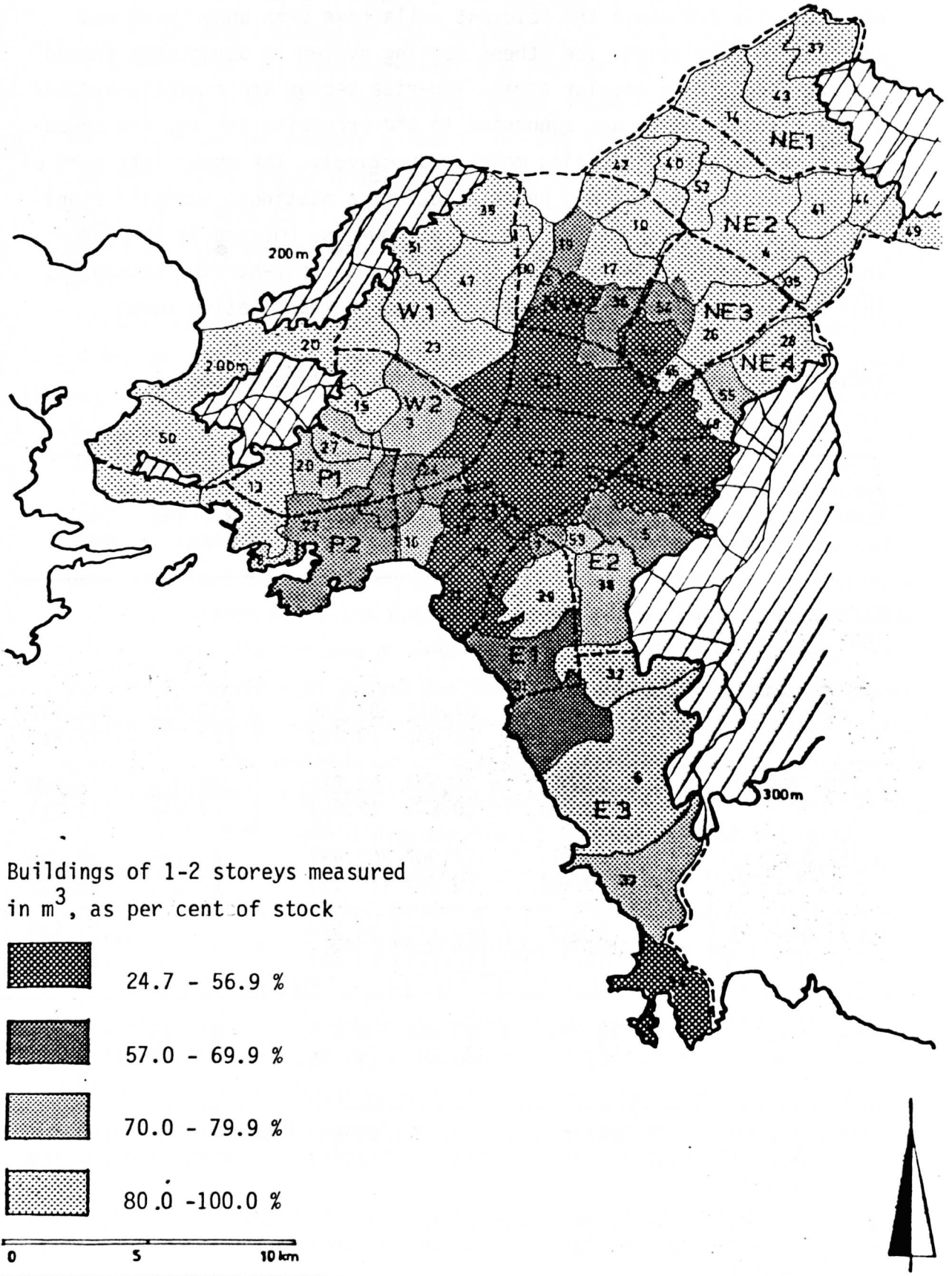
The predominant character of the Greater Athens areas in terms of the height/size composition of the 1970 building stock is presented in Figure 2.2. This may also serve as an approximate description of the structure of residential stock. Areas have been distinguished according to the share of residential capital produced by the non-speculative petty production sector in the total physical volume of the local built stock, and more specifically, the share of buildings of one or two storeys.<sup>22</sup> This variable signifies at the same time the ranking of zones according to the relative concentration of apartment buildings; these opposite types of building form (low-rise and apartment) show a clear-cut negative spatial association mainly because apartment buildings are concentrated in the more central zones of the city, whereas low-rise ones in the inner and outer urban periphery (see Appendix 2.1. to this chapter).

The differentiation of urban areas presented in Figures 2.1 and 2.2 forms a two-dimensional matrix based on the socioeconomic character and the residential structure of an area. The city's population for 1971 has been distributed within this matrix in Table 2.9. The distribution illustrates clearly the relation between social class and type of residential building we have suggested (the largest part of the urban population is distributed along the diagonal). From another viewpoint, it also delineates the main significant housing "sub-markets" within the overall housing system where the bulk of the urban population finds accommodation. Such supply categories or "housing situations" are related to certain

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22. The shares of buildings of a particular number of storeys in total built stock (residential and other) have been based on the 1970 census of buildings (see 1976 Yearbooks and Appendix 2.1). As these figures refer to the *number* of buildings, an estimate of the corresponding volumes was necessary. We used the more comprehensive statistics of building permits for a number of years in the mid-1960's to arrive at a relationship between the average volumes in m<sup>3</sup> of the various classes of buildings: buildings of 3-5 storeys were found to be roughly five times larger than those of 1-2 storeys, whereas those of 6 storeys and more, ten times larger. Bearing in mind the possible differences of size between existing stock and new buildings, the composition of stock used in the classification of Athens areas should be viewed more as a weighted index than an exact figure. It is my opinion, however, that they diverge marginally from real conditions; we may have, perhaps, a certain overestimation of the shares of smaller buildings due to the substantial differences in size between legal single-family dwellings and illegally-built ones.

Figure 2.2. Greater Athens Area, Municipalities and Communes: Composition of the building stock, 1970



modes of housing production and particular social classes to form what we have termed *housing sectors*. The pattern of housing sectors from the point of the distribution of existing residential stock can be clearly seen in table 2.9 where the relevant cells have been underlined and enclosed in rectangles. The Athens housing system is structured around two main sectors: a popular strata/low-rise sector and a middle-strata/higher rise one which are connected to the precapitalist and the speculative residential production modes respectively. The upper left part of the 2.9 matrix (A1, B1) may be said to form a distinct, socially significant housing sector: this consists of low-rise housing in the inner and outer urban periphery built by middle-and upper-strata households. This sector, however, is extremely limited in quantitative terms.

Table 2.9: Distribution of urban population by type of social residential area, Greater Athens, 1971

Predominant Socio-economic Strata:	A	B	C	D	Total A-D	
	Upper class/upper middle class	Middle class	Mixed/middle class	lower middle class	Working class	
Structure of building stock (1970)						
1. More than 80% low-rise (1-2 storeys)	9,375 (0.4%)	67,112 (2.6%)	81,395 (3.2%)	<u>536,875</u> (21.1%)	694,757 (27.3%)	
2. 70-79.9%	5,575 (0.2%)	14,904 (0.6%)	62,932 (2.6%)	<u>250,289</u> (9.8%)	333,700 (13.2%)	
3. 57.0-69.9%	4,087 (0.2%)	17,907 (0.7%)	307,997 (12.1%)	60,595 (2.4%)	390,586 (15.4%)	
4. 24.7-56.9%	9,053 (0.4%)	<u>1,083,761</u> (42.7%)	28,384 (1.0%)		1,121,198 (44.1%)	
Total 1-4	28,090 (1.2%)	1,183,684 (46.6%)	480,708 (18.9%)	847,759 (33.3%)	2,540,241 (100.0%)	

Source: Based on the data for Municipalities and Communes in Appendix 2.1. Population figures from the Statistical Yearbook of Greece, 1970.

Note: 24.7% is the lowest share of low-rise buildings in G.A.A. (that of the Athens Municipality); 57.0% is the average for G.A.A. as a whole.

The pattern described in Figures 2.1 and 2.2 and in Table 2.9 refers to the whole of the existing stock and is based on cross-sectional data (1970-71). To what degree are these sectors (enclosed in rectangles on table 2.1) a realistic schema of the housing system in a dynamic sense? In other words, do they represent the foci of the structuration of residential *growth*? To an important extent, even such cross-sectional data shed light on the dynamic pattern. For one thing, the population of Greater Athens almost doubled between 1951 and 1971 (1951: 1.378.586, 1961: 1.852.709, 1971: 2.540.241). Thus the 1971 pattern is mainly the product of postwar growth. Therefore the physical and economic character of existing buildings in extensive urban areas will reflect to a substantial degree the form of *new* building. This is true, of course, only to the extent that no dramatic shifts of the structure of building and its geographical distribution have taken place. Fast urban growth and change in the role of sectors has indeed effected significant changes in the spatial structure of Athens, but these have followed the lines of incremental expansion along a more or less "concentric" model with the additional complexity created by a second centre in Piraeus. Apartment buildings have mushroomed in the central zones of the city whereas low-rise development has taken place in the periphery, both forms expanding outwards with the process of urban growth. The relative regularity in the spatial pattern of growth has been reproduced by a number of factors: the tendencies of the housing economy for spatial specialisation in the medium term; the segregation of radically different housing modes/sectors; and, most of all, the stabilising effect of building regulations, particularly the rules controlling density of development and height of buildings. The official division of the city area into zones with different regulations and limits on building height and land exploitation has not changed since the mid-1950's; height limits were increased in 1968, but the change was applied universally though it was greater for low-rise areas. Thus the ranking of Athens areas by the predominant type and height of actual building is strongly correlated with the pattern set by regulations which certainly constitute the most important determinant of the form of building in a given area.<sup>23</sup>

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23. For this correlation, compare Fig. 2.2 with the relevant maps of building regulations shown in Ministry of Public Works, The Master Plan of Athens (Athens, 1965). See, also, Mandikas, Economic Analysis of the Athens Master Plan, vol. 4, Appendices.

Thus we may use the proposed matrix allocating Athens areas in different housing sectors in a dynamic way, if perhaps less so for the earliest part of the postwar period. Table 2.10 presents the distribution of population *increase* in the social/residential areas of the city for 1951-61 and 1961-71 (the figures corresponding to the main significant housing sectors are again underlined and enclosed in rectangles). The pattern that emerges demonstrates in a clear-cut manner the operational value of the sectoral schema we advanced: the bulk of growth in low-rise, non-speculative housing is associated with working-class, low-income strata. Seen from the point of social class, table 2.10 shows that the largest part of the growth of residential capital of popular strata has been geared to the precapitalist housing mode. The share of population growth allocated to such areas was in itself high: 52.0% for 1951-61 and 33.5% for 1961-71 (cells D1, D2). It is apparent, however, that significant changes in the sectoral structure of the housing system have taken place during the 1960's. The relative role of the popular precapitalist sector in residential growth has diminished, whereas the opposite is true for the speculative apartment sector in higher-density middle-class areas. The more central areas where the speculative sector is concentrated *doubled* their share in the total population increase.

Since this last point may easily give a wrong impression about the nature of our propositions on sectoral change during the 1960's, some additional clarification is needed. The apparent substantial incorporation of lower-class population growth into the speculative sub-system in the 1960's in comparison to the 1950's does not necessarily lead to the conclusion that such incorporation was in the nature of a direct shift to apartment housing. The evidence reviewed so far, particularly that establishing the limited extent of the speculative apartment sector even during the sixties, points rather to the conclusion that such direct shift to the apartment market must have concerned a very small share of popular strata. We will return to this issue later. Less disputable is the conclusion that in the 1960's we had a greater integration of popular strata into the older and lower-value housing stock of areas where growth has been increasingly *dominated* by speculative and petty-speculative building and where a "filtering" mechanism of some form has most probably operated.



Table 2.10: Distribution of population increase by type of social residential areas, Greater Athens 1951-1971.

1951-1961 (Population increase: 474.100)

	A	B	C	D
1.	5,240* (1.1)	14,207 (3.0)	18,821 (4.0)	<u>190,129</u> (40.1%)
2.	1,758 (0.4)	5,862* (1.2)	22,811 (4.8)	<u>56,366</u> (11.9%)
3.	1,550 (0.3)	7,446 (1.6)	23,686 (5.0)	10,322 (2.2%)
4.	3,502 (0.7)	<u>110,836</u> (23.4%)	1,587 (0.3)	-

1961-1971 (Population increase: 687.500)

1.	2,318 (0.3)	19,651 (2.9%)	26,880 (3.9%)	<u>184,975</u> (26.9)
2.	1,711 (0.2)	7,267 (1.0)	23,101 (3.4%)	<u>45,685</u> (6.6)
3.	999 (0.1)	3,652 (0.5%)	26,865 (3.9%)	20,465 (3.0)
4.	1,844 (0.3)	<u>319,279</u> (46.4%)	3,030 (0.4%)	-

Source: See Appendix 2.1 and text. Population change figures adapted from the Statistical Yearbook of Greece, 1976, based on the figures for individual municipalities and communes. For categories A-D and 1-4 see Table 2.9.

The two polar opposites of the dual structure of the postwar housing system shared between them the greatest part of population growth: more than two-thirds of the latter is found in either low-rise, lower-class areas of precapitalist housing economy or in areas of high concentration of middle-strata and high-rise market housing, (cells D1, D2 and B4 respectively). The third significant (though numerically limited) housing sector we have tentatively distinguished, that of low-rise, independent

house-building by upper/middle strata (cells A1, A2, B1, B2) has showed a relative decrease from a share of 5.7% in the 1950's to 4.4% in the 1960's.<sup>24</sup>

#### 4. Socioeconomic class, mode of housing production and tenure

Thus far we have utilised data about the *physical* characteristics of the residential structure in Athens. As a result we have felt the need to use somewhat narrow definitions for the different housing modes and sectors. We will conclude our analysis with an examination of tenure patterns. We will thus substantiate our original thesis that the non-speculative popular housing sector is based on small owner-building for use; the operation of this sector, in turn, has reproduced the high incidence of owner-occupation among Greek popular strata. The speculative mode is also associated with a substantial category of owner-occupiers, a fact that reflects the high incidence of house-ownership throughout the social-class spectrum. In contrast, however, an extensive rental housing market is an integral and important part of the speculative system.

The relatively high rate of owner-occupation has been a well-known feature of Greek urban housing in the postwar period. This rate is lower in Greater Athens and in Thessaloniki. The share of rental housing,

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24. Since the variation in the composition of built stock along the low-rise/higher-rise axis corresponds in general to variations in densities and land values, the classification of areas and their relation to the distribution of social classes in our schema of Athens amounts to a particular "model" of the distribution of social classes in the city in relation to the concentric pattern of densities. It can be easily seen that it stands in sharp contrast to the well-known model of the "Western City" following the original schema of Burgess derived from Chicago. It is not that the Athens pattern is an "inversion" of the Burgess model or even something in-between. (Leo Schnore's thesis on the structure of Latin American cities in his "On the Spatial Structure of Cities in the Two Americas" in P.M. Hauser - L.F. Schnore (eds), The Study of Urbanization, New York, 1965; 347-401). In a simple "inverse" model, socioeconomic status should be negatively related with distance from the centre and positively with density and land value. In fact, *middle* strata are found in the areas with higher densities and closer to the centre. No clear-cut linear relationship holds. As it happens, the same pattern has been documented for a number of Latin American cities by P. Amato, in his "A Comparison: Population Densities, Land Values and Socioeconomic Class in Four Latin American Cities", Land Economics, (XLVI, 4, 1970): 447-455.

however, has been steadily increasing during the 1960's. As table 2.11 shows, the share of rental accommodation *fell* during the 1950's to less than one-third of households in urban areas as a whole (at least up to early 1958); it rose fast, however, to 40% in 1971.

Table 2.11: Share of urban households in rental accommodation, 1951-1971

Year	All urban areas	Greater Athens	Rest of cities
1951 <sup>(1)</sup>	0.34	0.40	0.28
1958 <sup>(2)</sup>	0.32	0.38	0.27
1971 <sup>(3)</sup>	0.39	0.45	0.32

Source: Adapted from: (1) Statistical Yearbook of Greece, 1959; (2) "Construction and Housing in Urban Areas" N.S.S.G.: 28-29; (3) "Sociological Study", N.C.S.R., 1973, vol. 1, p. 273, "National Monograph", p. 123.

The main vehicle for the reproduction of high rates of owner-occupation has been the building of single-family houses by households owning a small land plot, as well as the other forms of small-scale family-controlled building aimed for owner-occupation: extensions, additions of storeys, small low-rise buildings. Residential production of this type was predominant during the earlier part of the postwar period; hence the decrease of the share of rental accommodation between 1951 and 1958. The degree to which new dwellings built during 1951-58 in Greater Athens were occupied by owners-users is impressive: the share of owner-occupation in new dwellings was 71%, and reached 75% if accommodation free of rent was added. In contrast, the share of owner-occupation in older stock (built before 1951) was only 52% (and 75% if we add rent-free housing).<sup>25</sup> A high concentration of rental housing has been in general a feature of intermediate types of residential stock which are usually older and depreciated buildings in medium and low-rise high-density areas. Speculative blocks of flats, on the other hand, stand somewhere in-between: though systematic statistical mate-

25. N.S.S.G., Construction and Housing, p. 28

rial is not available, the existing evidence suggests that such housing is roughly divided between owner-occupiers and renters.<sup>26</sup>

Owner-occupation is an especially strong norm in Greek society. It is the "popular" character, however, of the precapitalist residential economy that made possible the impressively egalitarian distribution of urban housing property in Greece. Lower strata, i.e. workers in secondary activities, services and transport as well as lower middle strata (petty proprietors, supervisory staff), have a rate of owner-occupation at least as high as the average for urban areas and most probably (on the grounds of available statistics) *higher* than the average for the largest part of the postwar period.<sup>27</sup> This is also true for Athens. A larger than average rate of owner-occupation is certainly evident in working-class areas of single-family housing in the urban periphery, which usually show heavy concentration of illegal housing. A study of three such areas in the western fringe of Athens, carried out in 1964 (Kipoupolis, Petroupolis and Aghia Varvara) found that the share of owner-occupation exceeded 85%.<sup>28</sup> The highly egalitarian distribution

26. The 1964 study of employees in industry cited before, found that about half (45%) of the residents of blocks of flats were in rental accommodation. The share of renters rose to 63% for those living in intermediate types of stock. In contrast, only 30% of those found in single-family detached houses were renting; G. Burgel, La Condition Industrielle, vol. 1, p. 151.

27. For Greater Athens, see, Burgel, La Condition Industrielle vol. 1, p. 150. For urban areas as a whole, see the figures for rental accommodation and owner-occupation given analytically for different occupational categories, income classes and by employment status (employers, employees, self-employed and unpaid family members) in Household Expenditure Surveys, Urban Areas (Athens, 1972) (N.S.S.G.). These figures covering a number of years between 1957-58 and 1968-69, though showing clearly the broad outlines of the social distribution of tenure forms, are based on too small a sample and are of limited use for any detailed class and income analysis or an exact estimation of changes in these matters.

28. Data from the Human Community Research Project, Report No 7, Athens Center of Ekistics (Athens, 1967) Table 16. A detailed analysis of the spatial distribution of tenure patterns in Greater Athens based on the 1971 census material (Sociological Study, vol. A, pp. 271-275) reports similar conditions: the shares of owner-occupation in occupied dwelling units in the lower-strata areas in the western and north-western periphery (mostly formed in the postwar) varied between 65-80% these are certainly among the higher for G.A.A. We might add, however, that these figures show that the trend of a decrease in the rate of ownership is strongly evidenced in such areas.

of owner-occupation rates is shown clearly in table 2.12. The same table, however, indicates clearly a change towards a decrease in the rates of owner-occupation among low-income strata. This change took place during the 1960's.<sup>29</sup>

Table 2.12: Rates of owner-occupation by occupational class of the head of household - urban areas, 1957/58 and 1974

Occupation of the head of household	1957/58 % owner-occupiers	1974 % owner-occupiers
A. Professional, Technical, Administrative and Managerial	60%	58%
B. Clerical	54%	55%
C. Commerce and Sales	65%	64%
D. Industrial, Transport and Construction Workers	69%	56%
E. Service Workers	63%	55%
F. Agricultural	89%	83%
G. Not gainfully employed	66%	65%
All households	67%	60%

Source: D. Emmanuel, Study of Categories of Households Outside the Existing System of Housing Assistance, Table D.4 derived from the 1957/58 and 1974 Household Surveys. Categories A to F are ranked according to average household income. "Owner-occupiers" include a small category of rent-free accommodation.

There are strong grounds for viewing the decrease of the rate of owner-occupation during the 1960's as a corollary of the major structural transformation of the economy of residential production, namely, the expansion of the speculative mode and the decline of the significance of the popular precapitalist housing sector in urban growth. For one,

29. A point corroborated by the data in N.S.S.G., Household Expenditure Surveys (1972) though the reservations pointed in note 27 above should be kept in mind.

a number of policies introduced during the military regime (1967-74) have drastically restricted the growth of illegal areas and popular petty-production of new housing in general; we will return to these issues in later chapters. We will also show that though construction costs moved throughout the postwar period in a favourable way, the growth of speculative building created scarcities and inflation in land and other inputs to an increasing degree; this, combined with the aforementioned restrictions and stricter "modernising" controls on land and small-scale building, added to the capital costs and difficulties encountered by non-speculative house-builders. It is ironic that the alleged main goal of housing policy during 1967-1974 was the spread of new housing and owner-occupation among the "people": hence the increase of mortgage credit and the encouragement of high rates of building. The actual outcome, as it turned out, was a dramatic increase in the significance of speculative activities in Greek urban housing. Given the class-character and economic structure of the "dual" housing system as we described it, the fall of the rate of owner-occupation should, therefore, come as no surprise.

#### Concluding remarks

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The aim of this chapter has been twofold. First, to substantiate our thesis about the "dual" structure of Greek urban housing in the postwar period, the existence, that is, of two major and greatly differing housing sub-systems, evident at the level of modes of residential production as well as the level of social and spatial relationships. And second, to examine empirically the relative extent of these sectors - precapitalist petty owner-building and speculative building - within the overall supply of housing, as well as outline the trends of change of this sectoral structure

We also made clear that few things can be advanced against an approach to the postwar housing situation that stresses the significance of a broad precapitalist housing mode which is certainly more broad and more complex than simplistic concepts of "marginal" illegal housing. The existence of systematic relationships between modes, social classes and tenure patterns has been equally well demonstrated (though important complexities caused by change trends and the mixed character of

older stock are present). These relationships suffice to show the opposed class nature of the precapitalist and speculative modes and the articulation of these into distinct social systems, i.e. housing "sectors".

To what degree this productive and sectoral dualism implies the existence of radically divergent *values* and social institutions in relation to housing, or perhaps even *antagonistic* ones, can not be decided at this stage. A positive answer to this question is a very reasonable one in the light of the evidence on housing choices and the historical significance of the popular residential household economy; theoretical arguments may also commend it (see the previous chapter). It is surely more plausible than the commonly accepted theories about housing values which stress the universal acceptance of market housing as the norm, public housing as a second best, and thus view the majority of popular "irregular" accommodation as the unhappy product of necessity and poverty.

Still, it could be pointed that there are strong elements of incipient speculative character within the precapitalist economy, and that the pace of speculative expansion has been fast: both of which might point to the contrary case. We will leave the question of the extent of antagonisms and conflicts (latent or manifest) or, alternatively, the extent of easy "assimilation" during the process of capitalist transformation in housing to be examined again in later chapters. A related problem, bearing on the origins, functions, and determinants of precapitalist popular housing will be discussed in the next chapter.

### 3. Socioeconomic Foundations of the Precapitalist Housing Sector

Accounting for the existence and systematic reproduction of precapitalist urban housing in Greece is of strategic importance for the analysis of postwar developments in the housing economy. First, it sheds light on the historical conditions of the "dual" housing system as a whole. It would be mistaken to assume that a limited social and spatial expansion of speculative production necessarily implies a dual housing economy, although it is certainly an important aspect of one: sufficient conditions for the extended reproduction of precapitalist housebuilding must also exist. Second, an examination of the socioeconomic foundations of precapitalist housing adds to our understanding of this particular housing form as a distinct social system with a major significance in the history of cities. Lastly, such an examination is crucial in pointing to the factors and mechanisms that determine the growth or decline of the precapitalist housing sector, illuminating thus the nature of the process of capitalist development in housing.

In this chapter we will be occupied with a number of fundamental characteristics of popular petty owner-building in postwar Greece that may be viewed as the socioeconomic conditions for its postwar reproduction. These furnish by implication a theory of the factors that most probably account for its relative decline in the later part of the period. Before this, however, we will shortly review a number of explanations of the phenomenon of widespread non-speculative popular petty-building on the urban periphery and, in particular, of illegal housing. The majority of these explanations are either inadequate or heavily obscured by ideological and biased approaches. In addition, they seldom place the question of the foundations or functions of popular petty-building within a more general conceptual scheme as is done in this study: in terms, that is, of the significance of the wider precapitalist housing mode and the related popular housing



sector in the context of an early capitalist urban economy.<sup>1</sup> Our review, thus, will be both a critique and an effort to point to a theoretically more relevant way of posing these questions.

### 1. Clearing the ground: Illegal housing and the precapitalist sector as a whole

There are no comprehensive studies of the postwar housing system in Greece aimed explicitly at the problem of its nature and peculiarities. The few Government reports and the small number of articles and pamphlets on housing published by individuals or professional bodies are almost universally concerned with the "Housing Problem" and prescriptions about public housing policies. They thus tend to start from a rather biased view of the character and functions of the housing system and consequently provide inadequate accounts of its determinant factors. Not unexpectedly, the State and its policies figure as the most prominent among these.

An older generation of architects, planners and public officials approached the problem of the "peculiarity" of Greek popular housing in the urban periphery (which forms the core of what we termed the "precapitalist sector"), solely from the perspective of administrative norms on housebuilding and the values of the Town Planning profession. Such housing forms were simply defined as a *problem* since they were the product of "uncontrolled" residential development, diverged sharply from the norms of postwar European organised housing estates, and required extensive planning action and public works to attain an acceptable environmental standard. Popular housing in most peripheral areas was judged, furthermore, to be below acceptable housing standards and thus was summarily condemned as "slums", "shacks", etc.<sup>2</sup>

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1. I have put forward some of the ideas about the precapitalist character of popular petty building advanced in the present work in an earlier small article on Greek illegal housing: "Anticapitalism and Autonomy in the Postwar History of Unauthorised Housing", Bulletin of the Architects' Association (1, 1975): pp. 11-14, (in Greek).

2. See the Conclusion and, more generally, the proceedings of the Second Panhellenic Congress of Architects held in 1962 on "Popular Housing - Town Planning"; for the published proceedings, see Technical Chronicles, Special Issue, (248, 1962, in Greek). Similar "official"

Since the mid-1960's and in the light of the growing literature on squatter settlements, the problem has come to be largely defined as that of *unauthorized* housing in Greek cities. This was certainly an improvement in that it increasingly led to the recognition of the wider socioeconomic determinants of low-income urban housing in a developing and rapidly urbanising country. Little progress has been made, however, towards a systematic understanding of the character of popular petty housebuilding as a whole, its origins and its functions.

Two widespread misunderstandings may account for this state of affairs. The first and more important stems from the mistaken equation of non-speculative, low-income peripheral housebuilding in general, with "illegal" housing.

This equation runs against both the statistical facts and the nature of the case. We have been at some pains to show that illegal housebuilding forms only a part - if a very important one - of popular petty production and for certain periods no part at all (see chapter 2). Furthermore, what may start as illegal settlement will usually develop in a strictly legal context after incorporation into the city plan. For the greatest part of the postwar period the substantial volume of authorised petty building and additions to existing structures formed a larger part of popular peripheral petty housing production than illegal activity. After all, a large number of municipalities and communes in Athens and Thessaloniki have been established and incorporated into the city plan through the Asia Minor Refugee Settlement, and not with the usual postwar process of incremental unauthorised urbanisation. Thus, *defining* petty building by urban low-income strata as predominantly "illegal" building is a gross empirical mistake.<sup>3</sup>

attitudes towards "uncontrolled" low-income urban housing have been quite common among the observers of the housing situation in underdeveloped countries after the war. See, Lila Leontidou Emmanuel, "Squatter Settlements: A Bibliography on Controversies on the Nature of an Urban Mass Movement".

3. To mention two cases: in contrast to the numerous official estimates and independent field research reporting that illegal building has been successfully suppressed during the period from 1968 to 1974, we read in the otherwise serious article by Z. Demathas & C. Courtis, "Political Economy and State Activity in the House-building Sector of Greece", in *Questions of Greek Housing*, Chair of Architectural Design, Univ. of Thessaloniki (1976): 83-120 (in Greek), that the latter *continued* to thrive undisturbed by the measures introduced by the

The second misconception stems in part from this mistaken view of the composition of popular petty production. That is, an undue emphasis is devoted to the particularities of the illegal housing process with the consequent disregard of the more important and general characteristics of precapitalist household production and distribution as an economic form *sui generis*. What is worse, the conceptualisation in terms of relative legality of the development process relates more to ideological and official definitions imposed upon a historical form of economy. After all, the meaning of illegality in the case of Greek unauthorised housing should not be confused with the patterns in other developing countries where the violation of laws - in this case laws on property - is an all-important aspect of the squatter settlement process. Squatting on non-owned land is hardly relevant to the Greek case: the illegality aspect refers to a violation of building by-laws, and thus involves the clash between two different concepts of rights over one's property, a traditional one of a smallholders society and that of a modern, urban society.

Since the "housing problem" aspect and illegality have commonly been defined as the essential aspects of the popular mode of peripheral housebuilding, it is not surprising that the factors proposed as the determinants of such housing are equally distorted and ideological. We are generally told that since the limited supply and/or the high costs of "normal" speculative market and public housing are such that these sectors are "unable to solve the problem" of accommodating the rapidly growing low-income population, the latter is "forced" to seek a solution in illegal activity. The State, in turn granted its inability (or unwillingness) to solve the emerging problem, gives in essence its tacit approval, tolerating the vice of illegal urban growth.<sup>4</sup> Some left critics of the State's policies have argued that this relatively passive attitude towards illegal housing has been

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Military; in a study of Greek housing by a group of architects connected to the C.P. of Greece, we learn that private housing activity as a whole is mainly composed by two parts: speculative building and illegal housing! See, SPADA, The Housing Question, pp. 30-40.

4. SPADA, The Housing Question, p. 39; Aristides Romanos, "Housing Outside the Plan: Problem or Solution?", Bulletin of the Architects' Association, 1, 1975 (in Greek) and his "Illegal Settlements", (1969).

intentional, aiming at the creation of an urban reserve army of labour useful to the demand of the industrial bourgeoisie for cheap labour.<sup>5</sup> Some go even further in this argument to claim that in essence a bourgeoisie-dominated State has been using a general policy of easy access to urban land through illegal housing in order to lower the cost of labour power by reducing what Marxists call absolute urban rents, namely the ground rents imposed on peripheral land which are a major factor in the cost of living of the working class. Indeed, they would perceive such a conscious policy going back to the middle of the last century.<sup>6</sup>

As most functionalist explanations, these arguments have certain elements of truth as well as an arresting simplicity. A moment's reflection, however, makes apparent their limited explanatory power and the lack of realism in their premises. To begin with, on what grounds should we expect a capitalist State and a speculative housing market to "solve" the "housing problem" unless some very special historical conditions and social struggles are present? Neither institution is inclined by nature or is morally obliged to seek solutions to the housing problem. Therefore, the lack of some "normal" solution to the problem in Greece does not imply that public and private elites had promoted, as an alternative, the "squatter" solution. After all, there was no serious housing problem in the postwar period, let alone an explosive one, that would force the ruling strata to formulate a specific policy. On the contrary, there was a clear-cut, unprecedented improvement in the housing conditions of the lower strata, even though urbanisation rates were rather high and a tremendous housing shortage has accumulated in the 1940's. If "inability" to solve the housing problem, benign neglect and *laissez-faire* attitudes are indeed the crucial factors explaining the role of illegal housing, England in the nineteenth century should be swarming with some form of squatter housing, whereas, as far as I know, nothing of the sort took place.

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5. See, SPADA, The Housing Question, p. 39 and G. Arachovitis, "The Nostalgia of Imperfect Commodity Production or Let's Have Another Look at Unauthorised Housing", Bulletin of the Architects' Association, (1, 1975): 15-17, (in Greek).

6. Z. Demathas - C. Curtis, "Political Economy and State Activity".

Neither the argument about the economic functions of illegal housing for the industrial bourgeoisie offers much in the way of explanation. Industrial concern for the supply of cheap labour was certainly great in the context of nineteenth-century English industrial urbanisation. Despite the fact, however, that industrial capitalism reigned supreme, no "strategy" analogous to illegal housing emerged. Even if such bourgeois strategies were common, it is certainly far-fetched to view Greek urban policies as dominated by an articulated industrial bourgeoisie, especially during earlier periods, in view of the capital city's weak industrial base. The last point applies *a fortiori* to the general case of the Third World city, hardly an industry-dominated social formation, though surely not lacking in low-income squatter housing. One could counter to the previous argument that although there were no *dysfunctions* in illegal housing, as far as industrial capital was concerned, there were important positive functions to make the latter accept such a state of affairs and that, furthermore, there was no articulated and strong urban landed bourgeoisie imposing restrictive, high-rent policies, as was the case in European capitals in the previous century (see chapter 1). But this takes us away from simple functionalist explanations and into the realm of historically specific patterns of class structure and class power, and relationships of urban landownership and its economic utilisation.

We may find *post facto* quite a number of positive functions for any particular social phenomenon; but these in no way point to a determinant mechanism for its historic formation on a significant scale. The arguments about the "latent" functions of illegal housing for the Greek State and Industry, simply state the more or less obvious fact that no strong negative policies seemed necessary, which teaches us little about the historical genesis and reproduction of illegal housing or, more important, about the wider case of precapitalist urban housing petty production. As for the theses about the inability of State or the market to solve the "problem", though they might be important in illuminating the rationale, again, of the lack of strong *negative* measures in the postwar era, they offer little as positive historical factors; if taken seriously as a theory of the genesis of illegal housing, they simply turn history on its head. The State and the speculative market as regular suppliers or popular housing are exceptional and recent phenomena in the

history of Greek housing, particularly in the postwar period. (The extensive programs for refugee housing in the interwar period should be considered as an exceptional case). The main source of popular housing has been, of course, precapitalist petty-building. Illegal housing has formed a part of this wider sector. As we will argue in the following, it has played a major role in the precapitalist sector's growth and must be properly viewed as an integral part of the system of social and political relations and institutions that historically characterised this sector. Thus any argument that explains illegal housing as a residual, necessary third alternative to the "normal" forms of public and market housing, should logically apply to the precapitalist sector as a whole. But this is patently absurd since the latter has clearly been, till at least the end of the 1950's, the dominant form of new popular housing in urban areas as a whole, while being a near-exclusive one in smaller urban centres.

In conclusion, the problem of explaining the existence and role of precapitalist housing should be sharply distinguished from that of explaining "illegal" housing. The explanations that have been advanced for the latter in Greece are inadequate and distorting as accounts for the broader phenomenon. However, they are equally inadequate as accounts of illegal housing as such. It is our contention that a proper understanding of Greek illegal building can be only gained when this is placed in the wider context of the characteristics and determinants of popular precapitalist housing as a whole. The rest of this chapter will be occupied with these issues.

## 2. The conditions for the existence of the precapitalist sector

Contrary to the widely held views referred to previously, the relevant empirical possibilities with regard to the mode of production of low-income housing in early capitalist cities are not the pair speculative and/or public new housing vs. precapitalist housing. Even a cursory knowledge of the history of capitalist cities and present-day developing countries shows that the most relevant pair of alternatives is precapitalist production or no new low-income housing *at all*. It is pertinent therefore to pose the question: how has it been possible for precapitalist housing production to exist and be reproduced at such a substantial scale in postwar Greece? What are the particular conditions that have been essential for its functioning and growth?

In the short historical and comparative analysis of chapter 1 we have pointed out that both theoretical argument and historical evidence show a necessary association between the existence of an extensive sector of low-income, precapitalist housing and widespread access to the ownership of land and other means of production along with the institutional structures legitimising and reproducing such a pattern. To this crucial precondition we may add the more obvious one of the level of economic development of a country: unless incomes per capita and thus savings and, more specifically, economic resources per low-income household do not exceed a certain level, extensive popular owner-building, especially in large urban centres, should not be expected. The existence of these two major preconditions makes for a strong possibility for the operation of an extensive precapitalist urban housing sector. Both of these general preconditions and their economic and political correlates were present in Greece in the early 1950's. The most relevant elements can be summed up as follows:

a. The economic development of the country in terms of income per capita placed Greece among the "middle-income" category in the international scale of development. This, in itself, does not signify much; but, given the pattern of income distribution in the country and the international economic context of the early postwar period, it implies a level of low-income household resources that was sufficient for the accumulation of substantial residential capital. This point is developed more fully in chapter 5.

b. There was a strongly diffused pattern of ownership of land and small capital.

c. There was an extensive small-holder family economy. This was dominant in the countryside but also of major importance in the cities especially in relation to low-income strata.

d. The system of values, social institutions and legal-political practices prevailing in Greek society had a strong component that expressed the interests and ideologies of the social stratum of small proprietors. This was expressed in the legal rights of small property owners, in the clientelist and populist attitudes and practices of politicians and administrators *vis-a-vis* the "people" (most notably in small towns and rural areas), and in the legitimacy given to small

property both by conservative rhetoric and the liberal-democratic tradition established during the land reform and the dissolution of large estates in the first quarter of the century.

This is not the place to substantiate these arguments or expand on these societal structures of twentieth-century Greece.<sup>7</sup> It suffices to point out that, given their validity in the context of historical-international comparisons, they make for a very strong tendency towards the existence of an extensive precapitalist housing sector, in objective terms, as well as in terms of values. In point of fact, their influence in Greece extends well beyond this and determines to a large degree the character of the building economy as a whole: as a significant Marxist study of postwar building notes, the structure of Greek house-building as well as its social significance can be largely derived from the strong "petty bourgeois" elements in the class structure of Greek society.<sup>8</sup> The latter involves the diffused pattern of property ownership, but it also signifies the institutional significance of small property and the limited development of modern capitalist relations.

Instead of analysing the aforementioned socio-structural patterns at the level of the society as a whole, we will examine the specific form these patterns acquire in the context of the urban-residential political economy. More specifically, we will examine the conditions making for widespread popular access to urban land since this certainly

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7. There are very few systematic studies on twentieth-century Greek society elaborating on the social and political aspects we have listed. On class structure and politics, see B. Sweet-Escott Greece: A Political and Economic Survey 1939-1953 (London, 1954); A.P. Alexander, Greek Industrialists (Athens, 1964); C. Tsoucalas, The Greek Tragedy (London, 1969); N. Mouzelis, Modern Greece: Facets of Underdevelopment (London, 1978). For a wealth of material on the same issues in the case of Athens, see L. Leontidou Emmanuel, Working Class and Land Allocation: the Urban History of Athens 1880-1980, Ph. D. Thesis, L.S.E. (1981). In relation to agrarian politics and property relations, see C. Vergopoulos, The Agrarian Question in Greece, (Athens, 1975, in Greek). Lastly, in relation to populism and clientelism in Greece see, Mouzelis, Modern Greece, K. Legg, Politics in Modern Greece (Stanford, 1969) and the articles in G. Kontogheorghis (ed.), Social and Political Forces in Greece (Athens, 1977, in Greek).

8. Study Group, Construction Workers and Building, pp. 16-17.



constitutes the most important precondition for the existence of the precapitalist housing sector. Though this factor, however, with its attendant social values may be a necessary condition, it is not a sufficient one. We will therefore pay equal attention to a number of factors that make for a lack of *negative* pressures or constraints on the operation of popular precapitalist housing. Thus, our discussion will be organised into two main sections with regard to the conditions that the social strata involved in the precapitalist sector faced: access to land and relative autonomy or lack of negative pressures and constraints due to middle-class/capitalist influence over urban land, and access to and relative autonomy in the utilisation of economic resources other than land, namely savings, labour and building capital. The first of these refers to the formation of widespread land-ownership among popular strata through the post-1920's "waves" of "colonisation" of peripheral land, the creation of extensive lower-income and working-class areas, and the lack of middle-class/speculative control over such land either in the form of substantial landed property or through any diffusion of competitive pressures for such land by speculative enterprises. Capitalist rent, thus, either in the form of "absolute" ground rent based on the monopoly power of a class of large landowners, or "differential" ground rent and high "development values", has not been a prohibitive factor for non-speculative growth.<sup>9</sup> Although the increased application of "modern"

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9. Since the recent literature on ground rent in urban land - mostly efforts to apply Marxian and Ricardian concepts in an urban context - is notorious for its anarchy of definitions and interpretations, we might as well make clear our own use of these concepts. "*Absolute ground rent*" is theoretically defined as the rent demanded by the owners of the best plots of peripheral ("marginal") land *not yet* incorporated in the process of supply of urban services - in this case housing. Naturally, under market conditions all plots already integrated in the urban sphere enjoy this rent. "*Differential*" rent, on the other hand, is attached to specific classes of land or even individual plots and it is the outcome of the differences in "productivity" of these plots compared to the *worst* plots included within the urban market - specifically, the difference in costs of production of urban services between a given plot and the "worst" one. This, given a uniform pattern of prices asked on services and a uniform rate of profit on capital, accrues to the landowner. Thus, in general, differential rents are produced by market prices and the inherent advantages of various plots, whereas absolute rents are based in part on the possible remuneration of non-urban uses but mostly on the monopoly power of the class of landowners. Thus, absolute rents may be thought of as transfer prices asked in the process of turning land from one

public regulations over the right to build and the form and size of the residential development are not always, or necessarily, a mere reflection of the norms prevalent in the middle-class/capitalist sector of the housing economy, they certainly tend to conform more with the "normal" private market and middle-class standards of housing. The relative autonomy of peripheral areas and petty-building from such norms and controls has been historically an additional important factor in its reproduction and growth. This particular condition was also important in permitting the best utilisation of popular economic resources, at least from a short-term point of view. But the informal and adaptive "rationality" of petty building in the precapitalist family economy would not have been possible were it not for the existence of a personal and uncontrolled system of savings accumulation and finance and the availability of a pool of non-capitalist petty-construction groups and independent labourers, the relative autonomy, that is, from capitalist relations and formal public controls over the important "inputs" of the housing process.

Before we go into these points, however, a note about the so-called "technological" factors that may have been instrumental in facilitating the reproduction of peripheral petty building is in order. A relatively modern technology of road-transport and cheap public transportation services must surely be a significant contributing factor permitting a more decentralised urban pattern. This is doubly important for the

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use to another; but the class-power component is also essential. It explains the fact that even land turned to urban uses but not yet developed can command rents well above the transfer price and differential rent. We may have, then, absolute rent, in addition to the first mentioned case, even in the case of the "worst" or marginal land transferred to the urban market. These conceptualisations follow in general lines the ones advanced by Arghiri Emmanuel, in his Unequal Exchange (London, 1972, translated from the French, 1969), pp. 216-26. For a useful review of various approaches to urban ground-rents, see, Allen J. Scott, "Land and Land Rent: an Interpretative Review of the French Literature", Progress in Geography (9, 1976): 103-145. The "development value" of a plot results from the multiplication of both absolute and differential rent per unit of housing services in the area by the density of development permitted on this plot. For a more detailed discussion of the theory of urban ground rents and the problems of its application in the Greek context, see Chapter 6, Appendix 6.1.

urban working class, for a peripheral and dispersed, "peasant-type" housing process is greatly facilitated by easier access to employment through public transport and by the spatial decentralisation of industry itself. These arrangements would hardly be possible under an older transport technology in a city of the size and complexity of Athens.<sup>10</sup> Of equal importance are most probably the improvements in the "technology" (which includes public capital and personnel) of electricity, sewage and water supply. These factors, however, together with other technological improvements in building materials and infrastructure construction, are of a more long-term character in relation to the urban pattern and therefore of secondary interest for the analysis of developments in the period we study. Thus we will not pay any systematic attention to them. Nevertheless, from the point of view of the historical-comparative argument on the foundations of precapitalist housing in the early post-war period, the availability of a relatively advanced level of urban "technology" in Greek cities is an important contributing condition and must be kept in mind.

### 3. Foundations of the precapitalist housing sector: Access to urban land and autonomy from middle-class/capitalist controls and pressures

The existence and growth of the precapitalist popular housing sector in Greece has been based to a determinate extent on the relative lack of control over land in the urban periphery by middle-class/capitalist owners, or control effected through the "integration" of such land into the speculative housebuilding economy. Since the 1920's and until the mid-1960's the social strata associated with petty owner-building faced a system that offered access to urban land as well as autonomy from the negative pressures and controls that the middle-class/capitalist system of economic and political relations over land normally imposes. We can distinguish three major aspects in this overall pattern:

a. The peripheral land into which the city expanded during the postwar years, has not been held by larger owners belonging to the

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10. This point is stressed in Leo Shnore, "On the Spatial Structure of Cities in the Two Americas", William Alonso, "The Form of Cities in Developing Countries", Regional Science Association Papers (13, 1964), and Lila Leontidou Emmanuel, Working Class and Land Allocation.

bourgeois class or older "aristocratic" families; on the contrary, the great majority of landholdings were of a very small size and were themselves further fragmented, a feature that can be said to apply for agricultural and urban real property in Greece in general.

b. Land in the inner and outer suburbs of the city has been for most of the postwar period outside the sphere of speculative residential development. Although a market of land properties has been a generalised and established institution since the last century, and therefore commodity exchange involved peripheral land plots, such land and its value have not been integrated into the spatial competition process of speculative building and the resultant system of development values.

c. The reproduction of precapitalist petty owner-building, either in older areas or in newly urbanised ones, has been based on an extensive "infrastructure" of urban holdings held by popular strata and accumulated through past "waves" of building and land acquisition in the urban periphery. Such "colonisation" processes have mainly been of extra-economic nature ("illegal" housing is the more well-known form), and were rooted in the class structure and politics of post-1920's Greek society.

Despite their crucial significance, these patterns have never been studied adequately. We will spend some time then in documenting them for the case of Athens for which relevant material is available.

### 3.a. The lack of bourgeois landed estates and the diffusion of land-ownership

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The extremely small size of land holdings in Greek agriculture is a well-known fact. It derives from the extensive redistribution of land undertaken during the agrarian reform of the early 1920's. The latter was one of the most radical in Europe and coupled with the agricultural settlement of the Asia Minor Refugees (1922) determined the present-day small-holding peasant economy.<sup>11</sup> In 1961 the average size of agricultural land holdings was as small as 31.77 stremmas (3.17 Ha): in 1971, it was 34,5 stremmas (3.45 Ha). This pattern was

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11. For an account of the Greek Agrarian Reform, see Kostas Vergopoulos, The Agrarian Question in Greece, (Athens, 1975) ch. 3, (in Greek). For comparative data, see Wilbert E. Moore, Economic Demography of Eastern and Southern Europe (Geneva, 1945) App. III.

even more pronounced in the agricultural land found in the fringe of the Greater Athens administrative area (Table 3.1).

Table 3.1.: Size distribution of agricultural land holdings in the Greater Athens administrative area, 1961 and 1971

Size Class	1961		1971	
	No of Holdings	Area	No of Holdings	Area
1 - 9 Stremmas	7,642	31,638	6,520	26,460
10 - 29 "	4,918	63,074	4,000	62,660
30 - 49 "	951	34,484	1,020	36,720
50 - 99 "	651	38,800	760	49,080
100 - 199 "	263	34,088	280	33,700
200 and more "	203	73,562	240	73,640
<b>Total</b>	<b>13,627</b>	<b>275,646</b>	<b>12,820</b>	<b>282,260</b>
<b>Average Size of Holding</b>	<b>20.22 Stremmas</b>		<b>22.01 Stremmas</b>	

Source: Agricultural Censuses, 1961 & 1971: 1968 and 1976 Yearbooks, N.S.S.G.

It might be pointed with regard to the data in Table 3.1 that whereas diffusion of ownership is high, there is a significantly high degree of concentration in the pattern since the few holdings exceeding 100 str. control nearly 40% of peripheral land. This concentration is higher than the national average: such relatively substantial holdings (in terms of Greek standards, that is), controlled in 1971 in the country as a whole a share of agricultural land that was just under 25% of the total. This extent of concentration, however, does not contradict the point we are making: a holding between 150 and 250 stremmas is admittedly modest by international standards; and the overwhelming majority of holdings as well as the greatest part of peripheral land were certainly owned by a class of very small owners. The degree of fragmentation is even more striking if we take into account the fact that each holding was split on the average into 3.21 parcels, each of an average size of 7.07 str. (0.7 Ha) (1971). This peripheral cultivated land was not wholly held by families actively engaged in agriculture; a substantial part was held in 1971 by people totally unconnected with primary production (4.980 heads of holdings out of a total of 13.360). We may reasonably assume that this parti-

cular part of peripheral land was to a large extent held for speculative purposes and thus is representative of the type of land turned to urban uses as the city is growing; these holdings were much smaller (67.220 strs for 4.980 holdings or an average size of 13.4 strs per holding).<sup>12</sup>

Predominance of large landed estates in the urban fringe will in general lead to land-withholding and monopoly power over supply terms and prices. Substantial owners of peripheral land will tend to transfer their properties to speculative developers and middle-class housing cooperatives and certainly take a longer-term perspective of speculative opportunities than petty-holders who will be governed by short-term financial needs, compete strongly with adjacent owners and have less power over the market as a whole. More importantly, if peripheral land was dominated by bourgeois landed estates, the *politics* of urban growth would have been radically different: we would have stronger pressures in favour of middle-class suburban housing and stricter controls against low-income subdivisions and illegal building (for this point see chapter 1).

The final transfer of peripheral plots to households aiming at their own housing, particularly low-income ones, is usually mediated by real estate business who also carry out the necessary land subdivision.<sup>13</sup> Needless to say, a number of small fortunes have been made in the process. Most probably, the largest part of peripheral land-transfers outside those allocated through the State or housing cooperatives (of which later) must have gone through such real estate, semi-regular operators. However, these land speculators are mainly *intermediaries* and not a group of landowners themselves. They are usually, moreover, a marginal business form, hardly one of great power or status: during the 1950's and early 1960's, when they achieved some notoriety, they were considered of limited respectability, not surprisingly given the social status of their clientele and their complicity in illegal building. In all, they hardly qualify as a class of bourgeois landowners.

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12. All data for the 1971 distribution of land holdings are from the 1976 Statistical Yearbook, N.S.S.G.

13. See, Romanos, "Illegal Settlements in Athens" and K. Buzenberg, "Land, the State and Urban Development", Architecture in Greece (1.1967): 78-93 (in Greek).

The limited role of substantial landed wealth in Greek cities is not confined to peripheral land. In an Appendix to this chapter (3.1) we present in some detail the extreme degree of real estate ownership fragmentation in a central area of Athens. Data of general urban land-ownership patterns are unfortunately lacking. We have on the other hand rather detailed information about the *incomes* from building property. Table 3.2 presents the size-distribution of the latter for the upper stratum of households that paid personal income tax in that particular year. Since incomes below a certain minimum do not have to submit income tax forms, only a small share of households do so - 15.3% of all households in 1967 of whom the great majority lived in cities.

Keeping in mind that most significant built-property assets are concentrated in commercial and office buildings in central city areas (where also the few incorporated real estate businesses, banks and insurance companies hold assets and which are not included in Table 3.2), the lack of large *residential* landlords is apparent. Even in the case of the "elite" segment of built-asset owners, which we reasonably expect to hold the best commercial and office property, and which formed less than 1% of taxed owners, the average monthly income from buildings hardly exceeds the 30,000 drachmas range (in 1967, 1,000 U.S. dollars).<sup>14</sup>

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14. To acquire an idea of the limited size of such urban built-property holdings we may estimate the size of an urban *land* estate of similar worth given the land values in 1967 in Greater Athens. The average price of a square meter of urban land in G.A.A. was 1,050 drachmas in 1964 and 2,750 drs in 1972 (Mandikas, Economic Analysis, vol. 4, p. 45); assuming a linear trend of price rises, and a capitalisation rate of 6%, property incomes of 400,000 drs a year would roughly correspond, in 1967, to 3.7 stremmas of such average land in Athens (0.37 Ha).

For "elite" landowners this is admittedly very small. It suffices to mention, as a comparison, the case of Rome, where in 1965 the seven largest *urban* land holders (five of whom were individual families) held each an average of 556.3 Ha - the largest one owning 2.208 acres or 893.5 Ha! (1 acre = 4.047 m<sup>2</sup> = 0.4047 Ha). See, R. Fried, Planning the Eternal City: Planning and Politics in Postwar Rome (New Haven, 1972), p. 116, table 5.6. Compare, also, with the sizes of large landed property found in central London in Counter Information Services, The Recurrent Crisis of London (London, 1973), p. 22, and the data in D. Massey and A. Catalano, Capital and Land: Landownership by Capital in Great Britain (London, 1978).

The legacy of the Agrarian Reform and the significance of petty-bourgeois, small-holding elements in Greek history has established a general institutional bias against big landlordism. For instance, a 1951 Law prohibits the long-term leasing or renting of land larger than 25 stremmas: L. Kamarinou, Agriculture and the Development Process in Greece (Athens, 1977), p. 54 (in Greek).

Table 3.2.: Size distribution of personal incomes from building property,  
Total of Greece, 1967 (as declared to the Taxation Authorities).

Size-Class	No of Owners	%	Income	%	Average annual income in Drs
1. Less than 28.000	162,748	78.5	1 560,030	32.6	9,585
2. 28.000 - 60.000	31,379	15.0	1 266,082	26.5	40,348
3. 60.000 - 200.000	11,680	5.6	1 148,124	24.0	98,298
4. 200.000 & more	2,038	0.9	804,249	16.9	394,626
Total	207,845	100.0	4,778,485	100.0	

Source: Statistics of Declared Personal Income and its Taxation for the Economic Year 1967, N.S.S.G. 1968, €1=82 Drachmas, 1967 rate.

### 3.b. The limited spatial expansion of speculative building

While the absence of a dominant class of bourgeois owners capable of exercising relative monopoly power over pricing and land allocation has been an important factor making for access to land by the working class and extensive non-speculative production of housing, it is not a *sufficient* one. Capitalist competition and control over land antagonising autonomous, non-speculative production may very well be realised through the "impersonal" process of the market. We may thus say that it is more important for our case that during the largest part of the postwar period, land in the inner and outer periphery of Athens was outside the scope of speculative enterprises. Speculative building in this period was confined to the inner and central zones of the largest Greek cities. Neither multi-family buildings in the periphery and the older lower-income suburbs, nor suburban low-rise or single-family housing developments were considered as economically attractive speculative activities. Alongside the examination of the implications of this for the operation of the precapitalist housing mode, we will also suggest the main reasons for this spatial limitation.

Speculative building tends to cater predominantly for the higher-class and upper middle-class markets: this has always been the case in the history of capitalist cities. This social limitation, inherent in a housing market without any system of housing subsidies for lower incomes, has been reinforced in the Greek case, especially in the 1950's, by the low level of incomes and the late emergence of



speculative apartment building. The latter has emerged as a major housing form only as late as the early 1930's when the necessary legal framework has been institutionalised: this included height regulations in the major Greek cities and the introduction of the so-called "horizontal" or floor property (1929), which arranged for the ownership of individual flats alongside a certain share of the building's land and its common spaces. As late as 1955, building regulations essential for the regular activity of speculative builders have not yet crystallised: that was the year when the General Building Code was introduced in the form that held for the rest of the period.<sup>15</sup> Furthermore, the rebuilding of central areas in Athens and Thessaloniki after the war has been strongly encouraged through a number of public measures.<sup>16</sup> Given the fact that central areas in Greek large cities were still relatively undeveloped in comparison to the permitted intensities of development, it is not surprising that apartment and office building grew rapidly in central areas and then moved gradually to the inner residential areas of higher densities. The historical genesis of such a form of central redevelopment created its own specialised techniques, a standardised building technology and subsequent "economies" in production and management that reinforced the concentration of activity on the "normal" speculative building types, i.e. apartments in central areas. In a long-run perspective, however, the reasons for the limitation of speculators to apartment-building in central areas in the first part of the postwar period were financial in the wider sense of the term. Lack of business capital or savings accumulated by associations specialised in housing, combined with the lack of mortgage credit

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15. In the same year, Royal Decree 30.8.1955 introduced a new set of so-called "terms of building" (height and coverage regulations) for the various zones of Greater Athens, abolishing thus the regulations applying since Presidential Decree 14.5.1934; D.A. Papadimitriou, Rules and Restrictions of Building on Plots of the City of Athens, (Athens, 1972), p. 4 (in Greek).

16. Notably legislation passed in 1947 ("KH' Psiphisma") aimed at the support of the private rebuilding of central urban areas by way of taxation benefits (effective up to 1955 and, in part, up to 1960) and a framework facilitating redevelopment and arrangements with tenants of older structures under rent control. These measures proved successful, especially in the case of central Athens, as it was admitted in a congress of urban property owners held in 1950. See, Kostas Kitsikis: Fifty Years of Activity, 1913-1963 (Athens, 1965), p. 97 (in Greek). For the particulars of "KH' Psiphisma" see, I. Michael The Management of the Land Factor in the Athens Master Plan, Ministry of Public Works (Athens, 1973), p. 269 (in Greek).

up to 1967, created a highly adverse financial environment for any shift away from building in height into projects with greater outlays on land and infrastructure and hence expansion into peripheral areas of lower density. Such a state of affairs necessitated a heavy reliance on areas of high *investment* demand, that is rental and commercial markets, which are in general located centrally and which, with their high solvency, can help in the rapid turnover of capital and the shortening of the "production period" and thus reduce the need for capital resources. The financial weakness of speculative builders led to a dependence on landowners and the increased power of the latter; landowners, of course, always prefer the "highest and best use" of their plot, which, given the particular conditions of landownership fragmentation in urban areas and prevailing financial arrangements, led to high-density, central development. Lack of substantial capital necessary for more peripheral development was evident also in the public sphere: the capacity and willingness of public authorities to supply, extensively and regularly, infrastructure in the periphery was extremely limited. Central areas, on the other hand, offered ready-made infrastructure at a minimal cost. Since no taxation on development gains was in operation, the speculative opportunities in such areas were too strong to ignore. These economic considerations were tacitly, and quite often openly, recognised by the authorities and were given expression in the highly favourable land use controls offered to central areas in the 1930's and 1950's.

With the institutionalisation of the political-economic "base" of Greek urban development into a definite pattern of public controls, the latter became crucial determinants of the reproduction of small-scale owner-building in so far as this depended on the relative social and spatial limitations of the speculative sector. If different conditions prevailed, if, that is, there was active competition by the speculative mode for peripheral land, even under the conditions of fragmented and small-scale land ownership, land values and the volume of land supply would certainly be much less suited to the personal petty builder. This, most probably, would not be caused by the *differential* or the *monopoly* ground-rents created by the expanded speculative market; these two types of ground-rents are determined, the first by the differential accessibility to employment and services of urban locations, and the second by a particularly high demand for specific neighbourhoods with valued character, housing types, facilities etc. Areas considered very

attractive on the basis of these criteria and belonging to the sphere of popular petty ownership and the precapitalist building mode, would be immediately affected by any expansion of the speculative market: prices of land will rise and small owners will turn speculators. It is doubtful, however, whether such cases will amount to anything but exceptions. Most attractive areas are allocated to suburban middle-class housing to begin with; a fact of the class character of urban land allocation that is independent of the pattern of modes of housing production.

The more radical negative effects of an expanded speculative market would be caused by higher *development* values - the land prices created by the expectations or actual offers for higher densities and utilisation of the ground through speculative building in comparison to petty owner-building. For these reasons, and from the point of view of competition over land, the limited spatial diffusion of apartment building with its high development densities was of greater significance for the growth of popular petty building in urban Greece - and particularly in Athens - than the lack of speculative interest in low-density, single-family housing in the Anglo-Saxon tradition of suburban development. Given sufficient demand, development values in Greek cities are determined by the officially set "building coefficient" or floor area ratios. With the prevailing small size of plots, speculative building could successfully compete with petty owner-building only in areas with coefficients equal or higher than 2.0. Table 3.3 (see next section) shows the socio-spatial distribution of coefficients in 1972 i.e. *after* the substantial rise effected in 1968 (this, for the areas with a previous coefficient of less than 3.0, was 40%). Thus in most suburban areas before 1968, building controls were prohibitive for speculative building. With the restrictions on densities in peripheral areas prevailing up to 1968, speculative building could hardly expand spatially given the economic characteristics of petty owner-building for use. The piecemeal buying of land by families for their own housing is governed, on the one hand, by family resources and, on the other, by family needs, including assistance to newly-wed members of the family, provision for bequests, etc. The balance of resources and needs as a governing principle of economic action differs radically from any accounting calculation of costs and returns from property. This "non-economic" mechanism with its emphasis on needs, which in this case means mostly needs for land, makes for a higher valuation of land than "economic rationality" dictates. This fact,

combined with the relatively high densities achieved in popular low-rise areas due to smallish plots, limited garden if any, compact continuous building, and two-storey or even three-storey houses,<sup>17</sup> may lead to land values that are *higher* than the capitalist calculation of ground rent and development values would determine, unless officially permitted densities were much higher.<sup>18</sup>

We should lastly refer to two additional factors making for a comparative disadvantage of speculative building *vis-à-vis* low-rise owner-building in the competition for land. First, the Greek taxation system specifies a high rate of property transfer tax imposed on sales of land and structures. This creates a cost-advantage for non-commodity residential production and distribution. Whereas buyers of apartments pay as high as 15% of the sales price in transfer tax owners building on an individual plot for their own use avoid this substantial additional cost.<sup>19</sup> Second, high densities of speculative development tend in general to follow points of concentration of urban economic activity and incomes - arteries with commercial developments, secondary centres, etc. Another reason, therefore, that made for a low degree of speculative competition over peripheral areas of intermediate and lower-status character in the first part of our period, has been the low level of economic and infrastructural development of those areas, and, indeed, of urban areas as a whole: with the exception of the middle and upper class suburbs of the 1950's and early 1960's even, street paving and water sewage facilities were lacking

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17. In areas that have been created by the illegal housing process and later incorporation in the city plan, the size of plots is generally very small, a fact that accounts for the prevalent high densities in more developed such areas: most plots range between 150 and 200 m<sup>2</sup>. Quite a few are as small as 100-120 m<sup>2</sup> (estimated from ground-plans of houses and Figure 7.1 in Leontidou and Emmanuel, Life Patterns).

18. A similar phenomenon has been noted in the case of Greek agriculture. The imperatives of the family network and the relatively high densities of population in the peasant economy drive land values up to the point that the peasant units are placed in a stronger competitive position in relation to land, compared to capitalist enterprise - unless the latter can achieve particularly high land-productivity, which is rare. See, Vergopoulos, The Agrarian Question, p. 202.

19. This point has been stressed by Break & Turvey, Studies in Greek Taxation, p. 246.

from extensive areas.<sup>20</sup> Higher-income residential nuclei and retail and service centres could hardly flourish under such conditions.

### 3.c. The political process of "colonisation" of urban land by popular strata

While the "economic" fact of the limited control over or competitive pressures for peripheral land either by speculative groups or other competing uses has been an important positive factor for the accumulation of new urban capital within the precapitalist sector, the latter could not be solely based on such "economic" processes. New urban land can be utilised as a factor in housing production only if some *rights to build* are attached to it, institutionalised in legal arrangements or in informal social rules. Even the very transformation of agricultural land into urban plots involves specific institutional processes - the so-called "sub-division" process. Thus in general the allocation of peripheral urban land has a strong "political" aspect, that is, it is regulated by certain State institutions. It is only when such institutional arrangements have been stable over a long period that land acquisition for housing appears as an "economic" process. In a long-run view such periods are non-existent: even in Western advanced countries most subdivision, land use, and building controls have been instituted after 1900. The political character of urban growth is even more transparent in Greece where State policies and institutional arrangements over peripheral land have fluctuated substantially during this century.

This brings us to the third of the analytical factors determining the access of the popular precapitalist sector to land and its autonomy from capitalist relations: the pronounced role of "extra-economic", political processes reflected in the historical "waves" of accumulation of land by the lower strata of cities (as well as by a significant part of the middle class). Greek Law does not prescribe public control of the subdivision of peripheral urban land.<sup>21</sup> Agricultural land can be subdivided and sold as urban plots as long as the latter are considered in essence

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20. For Athens in the early 1960's see, Athens Center of Ekistics, "The Capital of Greece", *Ekistics* (22, 11, 1965): 53-82.

21. This has been true at least up to 1976 when a legislative program aiming at a fundamental revision of the framework regulating peripheral urban expansion has started to be effected.

*agricultural* land parcels and therefore outside the scope of regulations over the size and use of plots intended for urban building which are normally included in the official city plan. Building outside the city plan area for residential purposes is not forbidden: but it is so regulated that whereas requirements for land and development controls within the authorised plan permit sufficiently high densities, residential development outside the plan is limited drastically. The legal framework concerning city plans and building regulations in Greek cities is based on two major acts: Legislative Decree 17.7.1923 concerning the regulations of building in cities and the formation of city plans, and Presidential Decree 23.10.1928 on restrictions of building outside authorised city plans.<sup>22</sup> The latter prescribed that all building in such peripheral areas required land of at least four stremmas (0,4 Ha); residential buildings should not cover more than 300 square meters of ground area and should not exceed a very small number of storeys: even under the more liberal post-1968 height regulations, the latter were set at the maximum of three, which implied a "building coefficient" or floor area ratio (the ratio of total floorspace to the plot area) of 0,225 at best.<sup>23</sup> These were heavily limiting controls compared to the requirements for land and the development coefficients permitted in areas within city plans. As we report in the Appendix to this chapter (3.1), in a fairly representative central area the average size of building plots was just above 0,02 Ha; even in the case of apartment buildings, where some measure of land consolidation should be expected, plot size barely exceeded 0 03 Ha on the average. The prohibitive requirements of

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22. See, G. Economou, Elements of Town Planning Law (Athens, 1970), ch. 3 (in Greek).

23. Economou, Elements, p. 213. The restrictions specifying 300 m<sup>2</sup> and 3 storeys have been introduced by Royal Decrees 14.9.1960 and 12.6.1968 respectively. The control of building in the periphery of cities has a long history, reaching back to 1836 when the Decree on the Plan of Athens was passed (Demathas & Courtis, "Political Economy", p. 107). In fact, during the rule of King Otto and the Bavarian administration (1833-1843) quite a few advanced pieces of legislation on urban planning and building control were put in effect: Decree 19.5.1835 on town hygiene, 9.4.1836 on the city plan of Athens, 5.6.1842 generalising the Athens plan regulations to the rest of Greek cities. To all effects these were highly incongruent with nineteenth-century Greek society both in terms of political culture and economic practice (Demathas & Courtis, "Political Economy"). The practices of directly implanting European legislation on urban matters (German or French) in response to Greek problems has continued in the present century.

land imposed on peripheral areas can be better appreciated in a comparison with the conditions prevailing in low-income residential suburbs, most of which were formed initially by illegal activity and gradually legalised: in such areas a single-family plot of 150-175 square meters (0,15-0,175 str.) is typical.<sup>24</sup>

The differences in terms of permitted development coefficients are equally striking; whereas regulations over the minimum size of plots are significant in themselves, the building coefficient provides a more composite picture of land requirements per unit of floorspace produced as well as the opportunities for intensive exploitation of the ground. Table 3.3 presents the socio-spatial distribution of building coefficients within the city plan in Greater Athens in 1972. The Table shows clearly that for the largest part of the urban area and the city's population, official building coefficients exceeded 1.0. Coefficients were substantially lower before 1968, but still the levels for the lower-income zones, as can be derived from the Table, were above 1.0. It is evident, moreover, that even in upper and middle-strata suburbs where land requirements are the highest, governed by a concern for "villa"-type housing and exclusion of lower-income residents, the permitted development coefficients are well above those prescribed for the outer urban periphery.

Land in the urban periphery has been essential for the growth of the popular precapitalist residential economy. Given the official controls over such land, had there not been for the *de facto* establishment of lower norms over land-requirements and densities, popular strata and independent petty housing producers could not have possibly competed successfully over land. Hence the essential role of the political factor in residential land accumulation.

Land redistribution as a means for popular agrarian policies by government is well-ingrained in the political culture of twentieth-century Greece. Pressure for land and its significance for the small-holder household economy of the countryside - even the implicit right to appropriate land from large estates forcefully (by squatting) - are fundamental aspects of the social structure of rural areas. Given the predominantly rural character of Greek society for most of this

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24. See note 17.

century, it is not surprising that these aspects have influenced legal and political institutions as a whole and have also been important within the urban context where small ownership and petty, non-capitalist economic activity is widespread. Distribution of land through quasi-political means, however, has a history *also* in the case of urban housing: this, in conjunction with the former broader aspects, has made it an integral part of the political culture surrounding the housing question in cities.

Table 3.3: Building controls in Greater Athens: Average incomes, land values and maximum permitted development intensity ("Building Coefficients") 1971-72

Zones by Socio-economic rank	Population (1971)	Building Plot area (str.)	Average income per capita(1972)	Land value (1972)	Average-building coefficient (1972)
<b>A. Upper Class &amp; Upper Middle</b>					
1. NE1	26,088	18,200	7.382	1.085	1.13
2. NE3	98,348	15,900	5,293	2,149	1.40
<b>B. Middle-Class</b>					
3. C1-C2	637,205	20,500	4,831	13,107	5.01
4. E3	42,123	19,000	4,220	1,387	0.64
5. NE4	79,147	9,800	4,076	1,564	1.34
6. C3	210,034	13,200	4,054	3,329	2.16
<b>C. Mixed/Intermediate</b>					
7. E1	111,251	14,300	3,733	2,452	1.87
8. NW2	236,844	14,700	3,674	2,318	2.46
9. NE2	64,791	29,800	3,609	1,074	0.93
10. E2	143,840	11,200	3,502	2,028	1.95
<b>D. Working Class/ Low income</b>					
11. P2	203,359	13,400	3,189	2,995	(2.85)
12. W1	328,093	26,000	2,948	1,940	1.84
13. P1	193,441	10,700	2,938	2,307	(2.85)
14. W2	167,771	11,500	2,645	2,794	1.84

Source: Adapted from Mandicas, *Economic Analysis* vols 2 and 4, Appendices. Zones 1-14 are the 1965 Master Plan zones (See Appendix 2.1, Fig. 2.1.1). The capital letters signify each zone's place in the agglomeration with "C" referring to central zones and "P" to Piraeus and its suburbs. Land values are in drachmas per square meter.



Public policies for urban housing during the interwar period mainly involved the promotion of housing cooperatives and the urban settlement program for the Asia Minor refugees (1922 and onwards). In the case of the latter, direct public building of housing was supplemented by extensive distribution of peripheral urban land to refugee recipients.<sup>25</sup> Most of the working-class municipalities around Piraeus were established during that period. As the urban area of the capital expanded to abnormal levels by the creation of new communities in the periphery, vast amounts of urban land became part of the lower-income residential zones and formed the basis for the subsequent growth of the precapitalist housing economy. This process was an outgrowth of political relations in more than one sense: during the time, refugees were mostly supporters of the Liberal Party and their settlement in cities, particularly in the capital, *en masse*, may have created resentments among the landowner interests or local conservative elites but such reactions were disregarded since it also helped boost the Liberal vote.<sup>26</sup>

Housing cooperatives as a vehicle of public assistance for urban housing go back to the First World War. As we noted before, they aimed exclusively at the acquisition of land-plots by members and in this they provided the only means for privately-initiated, legal peripheral residential development. The relevant legal framework provided the rules for the formation of a cooperative under the oversight of State authorities, the due process for the acquisition and subdivision of land, the latter's incorporation into the official city plan, and finally, the distribution of plots to the members who then could dispose of them independently. As a means for the distribution of urban land, cooperatives were highly beneficial for those groups carrying out successfully the various arrangements with the authorities; in addition, they were supported by a number of tax allowances, the right to import building materials without payment of import duties, and for certain periods, by the direct involvement of the State in the compulsory purchase of land

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25. See "Part I" (covering the period up to 1960) in Technical Chamber of Greece, Housing in Greece: Government Activity, (Athens, 1975), pp. 150-160 (the English text), and for a more comprehensive discussion Leontidou Emmanuel, Working Class and Land Allocation.

26. G. Daphnis, Greece Between the Wars, vol. 2 (Athens, 1955), (in Greek), p. 97 and J. Meynaud, Political Forces in Greece, (Athens, 1966), (in Greek), p. 46.

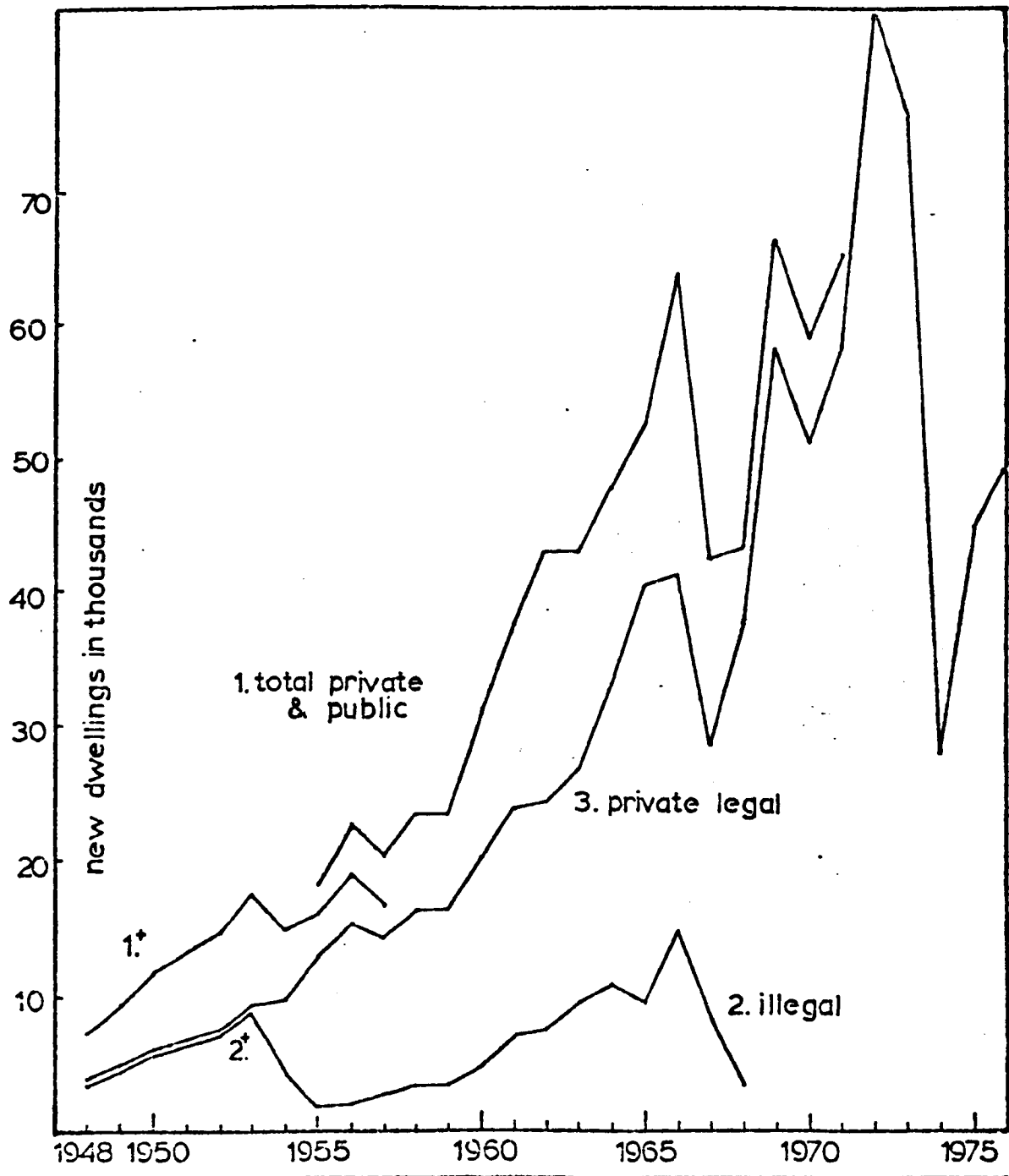
needed by the cooperative. This latter measure, when in force, gave the opportunity for rushes of extensive appropriation of land by numerous groups of public employees. During the short time of two years (1923-1924) more than sixty Decrees for the compulsory purchase of urban land in benefit of cooperatives were passed! During 1951-1952, when compulsory purchase powers were used for the same purpose, a further twenty Decrees were passed.<sup>27</sup> Such processes were quite openly cases of use of political power for land-appropriation by middle-class groups; they were publicly recognised as such, hence the widespread criticism they provoked for most of the years after 1923. In general, the institution of housing cooperatives has benefited almost exclusively public employees and to a lesser degree a number of categories among the urban petty-bourgeois strata. For middle-class peripheral landownership and the related housing mode of substantial, non-speculative owner-building, the legal and political framework of housing cooperatives has been most probably the backbone of the land accumulation process.

For most of the lower-income and working-class strata, on the other hand, the institutional basis of peripheral expansion after the officially sanctioned "colonisation" process of the 1920's has certainly been the more informal relations of "illegal" residential development: the essence of the process is best captured by the more commonly used expression "building outside the Plan" - buying subdivided land legally but lacking building rights and then trying to secure some *de facto* rights of house-ownership by prolonged efforts of building (illegally) and occupation of the structure. The time-series of house-building activity in Figure 3.1 show clearly two significant "waves" (or peak-periods) of illegal activity in the postwar period: 1949-1953 and 1963-1966. Both coincide with periods of important political changes and government instability. The first, 1949-1953, covers the years of the civil war aftermath and a weak liberal government. Elections in the end of 1952 brought into power the conservative Right under General Papagos' National Rally. The General himself was a figure of strong "gaudillist" elements, a populist leader prone to an attitude of paternalist tolerance towards the desire of urban masses for

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27. See the chronological list of relevant legislation in Panos & Klimis, Housing and Building Cooperatives. For the role of housing cooperatives in the mid-war period, see Y. Polyzos, Processus d'Urbanisation en Grèce 1920-1940, Thèse pour le Doctorat de Spécialité, Université de Toulouse - Le Mirail (Toulouse, 1978).

Figure 3.1: Dwelling Construction in Greater Athens 1945-1975: *Total Activity* (1) (Legal Private, Illegal and Public), *Illegally Built* (2), and *Private Legal* (based on permits) (3).



Source: See General Appendix, tables A.2, A.3, A.4. (1): Series from the National Monograph, p. 101 (1\*) and (2\*) series from NSSG, Statistical Yearbook of Greece, volumes for 1955 to 1958. (2): (1955-1968), series supplied by the Ministry of Public Works (1971).

a house: illegal builders always hope for such free-handing attitudes on the part of the authorities during and after election time. After 1952-1953, however, strong-government conditions and undisputed conservative stability was established, to be broken only after 1963 with the Liberal Centre's return to power and the political instability that ensued. Instability and a populist political outlook directed to the mobilised under-privileged "masses" made the period up to 1967 highly favourable for illegal housing: the 1967 Military Coup and its strong-arm policies towards illegal builders changed the scene drastically.<sup>28</sup>

Political factors, to be sure, were not the only ones at play: these periods were characterised by rising building activity in general. Whereas, however, legal dwelling construction *continued* to rise at the same or even higher rates during 1953-1961 and 1967-1974, this was not the case with illegal activity: it is fairly obvious that, in the last analysis, illegal urban growth has been politically determined.

Periods of upswings in illegal activity were also ones of land-accumulation expansion taking place in the periphery of "urban" areas, that is outside the limits of the city plan: as much is evident in the development of sales of agricultural land parcels in relation to the sales of "urban" building plots and residential building as a whole in Greater Athens presented in Table 3.4:

Table 3.4: Sales of peripheral land and urban plots in Greater Athens, 1958-70

Years	No of Agr.Land Parcels Sold (1)	Urban Plots sold (2)	Dwelling construction (3)	(1):(2)	(1):(3)	(2):(3)
1958-60	13,715	59,319	82,770	0.23	0.16	0.71
1961-63	10,675	70,885	118,799	0.15	0.09	0.59
1964-66	31,172	84,618	165,960	0.36	0.18	0.50
1968-70	9,245	82,995	168,164	0.11	0.05	0.49

Source: General Appendix A3, A6

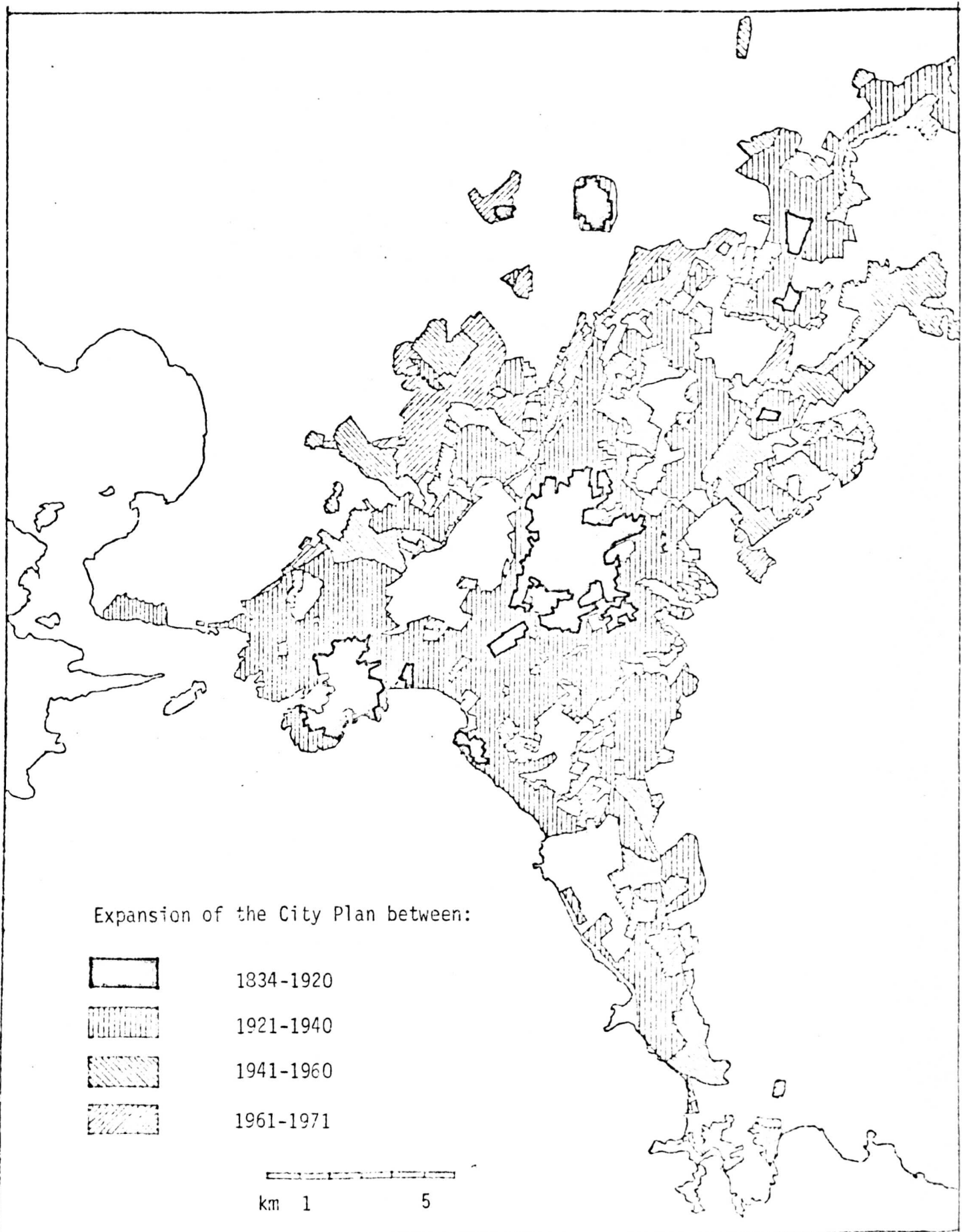
28. For the best concise account of the political developments after the war, see, C. Tsoucalas, The Greek Tragedy (London, 1969): chs 8-14.

Whereas exchange and accumulation of "urban" building plots shows a relatively stable volume of activity, and a trend of declining significance when compared with dwelling construction (a fact explained by the decline of the role of non-speculative, legal owner-building and especially single-family houses), the accumulation of peripheral agricultural land shows a clear upswing during 1964-66. The decline of similar activities after 1968 signifies quite clearly the negative effects of the strict controls on illegal housing areas introduced during the period.

The previous discussion aimed at showing the significance and the essentially institutional and political nature of the processes that sustained landownership and land accumulation within the orbit of the popular precapitalist housing sector. Either through the mid-war refugee settlement, or through the piecemeal acquisition of peripheral land, illegal building and the gradual incorporation into the city plan and provision of public services, and to a marginal degree with the help of housing cooperatives, extensive residential areas of lower-strata social character have been formed. Their extent can be seen in the successive expansions of the Athens city plan after 1920 in the western and north-western working-class suburbs (Figure 3.2). Such areas provided the ground for the owner-user economy of popular housing. Alongside the other more "economic" aspects examined in the previous section, these land control and accumulation processes form what we have defined as the pattern of access to land and relative autonomy of the precapitalist housing mode from the middle-class/capitalist system of relations over land; by now, it must have become clear that such a relative autonomy has been an integral part of the operation of the precapitalist sector in the history of Greek cities.

It should be added that the process of accumulation of land within the precapitalist sector determined by the above pattern, goes beyond the level of the individual household: it is essentially a *collective* process of formation of areas in terms of social class and predominant mode of housing production. When peripheral land is urbanised through the petty owner-building mode, growth proceeds in an individualised, piecemeal way; a large degree of sprawl and low densities are naturally to be expected in the initial stages. Once this expansion becomes established as part of the wider areas of the non-speculative family economy, it serves as the

Figure 3.2. Expansion of the City Plan of Athens, 1920-1971



Source: Wilbur Smith & Assoc., Athens Basin Transportation Survey and Study, Ministry of Public Works, 1963; for the 1961-1971 change, original data from official city plans.

infrastructure for further growth in unbuilt plots, by additions on older structures, improvements or higher-density redevelopment, sustained by the growth of existing families and the influx of new population. Thus, a moving "frontier" of peripheral urbanisation has been essential for the growth of urban capital resources of the popular classes *as a whole*.

#### 4. Foundations of the precapitalist housing sector: underdevelopment of modern-capitalist relations in the supply of factors of production other than land

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##### 4.a. Personal vs. Institutional finance

A United Nations specialist noted in 1955 that perhaps the most important peculiarity of the economy of private housebuilding in Greece was the high degree of reliance on a *personal* system of savings and finance. At the time, the financial resources of families were to a large degree held outside even ordinary bank accounts, hoarded in money form or in gold sovereigns; in general, self-help and family assistance in house finance were of far greater importance than any formal financial institutions and the normal capital market.<sup>29</sup> The operation of a personal "market" of savings has not been limited to the sphere of the popular petty owner-building sector: it has been an integral aspect of the speculative residential economy as well. As a study of the Greek capital market observed,

"the market works as follows: the financing of lots or sites within inhabited areas, especially in large towns, takes place by *exchange arrangements* between construction companies and owners of the site, the latter agreeing to permit the erection of an apartment house in exchange for one or more potentially finished apartments depending upon the value of the site. Then, the construction is financed by selling the remaining potential housing units or apartments to third parties against an agreed down payment".<sup>30</sup>

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29. Jacob L. Crane, "National Housing Policy in Greece", Technical Chronicles, (105-106, 1955): 50-54.

30. Diomedes D. Psilos, The Capital Market in Greece, (Athens, 1964), p. 212.

The volume of institutional finance for housing has been increasing steadily in the postwar period. It has risen sharply during years of expansionary monetary policy - notably in 1968-1973 (see Table 3.5). The expansion of mortgage credit for housing, however, has scarcely affected the non-speculative popular economy: such funds have been concentrated mostly to middle-class recipients - public employees being again the more favoured social group - and have been directed to the apartment market and perhaps to a less extent to more peripheral building of middle-class houses (partly speculative, partly user-oriented).<sup>31</sup>

Table 3.5: Mortgage loans to households in relation to private residential investment, 1958-1976

Annual averages in million drachmas, current prices

	(1) Private Residential Investment	(2) Mortgage Loans Funds	(3) (2):(1) %
1958-1962	5698.6	297.4	5.2
1963-1967	10548.4	1043.2	9.9
1968-1972	22345.0	5148.8	23.0
1973-1974	34254.5	4625.5	13.5
1975-1976	42118.5	7324.5	17.4

: "National Monograph", pp: 133-134; National accounts 1958-1972, 1973-1977; National Mortgage Bank, Annual Report 1979: C.P.E.R. Housing (1976), p. 12; See also General Appendix A.9. Bank financing for housing during 1948-1957 was insignificant.

Even after 1972 when the funds controlled by the limited public housing programs (Workers Housing and the programs of the Ministry of Social Services) were turned away from direct building and into a policy of assistance based on personal loans, the role of credit to the working class and other lower-income groups formed a very small part of institutional finance for housing. Whereas the latter as a whole (excluding agricultural housing loans) amounted to 99,344 million drachmas for 1971-1975, loans distributed through the so-called "programs for Social Housing" did not exceed 4,115 millions or a mere 4.1%.<sup>32</sup>

31. For a description of the various housing finance agencies and the terms under which mortgage credit has been supplied to different categories of recipients up to 1972, see, "National Monograph" (J.N., E.C.E., 1973A), ch.4.

32. Center of Planning and Economic Research, Development Plan for 1976-80: Housing, Report of the Work Team (Athens, 1976, in Greek),



Thus, a personal system of housing finance has been a constant background condition of popular non-speculative building throughout the period we study. The same held true for the housing system as a whole up to the late 1960's. From 1968 onwards mortgage loans to middle-class households have played an important role. To complete the picture bank financing to speculative builders has been insignificant throughout the postwar period due to monetary policy restrictions (see chapter 5).

Given these conditions, how was the precapitalist sector's operation and growth affected? Would a larger involvement of institutional financing have been a positive or a negative factor? The answer to this question depends on the nature of the housing finance system. In the case where the expansion of institutional finance has taken place earlier in the postwar period in the form that prevailed after 1968, the effects would have certainly been negative. The reason is simple: the post-1968 loans system was strongly skewed in favor of middle-class groups and thus funds were mainly channelled into the apartment market. The 1968-1973 building boom offers an obvious demonstration of the close association between bank credit expansion and speculative activity.<sup>33</sup> Such an increased flow of funds into the speculative sector would not only imply a diminution of non-speculative housing in relative terms: even if the distribution of housing demand between sectors remained unaffected (which is unlikely), the higher relative solvency in the speculative sector would certainly cause an increase in the prices of land, materials and labour as well as drain part of productive resources away from non-speculative areas - an effect that would most probably include the more marginal category of speculative capital that is normally part of the precapitalist sector. Therefore the limited expansion of a system of institutional housing finance of the kind observed in the 1968-74 period has certainly been a positive factor *vis-à-vis* the precapitalist sector. We can say that this limited expansion can be understood as an instant of a wider pattern

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pp. 18-19. It should be noted, however, that the role of Worker's loans grew in relative volume after 1975. See, National Mortgage Bank, Annual Report 1979 (Athens, 1980). An additional factor making for the limited diffusion of credit is the fact that the role of *insurance* companies, institutions that are major suppliers of housing credit in advanced countries, has been extremely limited in Greece. See, Psilos, The Capital Market, pp. 204-209.

33. For a more detailed econometric examination of the effects of credit, see chapter 6.

of relative autonomy of the precapitalist sector's resources from the middle-class/capitalist system of relations which was essential for its operation. This autonomy or lack of negative controls and pressures was not evidenced in this case at the level of the immediately involved factor, i.e. popular savings: these would have been left outside a middle-class - oriented system of finance anyway. The effects of first the lack and then the presence of institutional finance were felt through its influence on speculative activity.

Let us consider, however, the more interesting case where institutional finance of housing *does* cover a substantial part of the social strata traditionally housed within the precapitalist sector. Had such a system - say, a combination of State-supported credit and popular savings and loans institutions - existed in postwar urban areas, what would its effects be in comparison to the prevailing system of autonomous personal financing? Popular savings and loans associations of the type, for instance, that has been promoted by international agencies in Latin America during the 1960's, are not necessarily inconsistent with self-help, non-speculative housing production.<sup>34</sup> The spontaneous growth of building societies in the late eighteenth and the first half of the nineteenth century in England as part of the cooperative movement shows, in addition, that some form of such savings associations answers real needs for collective self-help among the urban working class.<sup>35</sup> Popular savings institutions coupled with a low-income-oriented application of the Greek legal framework for building cooperatives may have had effected a badly needed rationalisation and achieved substantial economies of scale in Greek popular owner-building. Moreover, widespread organisation of savings and easier supply of credit would most probably increase the elasticity of non-speculative building in relation to popular owner-occupation demand.

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34. See, Abrams, Man's Struggle for Shelter, pp. 151-154

35. These early "terminating" building societies, however, did not survive the financial context of the late nineteenth century. They were replaced by "permanent" societies which increasingly resembled banks rather than cooperative institutions and which catered more for the middle classes. The story is well-known. For short accounts, see, M. Boddy, The Building Societies (London, 1980), ch. 1 and Adela Adam Nevitt, Housing Taxation and Subsidies (London, 1966): chapters 2 and 3.

Thus, under the right conditions, widespread institutional finance of popular housing may have had enhanced the role of non-speculative building, though it would have certainly transformed its character. The emergence of such a pattern, however, is very unlikely. Even in unregulated capital markets, initially popular savings and loans institutions tend to be transformed or integrated into the capitalist banking system. This implies a trend towards concentration of building finance capital and a bias in favour of commodity relations (most notably through an emphasis on the marketability of the mortgaged property) that is conducive to the expansion of the speculative housing mode. Such tendencies would certainly be stronger in a highly organised oligopolistic financial system and a policy context with an emphasis on capitalist modernisation such as the one prevailing in postwar Greece. From a realistic comparative and historical viewpoint then, the lack of institutional financing has most probably been a positive factor for the existence and growth of a widespread precapitalist sector. It is ironic that this state of affairs is largely the effect of the very oligopolistic character of the Greek banking system. The need for new popular savings and loans institutions has been repeatedly stressed by economists concerned with the modernisation of the capital market.<sup>36</sup> The large commercial banks, however, have always shown a strong resistance to any policy that might drain away a significant part of the savings usually deposited there.<sup>37</sup>

#### 4.b. Requirements for capital in housing production and the limited modernisation of land and building controls

For the precapitalist mode, however, the available choices between forms of finance are less important than the relative autonomy from the requirements of capital itself. And this is linked with the very structure of the residential production process. The autonomy of precapitalist owner-building from the requirements of accumulated money-capital is based, in the last analysis, on the fact that the production

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36. Crane, "National Housing Policy", and Psilos, The Capital Market, p. 214.

37. This explanation is advanced by Abrams for the case of Latin American countries (Man's Struggle for Shelter, p. 152). Psilos (The Capital Market, p. 215) argues along similar lines in relation to the same phenomenon in postwar Greece.

of housing is organised "informally", piecemeal, and on a small-scale way. Capital costs for single-family houses - for construction or land - are distributed over a number of years: the houses are formed in stages, on land that has been bought much earlier at a price substantially lower than the development value it would have acquired were the area more developed. Of equal importance is the fact that in most cases of low-income areas the development of public infrastructure and services is gradual and *follows* residential growth. If such peripheral development was more organised, proceeding by the building of whole clusters of units fully supplied with services, the need for initial capital would obviously be much higher. An analogous argument can be made for the economic advantages, in terms of the need for capital, in the case of the incremental building of houses themselves: these advantages are amplified when the end-product involves more than one dwelling as is commonly the case in popular areas where building on an owned plot is aimed at the needs of extended families, the construction of a workshop or even of a few rooms to let.

These "peculiarities" of the precapitalist housing process are more a matter of the role of public controls over residential development than ones of simple economic choices. When some variant of urban modernisation policies imposes strict modern norms on residential production, more specifically ones necessitating planned development and houses conforming to relatively high standards, the need and cost of capital becomes prohibitive for most low and middle-income households. In addition, such modernisation will certainly increase the share of overheads and payments for professional services. *Total* avoidance of such costs is found, of course only in the more primitive forms of urban housebuilding: even simple cases of single-family housing in Greek cities necessarily involve some payments for professional services, taxation, social insurance etc., though it is important to remember that even these have been avoided by illegal building which forms a substantial part of the precapitalist sector.

It could be countered that to the degree that modern planning controls imply an increase in the scale and organisation of residential developments, they would be beneficial in offering an improvement in productivity, rationalisation and economies of scale. More planned development would also reduce costs in the long term, and certainly the cost of urban services

from the public viewpoint. Although the first point is valid, it is not as important as it is commonly thought. The few relevant systematic economic studies point to the fact that economies of scale in housing are limited; more importantly, they are mainly effective within a *capitalist* framework since most of the economies concern managerial and financial costs.<sup>38</sup> The second point is wholly justified but largely irrelevant from the viewpoint of the narrow and short-term interests of individual households with limited resources and immediate needs. The pressing concern of the latter is to reduce their dependence on the need for finance inherent in the nature of housebuilding. Regardless of more long-term and public-minded evaluations, the fact is that the lack of modern public controls - aimed towards urban planning or modernisation of housing - is the basis for an autonomy from capital and thus organically related to the reproduction of the precapitalist housing economy. Incremental, uncontrolled, and "informal" ways of residential development are clearly more suited to the personal and family resource utilisation among low-income strata.<sup>39</sup>

Thus, a limited social and geographical range of public control over financial resources and/or the organisation of residential development should be considered as an essential aspect of the socio-economic foundations of precapitalist housing. Such conditions are in the last analysis a further case of the relative autonomy or isolation from modern-capitalist relations. In this we assume that an increased application of "modern" rules, planning processes and administrative controls, would follow the norms established by capitalist institutions, the market and the middle class, thus promoting the spread of speculative or modern-capitalist enterprises and analogous social relations. Such an assumption is only reasonable:

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38. See, G.T. Jones, Increasing Returns (Cambridge, 1933), Maised, Housebuilding in Transition, Grebler, Large Scale Housing and Real Estate Firms.

39. This fact has been recognised by students of squatter housing. We should add as similarly important the avoidance by squatters of rent-payments achieved through the decision (and opportunity) to stay for long periods in an undeveloped property. See, J.F.C. Turner, "The Squatter Settlement: Architecture that Works", Architectural Design, (38, 1963): 355-60 and "Barriers and Channels for Housing Development in Modernising Countries", Journal of the American Institute of Planners (23, 1967): 167-181. It should be added, however, that it is highly objectionable to limit such economic facts to "squatter" housing which is after all a legal category: they concern low-income owner-building in general. The point needs stressing, since these purely economic issues have been obscured by an ideological emphasis on the virtues of "self-help" and thus the (very questionable)

After all, this was the secular trend in the housing systems of most capitalist countries: application of even the more socially-minded measures for urban planning and the control of residential development, has led, together with other factors, to the extinction of the more marginal forms of simple housing economy (including petty-speculation) and their replacement by more organised speculative production and modern-capitalist enterprises, as well as integration into the capital market proper.

#### 4.c. Construction labour and the structure of the labour market

The operation of the precapitalist housing mode is obviously associated in Greek cities with the extensive availability of labour outside the orbit of the organised capitalist economy. A relatively large supply of independent labourers and the prevalence of marginal, small-scale productive units has been a permanent characteristic of the postwar urban economy *as a whole* - though a trend towards full employment and increasing integration of labour into capitalist wage relations could also be observed after the mid-1960's.<sup>40</sup> In the case of the construction "industry" these relations were manifested in the elastic supply of independent construction labourers and the prevalence of marginal petty contractors. To what degree did this fact constitute an essential precondition of the extensive reproduction of the precapitalist mode of housing production?

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virtues of direct user's labour, and a liberal critique of Public Housing. For balanced assessments of the economic value of "self-help" see, Abrams, Man's Struggle, pp. 173-74, and D.J. Dwyer, People and Housing in Third World Cities (London, 1975): ch. 6.

40. This last point about the growth of capitalist relations in the Greek (and more specifically in the Athens) urban economy requires some clarification. It can be said that the capitalist sector - larger economic units employing wage-labour, incorporated enterprises etc. - has grown fastly in absolute size, modernity and social and economic influence. Moreover, the capitalist sector in *industry* has exerted a determinant influence on the urban labour market (most notably on the movements of wages) through the effects of a number of "leading" large industrial units, in plastics, chemicals, basic metals, electrical machinery and appliances, petroleum refining and non-metallic mineral products (of which the cement industries are highly significant in Greece). See, T.P. Lianos and K.P. Prodromidis, Aspects of Income Distribution in Greece (Athens, 1975), p. 86.

On the other hand, the indices of underdevelopment of capitalist relations in the structure of urban employment *as a whole* have shown a surprisingly strong tendency to persist throughout the postwar period. Lila Leontidou Emmanuel has shown that the share of the tiny economic units (less than 10 employed) in the Athens economy as a whole, and the share of self-

Let us first dispense with an erroneous approach to the problem common among students of squatter settlements. It is quite often said that such forms of housebuilding are based on the user's own labour and that of his family - they are "self-built" in the narrow sense of the term. By implication we are left with the impression that such labour relations are a *systematic* aspect of squatting and similar types of petty housing production. It is undoubtedly often true that most of the construction labour involved is of this kind. Reproduction of this particular pattern depends on the labour abundance characteristic of labour markets with high open or disguised unemployment and extensive family labour. These conditions are common in underdeveloped, peasant economies and quite often are a part of their urban economy in the form of extensive "informal" sectors - sectors of unstable employment, petty scale of production, low-income personal services etc. Simple construction work is in general within the range of skills of both peasants and poor urban migrants. Direct user-labour, then, is quite natural in such situations described by economists as "dual" labour markets. The latter refers in short to the existence of sharp differences in labour relations and wages sustained by the division of the urban economy into an organised capitalist sector with relatively high wages and generalised wage labour organised into larger-scale units, and a more "traditional" or "informal" sector of a petty-scale of production, elements of household production, with consistently lower wages reproduced by the continuous accommodation of labour surpluses available at subsistence wages.<sup>41</sup>

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employed labour, has remained in general stable, a fact that is also true for the various economic sectors in particular. The same can be said for more intermediate employment units (10-50 employed). Though there are some exceptions to this pattern they go both ways (see, Leontidou Emmanuel, Working Class and Land Allocation). Thus, a case in favour of a thesis that there has been in general a reproduction of a pattern of "polarisation" in the modes of employment in Greek cities (as it is argued in the aforementioned work) can be certainly made. Still, we could say with a fair degree of certainty (and this is not the place to amass qualitative evidence) that in the sense specified previously, the determinant influence of capitalist relations on urban labour has been fastly increasing - more so since the industrialisation and modernisation drives of the 1960's.

41. For a lucid statement of the concept of "dual" labour markets and the peculiarities of the supply and price of labour in non-capitalist modes, see, Amartya Sen, Employment, Technology and Development (London, 1975).

A "dual", primitive organisation of the urban labour market is necessary for the extensive use of direct labour by the settlers themselves. But this under no conditions can serve as a general point about the essential foundations of the precapitalist mode of housing, mainly because it would be extremely restrictive, as we argued in previous chapters, to define the precapitalist mode as "production for use" in the narrow sense of production involving the direct labour of the users. Such a component may be significant for certain categories of housing or periods; but it can not serve as a theoretical basis for a realistic historical analysis. A precapitalist economy of "simple commodity production" should not be understood as necessarily implying a so-called *natural* economy, i.e. one where production serves the needs of the immediate producers: it refers to an economy where capitalists as an important class and generalised wage-labour have not yet emerged. Exchange of labour services, contrary to the approach of most studies of squatters, is consistent with the precapitalist mode. It is, moreover, necessary since in housing construction the need for specialised work is essential.

Conditions in postwar Greek cities are an illustration. Direct experience testifies that although they do some of the work themselves, owner-builders have extensively employed and contracted others even in illegal building which calls for maximum personal involvement.<sup>42</sup> Moreover, the observed participation of users in construction work is more circumstantial than systematic: it is a by-product of the fact that a large part of the urban working class - especially rural migrants - is anyway engaged, or has been engaged, in construction employment.<sup>43</sup> Lastly, whatever the extent of direct user-labour in housing petty-production during the 1950's, the steady increase in incomes, labour demand and, significantly, the changes in the value, modernity and complexity of the houses of the popular strata, has undoubtedly diminished it. Thus, the role of direct user-labour is rather secondary to the problem that concerns us here.

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42. Romanos ("Illegal Settlements") reports incidences where construction workers imposed higher-than-usual wages and contract prices on illegal settlers taking advantage of the need for secrecy and speed in construction.

43. Whereas in 1951 11.3% of non-migrants were employed in construction, a share of 18.3% of employed recent urban migrants were occupied in the same sector. B. Kayser, Human Geography of Greece (Athens, 1968, in Greek), p. 116.



What mainly matters for the precapitalist housing sector is the supply of cheap, petty-construction labour *in general*. In Greek cities, the increasing approach to full employment and the growth of wages - for which the high demand of labour caused by speculative building booms played a part of equal importance with that of the industrial expansion after the mid-1960's - has antagonised directly the needs of the pre-capitalist housing sector for petty-construction labour, especially in Athens and Thessaloniki.<sup>44</sup> The negative effects of such developments have been manifested both in labour scarcities and higher costs. Conversely, and in answer to our initial question, we may say that the extensive operation of the petty owner-building economy in the 1950's and early 1960's has been founded to an important degree on the relative surplus of low-wage, fragmented construction labour characteristic of the "dual" labour market and the less-than-full employment of the period.

### Conclusion

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The outline of the socioeconomic foundations of urban precapitalist housing advanced in this chapter points to a number of historical forces that, by their increased influence, may lead to the decline of the role of such forms of residential production and distribution and the enlarged dominance of the speculative mode. These are:

- Imposition of political controls that limit access to land and the right to build; such negative pressures might also be effected through a direct expropriation of land and built property situated within the social and geographical sphere of the popular precapitalist housing sector.
- Effective policies of "modernisation" over housebuilding and the process of development of residential areas that cause a higher dependence on capital and increased building costs and which, directly or indirectly,

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<sup>44</sup>. A situation of near-full employment seems to have been reached by 1969-1970. This may have been true of even earlier years since the latter time has seen the first signs of acute labour scarcities in a number of economic sectors. See, R.E. Fakiolas, Labour Market and the Structure of Wages in Greek Industry, (Athens, 1974, in Greek), p. 21. Wages and the demand for labour were rising even faster in the construction industry due to the 1969-1973 building boom. See, P. Cassimatis, The Construction Industry in Greece, Center of Planning and Economic Research, Research Study No 5, (Athens, 1976) p. 43.

promote more organised forms of residential economy, beyond the capacities of the popular socioeconomic system as determined by historical and institutional conditions.

- Increasing competition over labour and material inputs from sectors of the modern-capitalist economy in general and speculative building in particular; increased "formalisation" of labour relations and expansion of larger-scale wage-employment; advances in the concentration of capital in the construction industry and significant improvements in the productivity advantages of capitalist/speculative building.
- Diffusion of speculative market relations over land and small property, either in the form of a diffusion of higher development values and invasion of capital in the social and geographical sphere of the popular precapitalist sector, and/or increasing socioeconomic differentiation among petty property owners. This process may involve either a process of urban economic development in general and thus the spatial spread of "nucleations" of high incomes, services and trade, or an expansion of the speculative opportunities offered to small property by policies of the State.
- Diffusion of speculative value orientations among petty owners of urban capital and increased integration of the social strata that have traditionally formed part of the precapitalist housing sector into the consumption patterns of the "normal" market.

The issues raised by the last point, namely the role of values, preferences and behaviour patterns in the operation of the precapitalist sector, have not been examined explicitly in this chapter. We take it that stability or change in these aspects should be understood more in the sense of the formation in the ideological sphere of relations that are essentially "fought over" in economic and political processes and conflicts, rather than as the result of processes of *"cultural assimilation"*. In this sense, these factors are an organic part of all the processes of change outlined above. Still, they *should* be treated as analytically separate, since we certainly can not exclude the important possibility of a determinant role played by the cultural "hegemony" of the capitalist/speculative system over the population at large. Thus, though we have mainly emphasized in this chapter the role of objective conditions in the form of constraints determined at the higher levels of the socioeconomic system

- the State and the capitalist/speculative sector - we should not under-rate the ambivalent role that may be played in these social changes by small property itself even when it is a part of a precapitalist social system of use-values and a family economy.

The existence of widespread petty ownership can cut both ways. As the basis for the expanded reproduction of autonomous housing supply, extensive land control (with the help of quasi-political mechanisms), and the sustainance of widespread non-commodity relations, antagonises directly the social system of the capitalist/speculative market. On the other hand, every petty owner is a potential speculator and a probably investor in the housing market in the specific sense of the latter as a system of commodity exchange. The same way a small peasant may turn into a "kulak" and the latter into an energetic capitalist, social differentiation among small urban owners may effect extensive spontaneous transformations within the popular economy of housing. Thus, alongside the listed theoretical conclusions and working hypotheses, we must also keep in mind that the historically given system of petty proprietorship and simple commodity production in Greek cities, in addition to having provided the basis for a housing sector outside the rule of capital and class-biased public policies, has quite probably been an important factor accounting for the dynamism of Greek smaller-scale speculative building itself. Given this contradiction, inherent in the conditions of Greek precapitalist housing, and the fact that modern and improved housing conditions have been associated with the speculative sector, it could be argued that with rising incomes and consumption standards, an increasing share of popular resources would tend to be *spontaneously* incorporated in the speculative system. In the same line of reasoning, the major factor behind the existence of precapitalist housing in the first half of the postwar period has simply been the low level of economic development.

In this chapter we have implicitly rejected this argument: first, by our critique of the dominant conceptualisation of illegal housing as a residual phenomenon contingent on the inability to enter the "normal" housing market; second, by establishing the importance of crucial "objective" factors, namely access to resources - especially land - and relative autonomy from constraining systems of relations; third, by arguing that the existence of an extensive precapitalist housing sector is ultimately

based on a broader complex of institutions, values and political relations that favour a small-holder's family economy. In the next chapter we will examine the validity of these alternative arguments more explicitly in relation to the question of the factors accounting for the decline of the precapitalist sector in the 1960's and the expansion of speculative building.

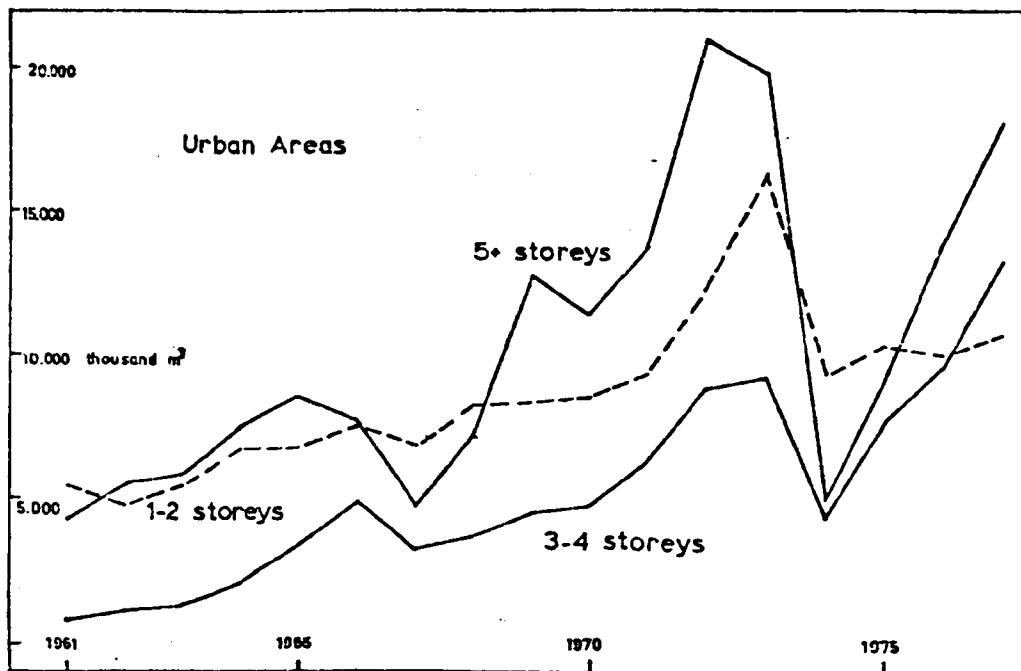
## 4 • Expansion of the Speculative Sector, 1950-1974: Determinants of the Structure of Housebuilding

We have seen in the second chapter that the share of speculative building in urban residential production as a whole rose sharply in the postwar period. Whereas, according to our calculations, petty owner-building (one and two-storey houses, illegal building and extensions) amounted to 67% of the volume of residential building in Greater Athens in the 1950's (1951-1958), its share fell to 56% in the mid-1960's and 39% in the beginning of the 1970's (see Table 2.6). Similar trends were evidenced in the rest of the urban areas. Figures 4.1 and 4.2 (see next page) showing time-series of the volume of building by height categories during the 1961-1977 period, make evident the extent of changes in the sectoral composition of housing production especially in Athens. They highlight, in addition, the fact that the really massive shift towards the predominance of the speculative (apartment) sector took place in the 1960's - especially in the second half of the decade. It is understandable, therefore, that we should focus our analysis on the 1960's.

What was the mechanism of sectoral change in the housing system? What were the determinants of the increase in the role of speculative building in the postwar period and more particularly during the 1960's? A comprehensive answer to these questions involves a large number of aspects of the postwar housing system at various analytical levels: social, political and economic. These will occupy us in the present as well as in the next chapters. In the present one we will examine certain accounts of the transformation of the housing system that are based on the growth and sectoral allocation of *housing demand*; the expansion of the speculative sector, in these views, can be understood as the "natural" corollary of the rise in household incomes and the diffusion of modern housing standards

Figure 4.1: Private building activity by categories of building height, Urban areas, 1961-1977

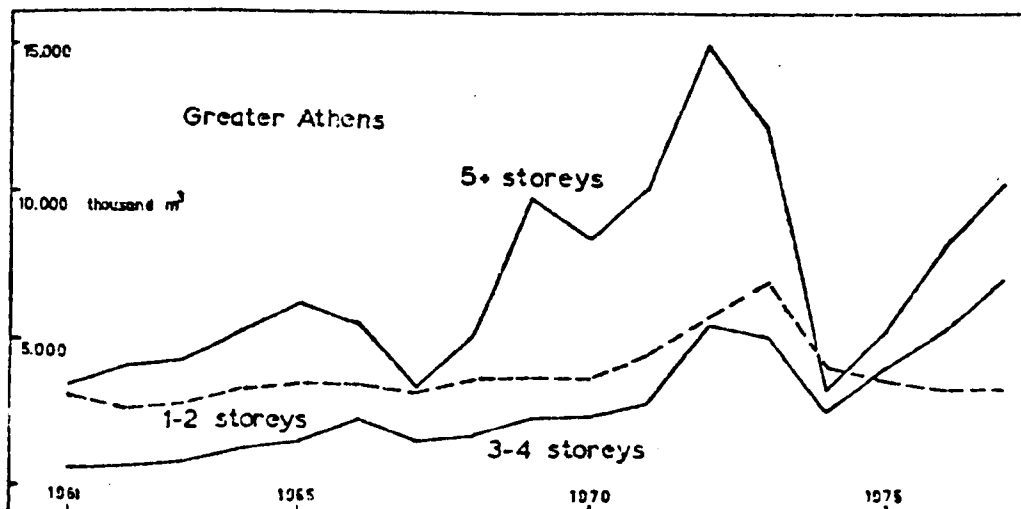
(permits for new buildings, volume in thousand  $m^3$ )



Source: See General Appendix, Table A.1.

Figure 4.2: Private building activity by categories of building height, Greater Athens, 1961-1977

(permits for new buildings, volume in thousand  $m^3$ )



Source: See General Appendix, Table A.1.

that took place in postwar Greece.<sup>1</sup> Our analysis will start from a critical revision of such theories and will proceed in two stages: we shall show, first, that an "integrated" model of housing preferences that channels, as incomes grow, increasing numbers of urban households into the speculative sector in a process of gradual "assimilation" cannot account for the pattern of sectoral changes observed; we will argue, then, that a "dual" or "segregated" model of demand allocation prevailed, and sectoral changes cannot be explained without an emphasis on the political and economic *constraints* imposed on housing production and their differential distribution in relation to modes of housing production and the social classes associated with these. We will arrive thus at a balanced account of the determinants of the sectoral change of the housing system in the 1960's, among which the "extraneous" political-economic constraints imposed on popular pre-capitalist housing have been crucial. As a result, the high rates of economic development in the 1960's and early 1970's have mainly favoured speculative building and contributed to its increased dominance over the Greek housing system. The latter point prepares the ground for the discussion of residential capital accumulation and public policies in the wider context of Greek postwar society in later chapters.

#### 1. The trend of changes in sectoral structure

The systematic analysis of the determinants of the sectoral composition of housebuilding requires a careful breakdown of the postwar period into a number of distinct sub-periods. The components of housing demand - demographic and income variables - showed, in general, varying rates of change. Moreover, the rise in the share of speculative building has not shown a uniform trend. Table 4.1 presents the share of different "modes" of housing production in the 1960's and early 1970's for the case of Greater Athens. The share of speculative building shows a small *decline* from the beginning of the period to the middle of the 1960's (a greater decline would have been observed had we included 1967 with its pronounced slump in speculative building). From 1968 onwards this share rises sharply. Even if our methods of measuring

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1. This thesis has acquired the nature of a tacit assumption in most discussions of Greek housing to such a degree that it is virtually impossible to find an explicit formulation. It is most frequently found, of course, in official accounts of the improvement and modernisation of housing conditions. For a similar viewpoint from a far-left stand, see Arachovitis, "The Nostalgia of Imperfect Commodity Production".

the volume of illegal activity and extensions on existing buildings (see chapter 2) lead to a certain overestimation of speculative building in 1961, these are similarly applied in the case of the mid-1960's and, therefore, the fact of the stagnation or even fall of the share of speculative building between 1961 and 1967 cannot be questioned.<sup>2</sup>

This deviation from the broader postwar pattern of speculative expansion took place despite the fast exponential growth of speculative building from the early 1950's to the early 1970's (save short-term fluctuations). It thus reflects changing patterns in the housing system as a whole or the effects of forces applied specifically on the non-speculative sector. By breaking down the two main types of building presented in Table 4.1 into their significant components, a more complex pattern is revealed: though the suppression of illegal building after 1968 is the major factor behind the stagnation of petty owner-building during 1965-1971, there is a drastic drop in the rate of growth of authorised owner-building, too. The latter, in contrast, grew during 1961-1965 at rates similar to those of speculative building. In the case of speculative building, it is clearly evident that the relatively slow growth during 1961-65 reflects the trends in apartment building: the intermediate, small-scale sub-sector grew at record rates. It slowed down, however, to half of these rates during 1965-71, whereas apartment building took an upswing. We can not make a similarly detailed analysis for the 1950's. We know, however, that one-third of residential building in Athens during 1951-58 was speculative production (see Table 2.6, Chapter 2). The share of the speculative sector, thus, has risen fastly in the second half of the 1950's and after 1967; in the intermediate years precapitalist housing production advanced at similar or higher rates.

Having specified the complex pattern of changes that took place in the postwar period, we may turn to the problem of explanation. We will restrict our analysis to the case of Athens. This is necessary mainly for reasons of data availability: the formulation of a systematic model of the mechanism of sectoral change requires a multitude of variables that can be constructed only in the case of Athens. We have already utilised the rich material

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2. It should be remembered that our estimates of illegal activity in Chapter 2 were based on the number of illegal dwellings built annually. This neglects the probably substantial amount of illegal *additions* to existing unauthorised structures. In this respect, our estimates of the volume of precapitalist housing production are conservative.



available for the capital to explore the social and spatial corollaries of the different modes of housing production (see chapter 2). We will return to these aspects in the following discussion.

Table 4.1: Sectoral composition of private residential building: Athens, 1961-1971

"Mode" of housing production	1961	1965*	1971*	(volume in thousands m <sup>3</sup> )	
				Annual growth rates 1961-65	1965-71
1. Petty Owner-Building	4,543	7,112	7,249	11.8%	0.3%
One, two-storey, extensions, illegal housing, of which, legal:	(54%)	(56%)	(39%)		
	3,712	5,373	7,249	9.7%	5.1%
2. Speculative Building	3,838	5,692	11,285	10.3%	12.1%
of which	(46%)	(44%)	(61%)		
- Intermediate, Small-scale (three, four-storey)	582	1 340	2 740	23.2%	12.6%
	(7%)	(10%)	(15%)		
- Apartment Building (five-storey and higher)	3,256	4,352	8,545	7.5%	11.9%
	(39%)	(34%)	(46%)		
Total of which, legal building	8,381	12,804	18,534	11.2%	6.3%
	7,550	11,065	18,534		
	(90%)	(86%)	(100%)		

Source: Tables 2.2, 2.5, Chapter 2, 1964 Yearbook, NSSG, General Appendix A.1, A.4. For the method of estimation, see Chapter 2. (\*): The estimates for the years 1965 and 1971 are averages of three-year periods: 1964-66 and 1970-72. Since no significant fluctuations occurred in the beginning of the decade (see Figure 4.1) no such average was used for 1961.

## 2. Formulation of the problem

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In the effort to explain the pattern of postwar changes in the housing system - particularly those that took place in the 1960's - a purely "political" argument suggests itself immediately: the parallel occurrence of fast growth in speculative building and a stagnation of precapitalist forms seems to be the product of specific policies of differentially applied control and encouragement. The suppression of illegal building after 1967 with its wider effects in diminishing popular access to land, coupled with building codes and credit policies that boosted speculative developments, make this argument highly attractive. There is, as we will show, a great deal of truth in this. However, as a matter of methodological principle such an argument should be counterposed to a second alternative hypothesis: namely that the pattern of housing change can be explained by factors "endogenous" to the housing system when the latter is conceived as a semi-closed system with equilibrium of supply and demand in the medium and long run. The first, "non-equilibrium" hypothesis, however appealing at first glance, could be effectively refuted or drastically diminished in importance, if we show that the standard socioeconomic and demographic determinants of housing demand can account for the largest part of changes, leaving only an insignificant residuum of "unexplained" variation attributable presumably to *ad hoc* factors such as "politics". In the following we will check the validity of these two theoretical alternatives. We have to examine, therefore, the extent to which the postwar changes in the structure of housing production can be explained by a simple model of the interplay of demographic growth, income change, and the pattern of income distribution; a model, that is, of the growth and allocation of housing demand.

We know that the differentiation of the system of housing production into speculative apartment building and precapitalist petty owner-building with intermediate forms in-between, is correlated directly with the social class structure (see chapter 2). The apartment market is mainly associated with middle and upper occupational strata. What is the nature of this association? The answer that is most commonly offered stresses the importance of household income levels measured in absolute terms: the extent of speculative building depends on the size of the market of houses having a price (or rental value) that exceeds a certain level. The tendency, after all, of speculative builders to be concerned almost exclusively with higher-income demand is a commonplace in the history of capitalist cities. We have

thus the general hypothesis that the share of the speculative sector is determined by the share of the "substantial incomes" sub-market in total housing demand. Fast urban growth and economic development, therefore, will lead to a steady expansion of speculative building in absolute as well as in relative terms. The bench-mark of minimum "substantial income" that permits "entry" to this sub-market depends, obviously, on the socially defined standard of "normal" housing in this particular sector and the trend of housing costs: rising relative costs (that overshoot, that is, the general inflation rate) will act negatively on the expansion of this sub-market. As a matter of fact, both of these "exogenous" parameters remained fairly stable for the period we examine: the standards of the average apartment unit have not changed significantly and house rents and construction costs moved in step with the general price index, at least for the most relevant part of the period: 1958-1971 (see Appendix 6.1). Starting, thus, from a base year and observing the movement of the income-level (or rent-level) that determines the range of the speculative sub-market and estimating the growth in the number of households with such incomes we may arrive, presumably, at a systematic "prediction" of the sectoral composition of housebuilding and, more specifically, of the expansion of the speculative sector. This then can be checked against the observed trends.

Although such a theory appears self-evident, however, it involves a number of complex and questionable assumptions with regard to the prevailing pattern of allocation of housing demand and the system of housing production. It assumes an *integrated* system of housing preferences as well as an integrated system of housing production. "Integrated" in these two senses means shortly the following: first, all socioeconomic groups have a common scale of preferences that places a high value on the housing situations (areas and types of housing) associated with the more comfortable middle class; second, such improved housing situations are supplied exclusively by the speculative mode. As a result, with the growth in real incomes an increasing spectrum of socioeconomic groups is assimilated into the more highly valued and "modern" sector which is the speculative one. In the preceding chapters, however, we have offered ample evidence that makes the validity of such an "integrated" model highly questionable. The "dual" system of housing production and its relationship with the class structure and the urban spatial structure suggest strongly

that there might be considerable lack of "integration" both in the system of the flow of household resources, as well as in the system of values and preferences. Thus, an alternative "dual-segregated" model of the allocation of housing demand must also be considered in order to arrive at a valid understanding of the role of income and population growth in sectoral change. This complicates substantially the formulation of the problem we are examining. We must answer the following set of interconnected questions:

a. To what extent has the expansion of the speculative sector been the result of "exogenous" factors (mainly political) that encouraged speculative building and hindered precapitalist building? This requires an examination of:

b. To what extent does the growth and allocation of housing demand, assuming supply-demand equilibrium, account for the postwar changes in sectoral composition? This, in turn, requires examination of:

c. What is the character of the system of allocation of housing demand between different "housing situations" in the postwar period, what changes took place in this respect, and how have these affected the rate of speculative sector expansion?

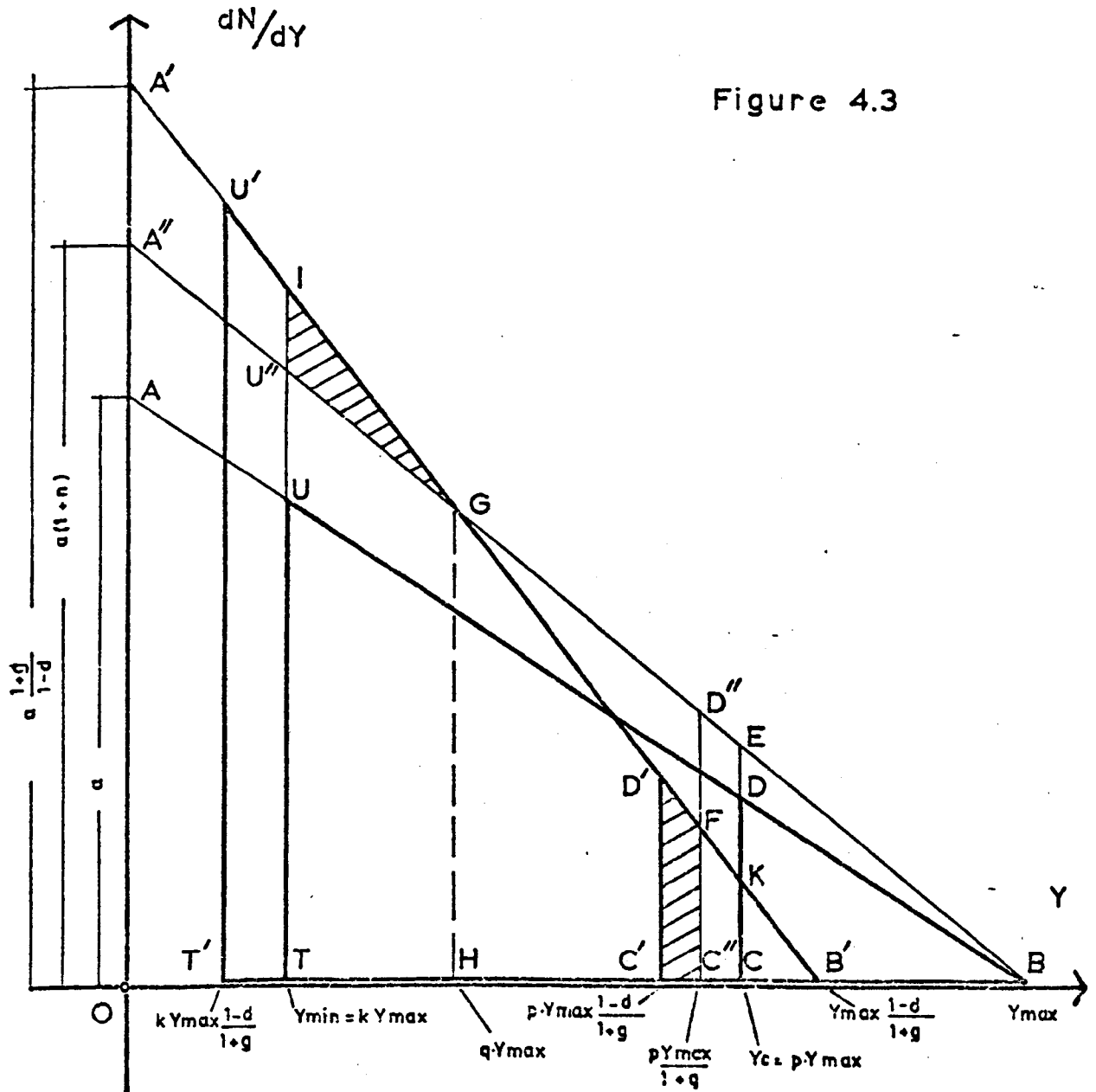
In the following sections we will be occupied with the construction of a model that can help answer questions (b) and (c).

### 3. A model of an integrated housing system

The analysis of the growth and allocation of housing demand as a determinant of the structure of housing supply can be approached with the help of a simple model presented graphically in Figure 4.3. Let us assume a pyramidal pattern of stratification described in Figure 4.3 by triangle TUB where  $\frac{dN}{dY}$  is the number of households in income bracket  $dY$ ,  $Y$  is household income and  $N$  is the total number of households. Since we are dealing with a model of housing demand, the concept of "income" employed is the one relevant for the determination of housing expenditure. Most theories of household behaviour stress the fact that current income should be rejected as a determinant in favour of some concept of "normal" income or the structurally determined resources of a household which abstracts from transitory or random influences on income.<sup>3</sup> "Normal" income is determined by differentials

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3. Muth has consistently argued in favour of Milton Friedman's concept of "permanent" or "expected" income. This is measured by the weighted average of the current disposable income of previous years, the most



recent receiving greatest weight (Muth, "The Demand for Non-Farm Housing" in A.C. Harberger (ed). The Demand for Durable Goods (Chicago, 1960). See also, M. Reid, Housing and Income (Chicago, 1962). An alternative operationalisation of structurally determined household income frequently used in the analysis of consumption is the total of a household's expenditures. See, for instance, J. Crocket, Consumption Expenditures and Incomes in Greece (Athens, 1970, in Greek). A theory of the consumption function opting for total household resources (current disposable income *plus* personal wealth) as a theoretically preferable alternative can be found in M.B. Johnson, Household Behaviour: Consumption, Income and Wealth (London, 1971): Chapter 6. See also note 1 in Chapter 6.

between occupational categories, differentials in skill and education and the distribution of wealth and ownership of means of production. These factors divide the population into a number of class-categories according to their "market situation", to use the well-known Weberian concept, which determines their life-chances in economic terms.<sup>4</sup> Let us assume then that the stratification pattern in Fig. 4.3 is composed by an hierarchical arrangement of such "classes". This implies that we abstract from variations caused by factors such as size of family or the stage in the life-cycle of a household, which operate *within* a certain economic class. In operational terms, the stratification pattern is mainly based on the hierarchical ordering of detailed occupational categories according to average earnings and the income from other sources (e.g. property) that is typically associated with each category. "Normal" income or structurally determined resources thus understood determine in turn consumption expenditure for each household category. Given this assumption, the level of total consumption expenditure of each occupational category defines its place in the stratification hierarchy in an objective manner (which must be distinguished from a use of consumption levels as indices of "status" stratification). Let us assume for the sake of simplicity that *rent* expenditures - either in direct payment or in terms of imputed rent in the case of owner-occupiers - are proportional to "income" as previously conceptualised. The pattern of "income" distribution then, represents the distribution of households among *rent-classes*, and income-level  $y$  in Fig. 3 denotes a corresponding rent level. Point B on the X-axis denoted by  $y_{max}$  is defined by the intersection of the income distribution line with the X-axis, whereas point T ( $y_{min}$ ) denotes the lowest income level. The area TUB measures the total number of households at any given time. Assuming supply-demand equilibrium and an insignificant

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4. For Max Weber's concept of "market-situation" as the economic determinant of "class-situation", see H.H. Gerth & C. Wright Mills (eds) From Max Weber (London, 1970), pp. 181-183. See also the discussion in Emrys Jones and John Eyles, An Introduction to Social Geography (London, 1977): 145-149, which is explicitly related to housing, N. Wiley "America's Unique Class Politics: The Interplay of the Labor, Credit and Commodity Markets", in H.P. Dreitzel (ed) Recent Sociology, vol 1 (London, 1969): 188-213, and chapter 6 in this study. I have not come across any study pointing out the strong affinity between Weber's "market situation" and "life changes" and the modern economic concept of "normal income" and household "resources". This obvious affinity opens up ways for integrating urban class-structure analysis with the enormous amount of research and theory on the income, savings, consumption and wealth of households.

amount of dwelling-sharing among households, the number of households equals the number of dwellings comprising the housing stock. We have also assumed that the pattern of distribution is described by a simple linear function of the type  $\frac{dN}{dY} = a - bY$  (1) where  $\frac{dN}{dY}$  is the number of households (dwellings) per *rent-class*. We may complete the formal description of the pattern of distribution by defining  $Y_{min} = kY_{max}$  where  $k$  is a constant. By integrating (1) and with the help of some simple geometry we have:

$$\text{Total number of households} = N = \frac{\alpha Y_{max}}{2} (1-k)^2$$

$$\alpha = \frac{2N}{Y_{max} (1-k)^2} \qquad b = \frac{2N}{Y_{max}^2 (1-k)^2}$$

Thus the variable  $Y_{max}$  (henceforth signified by  $Y_m$ ) and the constant  $k$  describe the system sufficiently at any given time. Let us assume that, first, incomes grow annually by  $g$  per cent, a rate applied similarly to all classes so as income differentials remain unchanged, and that second, population (number of households) grows by a rate  $n$  similarly applied in a uniform manner. Assume, furthermore, that all categories of the housing stock depreciate annually by  $d$ . The composite effect of these changes after a year's time is presented in Figure 4.3. Demographic change effects a shift of the demand line  $AB$  to  $A'B$ . The effect of income change can be described in either of two ways: points on the x-axis shift to the right to points measured by  $Y(1+g)$  and the intersection of the demand line with the y-axis shifts to  $\frac{\alpha}{(1+g)}$ , or, alternatively, the demand triangle remains in the initial position  $TUB$  and the effect of income change is registered on the position and shape of *supply*. Let us choose the second alternative. The combined effect of income change and depreciation by a rate  $d$  results in the shift of the supply triangle  $TUB$  (which at time  $t_0$  equals demand) to a new position  $T'U'B'$ . The supply line intersects now the y-axis at point  $A'$  where  $OA' = \alpha \frac{1+g}{1-d}$ . The composite effect of these changes can be easily inspected in Figure 4.3. Whereas demand at time  $t_1$  is described by  $TU''B$ , available housing stock is described by  $T'U'B'$ . The rise of incomes and depreciation make so that a part of stock moves below the lowest rent-class of demand and is therefore abandoned: this is measured by area  $T'U'IT$ . In the case when the new demand and supply lines have an intersection that lies to the right of the lowest rent-class of demand (point  $kY_m$  on the x-axis), we will have a *surplus* of supply at

the lower class levels (area IGU'' shaded in Figure 4.3). Thus *effective* supply at time  $t_1$  is measured by TU''GB' and the addition to the housing stock necessary for supply-demand equilibrium by B'GB. This mechanism can be generalised, of course, in order to provide the amount of building over a period greater than a year given the initial number of households, the increase in incomes and households and the depreciation rate over the same period plus the assumption that the coefficient "k" of income differentials remains stable. Assuming a constant "k" and a constant rate of demographic growth "n" we can derive with the help of simple geometry on Figure 4.3 or with the formulas of integration for a linear function, the following general expressions:

$$\text{Total Demand for Dwellings} = D_t = N_o (1+n)^t \quad (2)$$

$$\text{Effective Supply} = S_t = \frac{N_o}{(1-k)^2} (1+n)^{t-1} \frac{(1-d-k-kq)^2}{(1-d)^2} - S_q \quad (3)$$

$$\text{New Building} = D_t - S_t = B_t = \frac{N_o}{(1-k)^2} (1+n)^{t-1} \left[ (1+n)(1-k)^2 \frac{(1-d-k-kq)^2}{(1-d)^2} \right] + S_q \quad (4)$$

In equations (2), (3) and (4)  $D_t$ ,  $S_t$  and  $B_t$  are measured in dwelling units;  $N_o$  is the number of households at the base year and  $g$ ,  $d$  are annual rates observed for year  $t$ .  $S_q$  is area IU''G in Figure 4.3 and will be zero or positive depending on the combination of  $g$ ,  $d$  and  $n$ . Let us define the coordinate on the x-axis of point G (the intersection of the new demand and supply lines) as  $qY_m$ .  $S_q$ , measuring the surplus of supply at the lower income levels, will be positive when  $q$  is greater than the constant  $k$ . The values of  $q$  and  $S_q$  are given by the following equations:

$$q = (1-d) \frac{(1+g)-(1-d)(1+n)}{(1+g)^2 - (1+n)(1-d)^2} \quad (5)$$

$$S_q = \frac{N_o}{(1-k)^2} (q-k) \frac{2(1-d)(1+g)-(q+k)(1+g)^2}{(1-d)^2} - (1+n)(2-q-k) \quad (6)$$

Let us approach the problem of sectoral structure by considering the implications of the hypothesis that the range of the speculative market is determined by a certain fixed value of a dwelling unit that is considered as the lower standard, defined socially and economically, to which speculative builders will respond. This standard determines at any given time a



certain range of income classes that lie above it and therefore a part of the population that obviously expands as incomes grow and the standard remains fixed. Assume that this income range is defined for the base year by income (or rent) level  $Y_c$  shown in Figure 4.3. by point C on the x-axis and that  $Y_c = pY_m$ . Parameter  $p$  changes, of course, with the change of incomes, i.e.  $p_t = P_0/(1+g)^t$ . Triangle DCB describes the housing sub-market relevant for speculative building at time  $t_0$ ; this expands to D''C''B at time  $t_1$ . During the same period the housing stock previously used by this submarket shifts to D'C'B'. In effect, only part of this stock is currently available (area C''FB') and the rest (area C'D'FC'' shaded in Figure 4.3) is passed to lower classes of housing demand. Thus the necessary addition to stock for the case of the speculative sector is measured by area FD''BB'. This mechanism is expressed in the following equations:

$$\text{Speculative Sector Demand} = D_{c,t} = \frac{N_0}{(1-k)^2} (1+n)^t \frac{(1+g-p)^2}{(1+g)^2} \quad (7)$$

$$\text{Speculative Sector Supply} = S_{c,t} = \frac{N_0}{(1-k)^2} (1+n)^{t-1} \frac{(1-d-p)^2}{(1-d)^2} \quad (8)$$

$$\text{Speculative Building} = B_{c,t} = \frac{N_0}{(1-k)^2} (1+n)^{t-1} \left[ \frac{(1+n)(1+g-p)^2}{(1+g)^2} - \frac{(1-d-p)^2}{(1-d)^2} \right] \quad (9)$$

$$\text{where } p = p_{t-1} = \frac{P_0}{(1+g)^{t-1}}$$

Given equations (9) and (4), the share of speculative building in total building is provided directly by the ratio  $G_t = B_{c,t}/B_t$  (10)

The simple model we have introduced shows that the sectoral structure of housing production is determined in a complex manner by the combined influence of a number of variables. Let us examine the particular influence of each of these variables. In Table 4.2 we present a rough sensitivity analysis showing the effect on  $G$  of a 50% change in each of the variables and parameters of the system when the rest are kept constant. We start from an initial case defined by  $g = 0.03$ ,  $d = 0.02$ ,  $n = 0.04$ ,  $p = 0.6$ ,  $k = 0.2$ , a configuration of values that, as we will see later, represents conditions in Athens in the beginning of the 1960's. It is apparent from Table 4.2

that  $p$  has the strongest effect on  $G$ . Thus, given the rates of demographic and economic growth, the role of speculative building should be expected to rise steadily with a speed that varies positively with the rate of income growth since  $p = p_0/(1+g)^{t-1}$ . This influence of  $p$  is stronger at the upper levels of the income hierarchy and diminishes as the range of the speculative sector reaches lower income strata (an effect that derives from the greater absolute change caused on higher incomes by a uniformly applied rate of income growth). As it should be expected theoretically,  $G$  is affected negatively by  $n$  and positively by  $g$  and  $d$  in this order of importance with respect to the magnitude of the effect. It is interesting that the income distribution parameter  $k$  has a positive but insignificant effect. All the elasticities of  $G$  with respect to the corresponding variable vary greatly according to the range of values of the variable, a fact that signifies the complexity of the mechanism that determines  $G$  in periods of change.

The model that leads to expression (10) has been based on a number of assumptions. Most of them have been introduced in order to simplify the formal structure of the model and have limited theoretical significance. Certain assumptions, however, concern strategic aspects of the structure of the housing system as a whole. First, we have assumed that residential investment follows an equilibrium growth path determined by the exponential (compounded) growth of demand. Since we aim at an empirical check of the model, we must examine the realism of such a claim for postwar building. This amounts to arguing that after smoothing-out short-term fluctuations (say, by three-year averages), the long-term path of building is not the product of a disequilibrium mechanism that may have generated a "long wave" of building deviating from the growth path of incomes and population. Such semi-autonomous "long waves" (building cycles of a duration between ten and twenty years) may be generated by protracted lags in the reaction of investment to changes in demand. Long lags are frequently found in the analysis of residential investment and some studies have suggested that the familiar phenomenon of long-waves (or long swings) of building may be explained by the mathematical properties of certain investment functions with lags that generate endogenously an explosive oscillation<sup>5</sup> (in the terminology of logarithmic

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5. See J.B.D. Derksen, "Long Cycles of Residential Building: An Explanation", *Econometrica* (8,2,1940): 97-116. The tradition of studies explaining the cyclical fluctuation of investment on the basis of endogenous mechanism formed by the structure of time-lags, goes back to the influential work of J. Timbergen between the wars.

functions) instead of regular short-term fluctuations. Exogenous changes in incomes and population, then, serve as mere disturbances that set a long wave of building going until the increasing discrepancy between supply and demand checks the process.

Table 4.2. Sensitivity analysis of the share of the speculative sector in the growth of housing stock

1. Initial Case $g=0.03, n=0.04$ $d=0.02, p=0.6, k=0.2$	Share of Speculative Sector "G" 0.738	Elasticity of $G$ $dG/dV^*$ --
2. $g=0.045$ (+50%) $g=0.015$ (-50%)	0.819 0.635	+0.22 +0.28
3. $n=0.06$ (+50%) $n=0.02$ (-50%)	0.629 0.898	-0.30 -0.43
4. $d=0.03$ (+50%) $d=0.01$ (-50%)	0.790 0.667	+0.14 +0.19
5. $k=0.3^{**}$ (+50%) $k=0.1$ (-50%)	0.757 0.737	+0.05 +0.003
6. $p=0.8$ (+50%) $p=0.4$ (-50%)	0.433 0.928	-0.82 -0.51

Source: Our calculations from equations (4), (9) and (10).\* The elasticity of  $G$  with respect to the corresponding variable is defined as the ratio of the percent change in  $G$  to the percent change in the variable.\*\* For the estimation of  $G$  with a varying " $k$ " we have assumed, of course, a constant " $N$ " (number of households).

There are strong empirical grounds, however, for dismissing the importance of major endogenously created fluctuations as determinants of the path of postwar building. To begin with, petty owner-building, as should be expected, does not show any significant cyclical behaviour. Strong fluctuations are evidently an attribute of speculative building (see Figures 4.1 and 4.2). Speculative building, however, mostly responds to demand for owner-occupation rather than to "business" demand for rent-producing assets. We shall see in the next chapter that genuine *rentier* investment in residential property which is by nature very sensitive to

fluctuations in house-rents, is of extremely limited importance in Greek cities. The main basis of new housing demand is the growing flow of small household savings. The lack, thus, of a strong influence on investment by the level of rents eliminates a possible important lag between demand and supply. Moreover, the small size of speculative developments, the short period of production observed in such building, and the direct relationship between household savings and building expressed in the sale of properties before completion, make for very short lags in general. If we exclude the exceptional years 1967 and 1974 which were ones of major political changes (the military coup and the fall of the dictatorship) and were, furthermore, preceded by strong restrictions on building (especially the latter), we can easily observe in Figures 4.1, 4.2 the existence of a very short speculative building cycle of three-year duration. Permits for apartment buildings rise for two years and then either their growth is checked or we have an absolute fall. These short-term cycles are easily discernible: 1957-60, 1960-63, 1963-66, 1967-70, 1970-73. In conclusion, we may consider the trend in building from the mid-1950's onward as the expression of a *growth path*.

The second major assumption of the model we have presented concerns the structure of the "housing market". The reader may have noticed that the mechanism of allocation of demand and stock works in the following manner. Income strata shift to the right ("up") as income rises and the categories of housing stock move to the left ("down") due to depreciation. As each stratum (or economic class category) moves upwards to higher rent-classes of stock, it abandons housing which serves as part of the supply for lower strata. Such a mechanism of housing demand allocation may be called an *hierarchically integrated* one in that it implies a unified scale of housing preferences adhered to by all classes and a corresponding hierarchical ordering of categories of housing stock expressed in a spectrum of monetary values. The pattern of stock allocation follows directly from these principles, given generalised economic competition and the rule of the criterion of rent-paying ability in determining who gets what. These principles of allocation have been widely adopted as basic assumptions in models of the "housing market" and they form the backbone of the well-known "filtering-down" models.<sup>6</sup>

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6. Certain ingenious models of the housing market centred on the concept of the "filtering-down" process can be found in L.H. Klaasen, "Some Theoretical Considerations for the Structure of the Housing Market",

The latter, however, mainly refer to housing systems where the building of new housing is concentrated in the middle and higher income markets, with the implication that the stock that "filters" down forms the predominant source of supply for lower-income demand. This amounts to a system characterised by a hierarchically integrated allocation of demand *plus* the operation of a *one-sector* system of housing production, namely a speculative one. A pure "filtering" model, however, violates by its nature the requirement of equilibrium between supply and demand and thus differs in an important way from the model we have introduced. Unless the socioeconomic range of speculative supply is very broad (in our model the ratio  $p = Y_c / Y_{max}$  is very small or  $Y_c$  approaches  $Y_{min}$ ), and the rates of population growth and depreciation are low relative to the rate of income growth, the "filtering" model produces a shortage of housing for lower incomes.<sup>7</sup> This is exactly what took place during the fast growth of capitalist cities in the nineteenth century and is reproduced in the exploding Third World cities of the postwar period unless a sufficiently large precapitalist housing sector fills the gap. Our model, therefore, rests on a third major assumption, namely the existence of a "dual" system of housing production with an important precapitalist sector capable of sustaining the equilibrium growth of housing stock. The existence of a dual economy in Greek urban housing has been amply documented in previous chapters and no insistence on this point is needed.

The operation of a dual housing system, however, has implications that go beyond the mere fact of an adequate supply at the lower income levels: it puts into question the whole rationale of the model we have been describing up to now. This is evident on two levels: that of housing production, and that of the distribution of housing demand. With regard to the level of distribution we have assumed that lower-class demand will "move up" in order to occupy the housing stock abandoned by higher-

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in Essays in Urban Land Economics in Honor of Leo Grebler (Berkeley, 1966): 68-75, W.F. Smith, "The Income Level of New Housing Demand", pp. 143-78 in the same volume and W.G. Grigsby, Housing Markets and Public Policy (Philadelphia, 1963).

7. A similar point to the effect that the supply of housing for lower-income strata created through the "filtering-down" process can suffice only under certain favourable conditions, has been demonstrated by Klaasen in his "Some Theoretical Remarks". Klaasen's formal model of the housing market has served as an important source of ideas for the one advanced here. However, we have arrived at similar results regarding "filtering" and the significance of the various variables, with a much simpler mathematical formulation and one more suited to the problem of the determinants of sectoral structure and change.

income strata, following, that is, the rules of a system of "hierarchical integration" of housing demand. To the degree that social strata are segregated in the city this implies a substantial amount of *intra-urban mobility*. The existence, however, of a widespread system of non-speculative owner-building geared to specific areas and social classes and characterised by the economic relationships and values of household control over land and housing production, will most certainly vitiate against the undisturbed operation of such geographical "integration". To this we must add the primary influence of the *social* forces reproducing segregation along class lines in urban space irrespective of the dictates of the housing economy. Similar points can be made with regard to the system of housing production. The model we have outlined assumed the operation of a process of gradual *diffusion* of the speculative sector as economic development advances, or seen from another point, a process of swift *assimilation* of lower-class petty-owners of capital into the speculative economy, the counterpart of which is the readiness of speculative developers to expand the range of their activities accordingly. In chapters 2 and 3 we have stressed the point that such hypotheses of a process of "natural" assimilation of the socioeconomic resources of the precapitalist housing sector should be viewed with scepticism. It is imperative, therefore, that we formulate some alternative hypotheses about the structure of the housing system before embarking on the empirical analysis of trends in the sectoral pattern of housing production.

## 5. Alternative models

The formal model we have introduced permits a very easy consideration of significant alternatives. In Table 4.3 we present a four-fold conceptual scheme which determines four alternative theoretical models of the housing system. These models are, of course, "pure" types; the character of the actual system may lay somewhere in-between two or more than two of these. The scheme is defined by two dimensions: integration at the level of demand and integration at the level of production. Let us start from the second one. When we have a case of "integration" at the level of production, which we may call the "assimilation" case, the mechanism we have described earlier applies and we have an expanding range for the speculative market, i.e. a diminishing "p" as incomes grow. The logical alternative is a case where the range of the speculative market is *fixed* with respect to the income distribution, in other words it is confined to certain social

classes whatever the level of economic development. In this case, which we may call the "dualism" case, " $p$ " has a fixed value. Similarly, "integration" at the level of demand implies the operation of the mechanism of allocation of income groups to the available housing stock in the manner we have already described.

Table 4.3: A conceptual scheme of types of housing systems

		Integration at the level of distribution of housing demand	
		(+) Integration	(-) Segregation
Integration at the level of housing production	(+) Assimilation	1. Model "A-I" $B(AI)c$ $B(AI)$	3. Model "A-S" $B(AS)c = B(AI)c$ $B(AS)$
	(-) Dualism	2. Model "D-I" $B(DI)c = B(DS)c$ $B(DI) = B(AI)$	4. Model "D-S" $B(DS)c$ $B(DS)$

Lack of integration of demand, which may be called the case of "segregation", can be defined as follows. Assume that there exist two distinct sub-markets of housing stock that are associated with the socioeconomic groups delimited by " $p$ " (the boundary of the speculative market) in a way that although the mechanism of hierarchically integrated allocation of demand to stock operates *within* these markets, there is no interrelationship between the two, as if they formed different urban areas. The result is that the amount of housing that "moves below" the boundary of the speculative market is not available as supply for lower-income demand and is effectively abandoned or demolished. This does not affect speculative building; non-speculative building, however, (and total building) must necessarily increase in comparison to the integrated case and, therefore, the ratio " $G$ " must fall. The amount of the necessary additional building can be inspected in Figure 4.3: in the case of a fixed " $p$ " (model "D-S") it is measured by CKD'C' whereas in the case of a diminishing " $p$ " (model "A-S") by C'FD'C'. The combination of these alternative cases at the levels of demand distribution and production structure generate the four models in table 4.3. These stand in definite relationships to each other. Model "A-I" is described by equations (4),

(9) and (10). Model "D-S" is its polar opposite. Models "A-S" and "D-I" are of intermediate nature having elements that are common to one or the other of the polar opposites as we show in table 4.3.

Having presented the equations that provide total and speculative building for the case of the "assimilation-integration" ("A-I") model, we may give the formal expressions of the alternative models with the following equations that can be easily derived from Figure 4.3.

For the case of "dualism-integration" (model "D-I").

$$B(DI)_e = \frac{N_o}{(1-k)^2} (1+n)^{t-1} \left[ (1+n)(1-p)^2 - \frac{(1-d-p-pq)^2}{(1-d)^2} \right] \quad (11) \quad \text{and} \quad p=\bar{p}$$

$B(DI) = B(AI)$  where  $B(AI)$  is given by equation (4).

$$G(DI) = \frac{B(DI)_e}{B(DI)}$$

For the case of "assimilation-segregation" (model "A-S")

$B(AS)_e = B(AI)_e$  where  $B(AI)_e$  is given by equation (9).

$$B(AS) = \frac{N_o}{(1-k)^2} (1+n)^{t-1} \left[ (1+n)(1-k)^2 - \frac{(1-d-k-kq)^2}{(1-d)^2} + \frac{pd}{(1-d)^2} \left[ (1-d)(2-p)-p \right] \right] + S_q \quad (12)$$

where  $S_q$  is given by equation (6) and  $p = \frac{\bar{p}_o}{(1+g)^{t-1}}$ . Then  $G(AS) = \frac{B(AS)_e}{B(AS)}$

Lastly, for the case of "dualism-segregation" (model "D-S")

$B(DS)_e = B(DI)_e$  where  $B(DI)_e$  is given by (11).

$$B(DS) = \frac{N_o}{(1-k)^2} (1+n)^{t-1} \left[ (1+n)(1-k)^2 - \frac{(1-d-k-kq)^2}{(1-d)^2} + p \frac{(q+d)}{(1-d)^2} \left[ (1-d)(2-p)-p(1+g) \right] \right] + S_q \quad (13)$$

where  $p=\bar{p}$  and  $S_q$  is given by equation (6). Then  $G(DS) = \frac{B(DS)_e}{B(DS)}$

Some additional clarifying points with regard to the hypothesis of "dualism" in the formation of housing production are necessary at this point. The assumption of a fixed point in the income distribution that operates as an effective boundary beyond which speculative production does



not expand has real significance only after the margin of the speculative market, moving "downwards" due to economic growth and incorporating an expanding share of the middle classes, has *reached* this fixed socio-economic boundary. This point has certain theoretical implications. It would seem at first glance that under conditions of steady economic and demographic growth, evidence of a rising share of speculative building implies the operation of an "assimilation" model. As the previous argument shows this is not always the case. Such a change may very well take place for a period because of speculative expansion *within* upper incomes and then stop because the *overall* structure conforms to a "dualist" model. On the other hand, evidence of stability or fall of the speculative share immediately suggests the possibility of strong forces making for a "dual" housing system where modes of housing production have definite relationships with specific classes and geographical areas within the city unless, of course, there has been an important shift in the configuration of demographic and income variables that could account for the pattern observed in the ratio "G" (as indicated by the previous sensitivity analysis). We would, thus, distinguish in applying models "D-I" and "D-S", that value of parameter "p" which refers to the segregation pattern (and which is fixed) from that which refers to the boundary of the speculative market - say " $p_c$ ": the latter is not fixed for the range that lies above income level  $pY_{max}$ .<sup>8</sup>

Models 1 to 4 in Table 4.3 provide a means by which we may study systematically the *actual* trends in the ratio "G" in a way that evaluates both the influence of economic and demographic variables *and* the structure of the housing system or important transformations in the latter. Equipped with these analytically determined theoretical possibilities as alternative hypotheses for the explanation of trends in the sectoral composition of housing growth, we may turn now to the empirical investigation of postwar developments in Athens.

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8. The reader may have noticed that the equations for speculative building are in a sense incomplete. It is possible that "p" (denoting the boundary of the speculative market) has a value at some time that is smaller than "q" - the x-axis coordinate of the intersection of the demand and supply lines given by equation (5). In that case speculative building should be increased by an amount provided by equation (6) for " $S_q$ " when in place of "k" we put "p". We have omitted this since such an occurrence will be rather rare in a two-sector housing economy. Still, the point is necessary for the formal completeness of our analysis.

### 5. The case of Athens in the postwar period

In an Appendix to this chapter (Appendix 4.1) we review the empirical evidence of demographic and socioeconomic changes in Athens in order to determine the trends in the variables relevant to the study of sectoral structure, namely the rate of growth in the number of households " $n$ ", the rate of depreciation of the housing stock " $d$ ", the rate of growth of rent expenditures " $g$ " (real and imputed) and the values of " $k$ " and " $p$ ". Such an analysis presents certain problems since it must achieve a high level of precision for each particular sub-period of the time-span under analysis: the study of changes over relatively long periods such as decades does not suffice for the analysis of building over particular short-term periods and certainly not for specific years if rates of growth are not stable. We could only estimate, however, the rates of change for five-year periods over the two decades from 1951 to 1971: particular years were characterised according to the period they belong to. We should expect, thus, a certain degree of imperfection in the data.

The parameter for the pattern of "income distribution" (more precisely, the rent distribution) " $k$ ", and that for the boundary between different sub-markets " $p$ " (which, depending on the model we use, may be considered a variable) presented more difficult problems. It is obvious that if we arrange groups of "structurally determined resources" in a hierarchy, the resulting pattern may very well deviate from the assumed pattern of a pyramidal distribution. By aggregating lower income strata we may approach more closely a pyramidal shape but significant imperfections remain. In the case of Athens we found that by adopting the simple triangular presentation we underestimate the number of lower-class households and overestimate that of higher-class ones. Moreover, the rent level of higher-class households tends to be larger than the one determined by a linear rent function (an exponential line would be preferable for these higher-class levels). We do not think, however, that these imperfections affect the time-pattern of sectoral structure significantly. The same can be said about the effect of changes in rent-level differentials. We have estimated a ratio of  $\frac{Y_{min}}{Y_{max}}$  or " $k$ " equal to 0.2 (a differential of one to five) and have accepted that this remains constant over the period under study. These are very rough approximations: we know, for instance, that during the postwar period substantial shifts

in "k" took place (see Appendix 4.1). It appears, furthermore, that the value of 0.2 is an overestimation as we shall see immediately below. We have shown, however, in the sensitivity analysis that the influence of "k" on "G" is insignificant: the distribution parameter is of much greater importance in the determination of the *absolute* level of building. These imperfections, thus, are of little consequence for the analysis of sectoral structure.

The determination of "p" obviously presents great difficulties. Since, however, we are interested in "explaining" the broad pattern of *changes* in the sectoral structure of building, the exact value of "p" at the base-year is of secondary importance. A rough approximation of "p", when this signifies the effective boundary of the speculative market at the base-year, provides a sufficient indication of the extent of demand for speculative building. The amount of building estimated formally with the help of the model may deviate from actual speculative building. But in terms of the time-pattern of the sectoral structure, this is immaterial as long as predicted demand and actual building develop in the same proportional relationship. With these observations in mind we have selected a value for "p" that is roughly consistent with the class structure of Athens and our observations about the correlation between modes of housing production and social classes. We have estimated that "p", determining the boundary of the speculative market for the base-year - in our case 1960 - has a value of 0.60. This, given the distributional pattern ( $k = 0.2$ ) lies in the mid-point of the rent level spectrum and divides households in an upper quarter and a lower three quarters. Since this boundary also marks the division between the middle and upper social classes and the working class in the occupational hierarchy, we have assumed that a "p" of 0.60 signifies the point at which segregation occurs in the non-integrated models of the distribution of housing demand.

The values of the parameters and variables we have estimated in Appendix 4.1. are presented below.

1951-1961	$n = 0.037$	$g = 0.03 - 0.033$	$d = 0.01$	$pc_{1951} = 0.83$
1961-1965	$n = 0.051$	$g = 0.035$	$d = 0.01$	$pc_{1960} = 0.60$
1965-1971	$n = 0.035$	$g = 0.06$	$d = 0.01$	$pc_{1970} = 0.366$

$k = 0.15-0.2$  (common to all years),  $p = 0.6$  (the parameter of the segregation boundary),  $pc$  calculated from  $pc_t = \frac{pc_{t0}}{(1+g)^t}$  when  $pc_{1960} = 0.6$ .

Total number of households: 1951: 361,100, 1961: 522,587, 1971:781,140.

Given these estimates and using the formal models of the previous section, we have calculated the levels of speculative building, total building and the ratio "G" for years 1971, 1965, 1961 and the period 1952-1957. The values "predicted" for these three dependent variables by each of the four alternative models introduced before are presented on Table 4.4 (next page) alongside the *actual* values shown on Table 4.1. Since the sectoral composition of building presented on the latter table refers to volumes whereas our model-based "predictions" refer to numbers of dwellings, we adjusted the former by using a volume ratio (for the whole period) of the average speculative dwelling to the non-speculative one of 1.25/1.0. This is admittedly a rather crude assumption (the ratio most probably decreased during the period) but it suffices for the broad comparisons we wish to make.

It is evident from Table 4.4 that the hypothesis of "assimilation" as a theory of the expansion of the speculative sector cannot account for the postwar pattern. If the speculative market expanded "downwards" into an increasing range of socioeconomic strata as a result of income growth and the diffusion of modern living standards, its share in building would have changed at rates that are obviously much faster than the observed ones. A similar point can be made in relation to the level of speculative building in absolute terms. The housing system in postwar Athens, therefore, has a strongly "dual" character confining speculative activity within a certain socio-spatial range, as we have repeatedly argued in this and previous chapters. It is equally evident that there are very strong elements of a "segregation" mechanism in the allocation of housing demand. Indeed, the "dualism-segregation" model appears as the most realistic in terms of closeness of fit with the actual trends - certainly so for the time-pattern of "G", less so for the absolute levels of building.

Though in overall terms the comparative validity of the lack of integration at both the levels of production and distribution cannot be disputed, the pattern implied from Table 4.4. is certainly more complex and suggests a number of significant changes in the structure of the housing system over the postwar period.

Table 4.4: Trends in the sectoral structure of residential building in Greater Athens 1952-1971: Predicted and actual values

Period/Year	Model "A-I"	Model "D-I"	Model "A-S"	Model "D-S"	Actual values
<u>1952-1957</u>					
$n=0.194$ (0.03) *	$G=\frac{48,726}{75,020}$	$G=\frac{48,726}{75,020}$	$G=\frac{49,726}{111,543}$	$G=\frac{48,726}{155,713}$	$\frac{29,000^{**}}{100,000}$
$g=0.194$ (0.03)					
$d=0.061$ (0.01)	<u>=0.65</u>	<u>=0.65</u>	<u>=0.44</u>	<u>=0.31</u>	$\frac{0.29}{(0.33)}$
$k=0.15$ $p=0.6$					
$pc_{1951}=0.83$					
<u>1961</u>					
$n=0.04$ =0.035	$G=\frac{19,835}{28,128}$	$G=\frac{19,108}{28,128}$	$G=\frac{19,835}{31,474}$	$G=\frac{19,108}{42,785}$	$\frac{15,600}{38,000}$
$d=0.01$ =0.15					
$p=0.6$	<u>=0.70</u>	<u>=0.68</u>	<u>=0.63</u>	<u>=0.44</u>	$\frac{0.41}{(0.46)}$
$pc_{1960}=0.6$					
<u>1965</u>					
$n=0.045$	$G=\frac{28,055}{37,066}$	$G=\frac{23,788}{37,066}$	$G=\frac{28,055}{41,284}$	$G=\frac{23,788}{54,796}$	$\frac{21,500}{55,000}$
$g=0.035$ $d=0.01$					
$k=0.15$ $p=0.6$	<u>=0.75</u>	<u>=0.64</u>	<u>=0.68</u>	<u>=0.43</u>	$\frac{0.39}{(0.44)}$
$pc_{1964}=0.52$					
<u>1971</u>					
$n=0.035$	$\frac{48,210}{48,282}$	$\frac{39,233}{48,282}$	$\frac{48,210}{53,141}$	$\frac{39,233}{81,693}$	$\frac{37,000}{66,000}$
$g=0.06$ $d=0.01$					
$k=0.15$ $p=0.6$	<u>=0.99</u>	<u>=0.81</u>	<u>=0.91</u>	<u>=0.48</u>	$\frac{0.56}{(0.61)}$
$pc_{1970}=0.366$					
$q=0.320491$					

Source: Our estimates based on data from Appendix 4.1 and formulas (1)-(13). Magnitudes refer to numbers of dwellings built. (\*): The rates used for 1952-1957 concern the 6-year period; the annual ones are given in parentheses. (\*\*): The estimates for the actual values have been derived from the volume relationships in Table 4.1 (in the parentheses), adjusted with a ratio of the average "speculative" dwelling unit volume to that of the average for total building, of 1.25/1.0. The actual number of total new dwellings has been derived from "National Monograph", p. 101 and the Construction and Housing in Urban Areas (NSSG, 1962): p. 21. Figures for 1965 and 1971 are averages for 1964-66 and 1970-72. All actual figures are rounded.

1. During the 1950's, although the sectoral composition conforms to the prediction of the "D-S" model, the actual level of building activity in both sectors is substantially lower. With regard to total building this implies that the extent of "integration" in the distribution of housing demand over the stock (and by implication over the geographical areas of the city) was great in comparison to later periods. The housing system during the 1960's and most especially during the first half, had evidently a much stronger "segregation" component. The discrepancy between the predicted and the actual values for speculative building may be accounted for in either of two ways (or a combination of the two). First, it is only natural that the level of speculative apartment building immediately after the war and the civil war and in the context of a poor economic and institutional environment, would have "taken off" at a slow rate. We can safely assume that similar difficulties operated on the supply side for housing construction as a whole, thus, making for a strong influence towards a greater utilisation of the available housing stock and, therefore, a greater extent of "integration" of demand and the "filtering" of stock. Second, it may be argued that during the 1950's speculative apartment housing was effectively antagonised even within the market of middle-class, high-income strata, by *suburban* owner-building. It should be remembered that the upper social strata in Athens are predominantly housed in low-rise suburban areas (see chapter 2); since the share of these strata in the limited speculative market of the 1950's was large, the effect of such antagonistic housing types on speculative building should have been greater. Moreover, the extensive legal "colonisation" of suburban land by the middle classes during the interwar period and immediately after the war (done mostly through cooperatives - see chapter 3) provided ample land for low-rise owner-building during the 1950's.

2. It is evident from Table 4.4 that speculative building achieved predominance within the middle-class market during the 1960's. Even in the early 1970's it had not expanded into the working-class market to any significant degree. The level, moreover, of speculative activity in the 1960's and early 1970's conforms with the magnitude we would have expected given the nature of its clientele and the trends in incomes and population - assuming, of course, an elastic supply in equilibrium with demand.<sup>9</sup> Thus, we should search for the factors accounting

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9. A cautionary note is necessary here. In the model-based estimate of speculative activity we made some useful but approximate assumptions.

for the "anomalous" rise in the *share* of speculative building in the late 1960's - "anomalous", that is, in terms of the "dual" housing system - among the factors that determined the relative conditions of housing production and distribution in the traditional sphere of *non-speculative* housing. It must be said, however, that the observations about the limitations of speculative building in the 1950's made previously suggest a strong possibility that even *within* the middle-class market speculative expansion did not occur "naturally" but important changes in preferences and/or conditions of housing production took place.

3. Save for a certain degree of change within the middle-class market, the analysis summarised on Table 4.4 shows that up to the second half of the 1960's the observed increase in the share of the speculative sector was the corollary of demographic and income changes. If anything, between the 1950's and early 1960's a parallel boost of the precapitalist housing sector took place. This is an important result of the analysis highlighting the crucial role of systematic models as bases for evaluating trends that may at first glance suggest non-existent major transformations. It is evident, however, that such a transformation was indeed effected in the late 1960's especially in comparison to the immediately preceding period. This, of course, comes as no surprise. The inspection of building series and the drastic changes in policy after 1967 has made us familiar with the fact of a major shift in the political economy of housing at that time. The model-based analysis, however, serves as a useful corrective here. On the one hand it shows the exceptional character of the period.

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First, we assumed that the lower boundary of the middle and upper classes is given roughly by a fixed point in the income distribution equal to  $0.60 Y_{max}$  ( $p=0.60$ ), given the additional assumption that  $k = Y_{min}/Y_{max} = 0.20$  represents realistically the overall distribution (assumed pyramidal in form). Second, we have neglected completely the role of middle- and upper-class suburban, *non-speculative* building - a limited but important form of housing. The first of these assumptions leads to a certain underestimation of middle-class speculative demand whereas the second to the opposite. The fact that the model's predictions are fairly realistic (in the case of the "dual-segregated" model) is due to some extent to the cancelling-out of the inaccuracies that these two assumptions introduce. Thus, our formally derived predictions should be considered as rough indications of levels of activity and trends. A more detailed analysis with greater realism in relation to these issues could be easily incorporated in the models. It would increase, however, their complexity without adding much to the force of the argument.

On the other, it demonstrates that the change was somewhat less drastic than simple inspection of trends might have led us believe, or put differently, that although precapitalist housing production shows a strong relative decline, something like half of the increase in the share of the speculative sector ("G") can be accounted for by demographic and income change (compare the G's for 1965 and 1971 in the "D-S" model and the actual trends). An additional point of interest in this respect is that the economic and demographic conjuncture around 1970 was such that it produced a certain *oversupply* of housing stock at the lower levels of the income distribution. This was rather insignificant in absolute terms (given  $q=0.320491$ , the "oversupply" is estimated at 3366 dwellings for approximately the lowest third of the population of 282,000 households), but points to a relative supply-demand equilibrium for a substantial part of the non-speculative housing sector and thus gives additional emphasis to the fact that the economic and demographic conjuncture was favourable for a change towards increased "integration" and a reduction of popular precapitalist building.

The fact remains, however, that the amount of precapitalist building in the late 1960's and early 1970's cannot be understood in "equilibrium" terms: there was obviously a drastic transformation of the housing system towards greater "integration" in the socio-spatial process of the allocation of households. The issue is to what degree such "integration" came about by a shift in the housing values and social relations of housing production and distribution among the working class and other popular strata due to economic development and "modernisation", or was a *forced* one produced by political and economic constraints imposed on the precapitalist sector. Our thesis is that the latter is mainly the case. We will turn now to an examination of these issues.

## 6. The extent of "value-integration" in the housing system: Theoretical assumptions

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In our analysis so far we have distinguished two ways in which we may speak of the "integration" of the housing system: integration at the level of housing production and integration at the level of allocation of demand. With regard to the first, we concluded that a process of substantial expansion of the speculative apartment housing market into an increasing number of social groups does not occur as a corollary of economic development. Such a process has only taken place within the middle and upper-class market.



With regard to the second, however, we found evidence of an important shift in the pattern of housing allocation to the working class and other lower-income groups during the late 1960's and early 1970's. This change had a clear-cut expression in the geographical pattern of urban growth in Athens as the analysis of the spatial distribution of population growth in the agglomeration during the 1950's and 1960's presented in chapter 2 demonstrates. Growth between 1961 and 1971 was definitely more concentrated in central areas and away from areas of precapitalist housing production. The shift thus towards greater "integration" seems to imply a change in the pattern of residential mobility of households as well as in the pattern of distribution of newcomers to the city. The relevant question here is to what extent such changes have been the product of *constraints* imposed on the production of housing in popular areas in the peripheral quarters of the city, or the outcome of shifts in the structure of *preferences* that favoured the increased dominance of the market sector in geographical and economic terms. In other words, was there a change in the pattern of voluntary residential mobility (as opposed to forced mobility) that signifies that the objectively observed increased "integration" had a counterpart at the level of the integration of *values* among social classes? In order to answer this question we must examine more closely the meaning of "integration" at the level of values and preferences and its implication for voluntary residential mobility in the context of the postwar housing system.

We may assume that households distinguish *housing situations* according to the existence or lack of a set of discreet attributes which they value and that they arrange these housing situations in an hierarchical ordering of preferences. As incomes increase and households are able to spend an increasing amount of resources for housing they "move up" along this hierarchy. Households, moreover, place a certain degree of emphasis on each of the attributes of a housing situation. As a result, they react in particular ways when objective constraints increase the cost of attainment of a specific valued attribute of a housing situation. We may speak of "integration" of the housing system at the level of values when all social groups show similar scales of preferences as well as the same emphasis on particular attributes of housing. Moreover, we may speak of "integration" of the housing system from the *point of a certain housing sub-market of increasing dominance*, when the pattern of preferences and emphasis put on housing attributes by the various social groups leads with

economic development to an expanding share of this housing sub-market. What was the extent of "integration" at the level of values from these two viewpoints during the period we study? We lack the detailed empirical evidence necessary for a definite judgment on this issue. Given, however, the facts of our broader historical and institutional analysis of the Greek urban housing system and, more specifically, the pattern of development in Athens, we may advance some realistic hypotheses. These will be supplemented by the available empirical evidence on residential mobility and housing preferences observed among different social classes.

Let us distinguish the attributes of housing situations that households take into account in arranging the latter into a hierarchy of preference. Let us, furthermore, advance hypotheses as to the social differentiation of the emphasis placed on such preferences.

- a. Households order housing situations hierarchically in terms of the *use-value* of a dwelling unit, i.e. its size, physical quality and condition, and the availability of necessary utilities. We may reasonably assume that households belonging to different social classes evaluate this aspect in a uniform manner or that there is relative "integration" in this respect.
- b. Households order housing situations according to the economic or *exchange value* of a dwelling, that is in terms of the economic return that can be realised on the investment that the dwelling represents or the capital gains that can be realised from a potential sale. We make the hypothesis that middle and upper social classes place a substantially greater emphasis on this aspect or, in other words, that there is *no* "integration" with regard to this attribute.
- c. Households order housing situations according to the *social status* of the area within which a dwelling is located. The social status of an area is determined by the average status of its residents in the hierarchy of social *prestige* predominant in the society, as well as by the existence of local services associated with high-prestige groups. We make the hypothesis that there is no integration in this respect, or that working-class and lower-income households do not place significant emphasis on this attribute compared with middle and upper-class ones.
- d. Households order housing situations according to the *location* of a dwelling in relation to the location of the major centres of employment. We make the hypothesis that there is relative integration in this

respect, or that there are no significant differences between social classes in their response to the distance between place of residence and place of work.<sup>10</sup>

- e. Households order housing situations according to the *type of tenure*. All households prefer with equal emphasis owner-occupation in comparison to rented housing. We thus make the hypothesis that there is relative integration in this respect.
- f. Households order housing situations according to the *type of residential development* within which a dwelling is located. Types refer to physical attributes such as the height and land-utilisation of buildings. All households prefer dwellings that approach the detached, single-family type in contrast to the high-density, high-rise apartment type. We thus make the hypothesis that there is relative integration in this respect.
- g. Households order housing situations according to the *social relations of control* over land and residential development found in particular modes of housing production and distribution. We make the hypothesis that working-class households and other "popular" strata traditionally associated with the precapitalist housing sector value autonomy and owner's control especially in relation to legal-bureaucratic systems and restrictive economic relationships, with significantly greater emphasis than the middle class.

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10. It is often assumed that the value of leisure time and thus the subjective cost of the time spent at the journey to work differs among socioeconomic groups (see, for instance L. Wingo, Transportation and Urban Land, Washington, D.C. 1961). We rejected this assumption on the ground that we have here an analogous case with other *use-value* aspects of housing for which we assumed common valuations. We have found, after the completion of this study, that the assumption is realistic: in a calibration of a Lowry-type model of spatial allocation with 1971 data for Athens, the emphasis placed on public transport time between home and work varied inversely with socioeconomic status. Since the role of private transportation makes for less actual travel time with increasing distance in higher status groups we had in effect roughly equal valuations of actual travel time. (Unpublished data from Research Project 80M03/1/1980: "Housing Market and Urban Development in Athens", undertaken by the research department of the Public Corporation for Housing and Urban Development and directed by the author).

To complete this list, we must add the component of economic *cost* necessary for the attainment of each particular housing situation differentiated along these dimensions.<sup>11</sup> Cost would represent, in the economist's jargon, a "negative utility" whereas the other elements represent hierarchies of positive utilities. When the total of these elements is combined with their respective weights into a composite valuation of housing situations, we have an overall "pattern of preferences" or a complex "utility function" that expresses the orientations of the average household of a relatively homogeneous social category. The behaviour of households, following exogenous demographic and income change, is the product of these patterns of preferences and responses to costs. The latter are in essence imposed constraints (unless we believe in the fantasy world of perfect competition and general equilibrium). An additional class of important constraints, however, are the clear-cut restrictions in the supply of particular housing types, commonly imposed by land-use controls. The actual behaviour of households, thus, which forms the observed pattern of demand allocation and residential mobility in the city, is the product of all these forces. The nature of the response, however, to constraints in terms of the alternative that will be substituted in the place of the constrained housing situation, depends on the pattern of housing values of households and thus is an integral part of the analysis of the distribution of housing values and of the extent of social integration.

These somewhat abstract arguments were necessary in order to derive the concrete implications of our hypotheses about the distribution of housing valuations. Assuming the validity of our hypotheses, we can easily derive a number of conclusions. First, there was clearly no overall "social integration" in the Greek postwar housing system. The patterns of values over housing differed among social classes in significant respects, namely with regard to the emphasis on owner's autonomy and control over land and production, the emphasis on the social prestige of areas and the potential monetary (exchange) value of property. Given the systematic interrelationship of such issues with the pervasive division of the housing system into two different sectors, these discontinuities in the system of values outweighed the significance of aspects where relative "integration" exists. Second, we can plausibly argue that the increasing domination of the speculative sub-market implies the lack of voluntary integration in the housing

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11. Cases of residential mobility due to changes in family structure and size lie outside the scope of our analysis.

system. This is obviously true in relation to the lower social strata. The hypothesis, however, that middle-class households value non-apartment types of housing as well as situations of higher control over exclusive land property, leads to the conclusion that the expansion of speculative apartment housing within the middle-class market was not completely consistent with the pattern of housing preferences of these social groups. This leads us to the third point.

If our hypotheses about the pattern of housing valuations are correct, and given the fact (to be substantiated further at a later point) that non-speculative residential development faced increasing amounts of imposed constraints and relative costs, we should expect that popular strata would be drawn to a very limited extent into areas and housing situations that were in conflict with their values and preferences. The objective result would be substantial reduction in the production of their preferred types of housing coupled with a limited *forced* "integration" through reallocation towards areas with concentrations of available housing stock. We should expect, in contrast, a definitely "easier" assimilation of the middle class into the expanding speculative apartment market, since such a process, though having in certain respects the character of a partly forced integration (mainly in the violation of the "suburban ideal"), poses no major conflicts with the middle-class system of values and housing preferences.

We must immediately point out that this interpretation of the underlying mechanism of the observed increase in the "integration" of the housing system during the late 1960's and early 1970's and the concomitant shift in the sectoral structure, can not be adequately substantiated with direct evidence. We may say in its favour that it provides a comprehensive and meaningful account of the developments in the postwar period *as a whole* and that it advances hypotheses that are consistent with the historical and socioeconomic characteristics of the "dual" housing system peculiar to Greek urban areas, certainly for the years up to the mid'1960's (as presented in chapters 2 and 3). However, some empirical material that has a bearing on these matters *is* available and we may utilise it suggestively in order to strengthen our argument.

7. The empirical evidence on values and residential mobility behaviour:  
Athens in the 1960's

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All household surveys conducted during the first half of the 1960's document a near-exclusive preference among all social classes in Athens for single-family (and two-family) housing as opposed to apartments. This attitude was especially prevalent in the case of lower strata. The predominant hierarchy of values concerning housing types, therefore, clearly favoured peripheral owner-built housing and not the speculative sector (see also chapter 2). This was not restricted to preference for a type of housing in physical terms - though it was certainly related to a complex of values for "suburban" family living:<sup>12</sup> it was connected organically with the reproduction of owner-occupation which in the context of the popular household economy and its accumulated historical experience implied the operation of precapitalist housebuilding and the ownership of a plot. This can be seen clearly from the effects of the radical decline in the role of small owner-building after 1967. The share of owner-occupation among worker and lower-income households in Greek cities between the late 1950's and the mid-1960's has been stable at about two-thirds or more (see chapter 2, table 2.12 and note 29) - a share that *exceeded* the average share for the middle class. During the 1951-1958 period, when precapitalist owner-building was clearly the predominant form of residential development, the rate of owner-occupation was *increasing* despite the low level of incomes relative to later periods.<sup>13</sup> Evidence for 1974, however, indicates a sharp change away from this impressively "egalitarian

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12. It should be said that the term "suburban" used in this occasion is to a great extent an anachronism. The values of living in detached or semi-detached housing prevalent among popular strata stem directly from two historical forms of housing environment: the village and the low-rise urban quarter - the "synoikia" - situated in the more peripheral parts of the city. The latter can hardly be described as "suburbs" ("proastio") which are usually areas with substantially greater amounts of organised open space and greenery, situated at some distance from the city centre and associated historically with the residences of the affluent middle class that could afford private carriages or motor cars. Since genuine "suburbs" in this sense were rapidly becoming extinct in the postwar period and the modern European-American concept of suburban housing had scarcely taken root in Greek urban culture, the term "suburban housing" in this context should be better understood in terms of location and physical type rather than a *cultural* form in the modern sense - though the aforementioned historical and social patterns peculiar to Greek urban history must certainly add to its meaning.

13. NSSG, Construction and Housing in Urban Areas, p. 28.

pattern" (chapter 2, table 2.12). Thus, in both the objective and subjective senses the high valuation of owner-occupation must have been strongly interrelated with the valuation of owner-building and detached housing, most especially by lower-income groups.

Let us now consider the evidence on residential mobility. Intra-urban geographical mobility towards areas of higher *status* (in terms of social composition and incidence of quality services) as a response to the improvement of the economic condition of households may have been an important factor in the growth of the apartment market. The latter is concentrated in the more central zones of the municipality of Athens and a small number of adjacent municipalities with a decisively middle-class character and high levels of services. Such a process, however, was obviously restricted mainly within the social sphere of middle-class and lower-middle-class groups. The postwar growth in incomes and the drive for the modernisation of housing conditions has not produced any tendency among popular strata to move towards areas of higher status, save in a strictly local context. To the extent that inter-generational or life-time social class (i.e. vertical) mobility exists in Greek urban society, it may indeed lead to moves to higher-status apartment areas, though the strong familistic ties that are observed among Greek social strata would have most probably hindered even this factor.<sup>14</sup> Given, however, the noticeable stability in the occupational distribution of households (see Appendix 4.1), a process of vertical social mobility could not possibly produce any important shift in the geographical and sectoral structure of housing production.

The available evidence on residential mobility substantiates these points. Working-class and lower-income households in Athens during the 1960's showed striking differences in terms of the form and amount of intra-urban mobility compared to middle-class households. For one, they showed a very small number of moves, no more than two in most cases.<sup>15</sup>

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14. E. Crueger, after studying the 1971 data on intra-urban residential mobility in Athens between 1965 and 1971, reports that only few cases of vertical (social) mobility are connected with "horizontal" (geographical) mobility. "Socio-geographic Study of the Greater Athens Area", Socio-logical Study, vol. A, p. 283.

15. A 1964 survey reports that between 60% and 65% of industrial workers had changed residence throughout their lives only twice or less! Such an incidence of mobility can be accounted in most cases by the purely "demographic" processes of household formation. In contrast, only 40% - 45% of the administrative personnel in industry showed less than

Furthermore, internal migrants tended to move *directly* to the zone of their permanent residence. In this they were influenced by the strategic role of family networks in the move to the city and the fact that these networks tended to cluster in particular zones. Newcomers to Athens thus did not, in general, follow a certain path across the city as incomes and employment conditions improved - in contrast to what is often reported for cities in developing countries.<sup>16</sup> A certain centrifugal movement is, of course, evident, generated by the drive for owner-occupation through the acquisition of a plot in peripheral areas. This was weakened, however, by the fact that substantial numbers of houses for rent were available even in peripheral neighbourhoods, especially the older and denser ones, providing a varied spectrum of housing opportunities. Mobility for reasons of improvement in the form of accommodation could therefore remain within a relatively limited radius.<sup>17</sup> After all, the very character of popular precapitalist residential development by petty building on an owned plot, especially in areas urbanised by illegal building, permitted improvement of housing conditions as incomes increased *on the spot*, i.e. by additions on or modernisation of the existing structure.

It must be stressed that these observations are based on evidence collected by surveys done in Athens during 1964-1966 and on the material on residential mobility between 1965 and 1971 provided by the 1971 population census. They are therefore directly relevant for the period during which an apparent "integration" occurred. We can say then with

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three moves. It is interesting that these shares and the inter-class differentials did not differ between internal migrants to Athens and Athenians (G. Burgel, La Condition Industrielle, vol. II, pp. 159-160). Similar inter-class variations in the rate of residential mobility have been observed in an Athens-wide survey done in 1966 reported in O. Zarnari et al., "Sociological-Ecological Study of Greater Athens Areas", Sociological Study, vol. A, p. 511.

16. O. Zarnari et al. report that more than 70% of internal migrants to Athens moved directly to the area of present residence ("Socio-Ecological Study", p. 505). For a similar pattern and its interconnection with the pervasive role of family networks in the migration process, see L. Leontidou and D. Emmanuel, Life Patterns, Table C.9, p. 107 and Note 59. For the contrasting pattern observed in Third World Cities, see F. Benninger "Models of Habitat Mobility in Transitional Economies", Ekistics, (171, 1970).

17. Crueger reports that intra-urban mobility in Athens is in general characterised by very short moves: only 17% of households moved over relatively long distances while the rest is divided between those moving within the same local authority and those moving to adjacent ones ("Socio-geographical Study", p. 283).



some certainty that status-orientated and type-orientated intra-urban mobility across different housing market areas in the case of popular strata was limited and followed a pattern that did not contribute in any significant way to a shift of popular resources towards the speculative market. Residential change aimed at the improvement of material living standards was also a process that did not lead to inter-sectoral mobility. This can be seen in the fact that the improvement in housing conditions enjoyed by the lower-income strata during the 1960's was channelled into areas of similar social character instead of being "siphoned" in any significant degree to areas approaching middle-class/speculative market character. Between 1961 and 1971 substantial improvements in housing conditions took place - relatively greater, in fact, in the case of low-income and working-class households. A first indication for the latter point may be found in the reduction of the differentials in average housing expenditures along the social class spectrum (see Appendix 4.1). It is also evidenced in the changes of a simpler index of conditions such as the average number of rooms per person for the households of a given class presented in the following table.

Table 4.5: Housing conditions (rooms per person) by occupational class of the head of household - Athens 1961, 1971

Occupation of the head of household	1961	Index of relative conditions	1971	Index of relative conditions
Categories A,B,C	0.83	1.18	1.19	1.12
Categories B,E,F	0.59	0.84	0.91	0.86
Category C	0.77	1.1	1.21	1.14
All households	0.70	1.0	1.06	1.0

Source: See Note 18. For the categories see Table 2.12 in Chapter 2

18. Calculated from the cross-tabulation of Athens households by occupational category of the head and level of housing conditions measured by persons per room (1961 Census, Vol. VI and 1971 Census, Vol. I). The calculation of averages involved some complex procedures: the average household size by occupational category was taken from household survey data (1957/58 up to 1974) and adjusted in the light of the overall average given by the 1961 and 1971 censuses; the housing conditions estimates for each category were then calculated and these were adjusted so as to be consistent with the aggregate data from the censuses.

If a substantial part of residential mobility for the improvement of housing conditions had taken the form of geographical mobility towards areas of higher socioeconomic character, the relative conditions in working-class *areas* would have lagged behind the relative conditions of the *class*. In fact, the relative index of conditions for a number of municipalities and communes of working-class/low-income character in 1971 (roughly sectors W1, W2 and P1 in Figure 2.1.1, Appendix 2.1) is very close to the index for the respective social classes: it is 0.84 whereas the class index (from Table 4.5) is 0.86.<sup>19</sup>

One of the effects of the "segregated" pattern of the allocation of housing demand and the local placement of household resources in real wealth as popular incomes grew, is the relatively fast expansion of intermediate forms of residential production typified by buildings of three to four storeys. This form of piecemeal residential development was a vehicle through which a process of diffusion of quasi-speculative relations took place. However, their growth in the more central locations of popular areas does not necessarily indicate any significant prior change in the system of social values and institutions that reproduced precapitalist owner-building. The relative expansion of the intermediate sector can be accounted for by the predictable accumulation of capital among a part of popular strata and the certain attractiveness of speculative development for small plot-owners given sufficient opportunities which were bound to occur due to economic development and the rise in permitted intensities of land use introduced in 1968. After all, it is only natural to assume the existence of a certain amount of "labour aristocracy" in popular areas as well as some demand for higher-quality

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19. Data on housing conditions by geographic area were taken from National Centre of Social Research (NCSR), Housing in Greece: Summary Report, (Athens, 1977): Appendix (in Greek). This study utilised the 5% sample of households from the 1971 census. It is surprising, therefore, that the overall average in the rooms per capita ratio reported by this study - 0.791 - is substantially lower than the one we derived directly from the Census data (Vol. 1): 1.06. Accordingly, the average reported for working-class areas is very low - 0.666. I have not been able to find an explanation for this discrepancy which, moreover, seems to contradict other official reports which give an overall average in the region of 1.0 (e.g. CPER, Housing, 1976). There is no reason to suppose however, that this difference invalidates the relation between conditions in working-class areas and the whole of the city. These areas are comprised by thirteen municipalities and communes: 30, 39, 47, 51, 23, 25, 3, 15, 27, 20, 13, 50, and 1, as numbered in Figure 2.1.1, Appendix 2.1.

rental housing for which small apartment houses cater. On the other hand, the diminishing opportunities for the acquisition of a peripheral plot and owner-building after 1967 must have surely contributed to a *forced* boost of the demand for such petty-speculative housing. The effects of constraints on peripheral owner-building, however, were expressed to a much greater extent in the form of the increased concentration of popular strata in areas of older housing stock, high density, greater amounts of rental supply and relatively more "mixed" social character<sup>20</sup> - hence the evidence of a greater "integration" in the allocation of demand noted in our numerical analysis of alternative models.

It could be argued that a fundamentally similar dynamic explains the increasing predominance of the speculative mode among the middle class, though we must add the crucial provision that the "preference pattern" here and the orientations of speculative builders facilitated such a change to a much greater extent. Undoubtedly, after the mid-1960's apartments became a *de facto* social norm for the middle class. Apartment housing areas in Athens by virtue of location (centrality) and social composition display a very high level of quality services. This fact in conjunction with the well-corroborated assumption that middle-class households place greater emphasis on status considerations and luxury consumption as incomes grow, and the evidence of the higher incidence of intra-urban mobility among these groups, suggests strongly that the integration of the middle class into the speculative market was mainly the result of expressed preferences. On the other hand, our hypotheses about housing values and residential mobility, especially the universal preference for detached owner-built housing, point to a significant component of forced "integration" even in this case. In addition, the availability of quality services and housing stock of improved standards may be subsumed under the *physical* (use-value) attributes of the composite entity "housing services". The shift to areas providing such services as aspirations increase with growing incomes may therefore imply a partially forced choice if alternative opportunities, preferred more, are not available. In contrast to simple forms of

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20. Lila Leontidou Emmanuel has examined the changes in the distribution of the industrial working class between 1964 and 1971 and found an increased concentration in such areas (Working Class and Land Allocation, Chapter 7). The relatively high rates of growth of "intermediate areas" during the 1960's has also been noted in Chapter 2.

owner-building, the comparative cost of building autonomously on owned land with middle-class standards of detached housing patterned on the ideal of a "villa" was very high and got higher as construction costs and access to land changed unfavourably. Thus, whatever preferences dictated, the largest part of middle-class owner-occupation demand *had* to be channelled into the apartment market. Demand for rented housing was constrained to an even greater extent. More than two fifths of middle-class households lived during the period we study in rented accommodation. Supply of rental housing of sufficient quality in more peripheral, low-rise areas was limited given the minimal attraction of such areas for speculative investors due to institutional conditions (see chapter 3). Rental demand by middle and higher incomes, thus, presented an obvious target for speculative building in central areas.

The *combination*, then, of "subjective" factors, namely the pattern of housing preferences peculiar to the middle class, and "objective" factors such as the constraints on peripheral low-rise building and the attractiveness of central locations for speculative builders (for reasons outlined in chapters 2 and 3), made for the steady drift of middle-class households into the speculative sector. This process has been largely completed by the early 1960's. The exclusive channelling of most middle-class demand into high-density speculative areas, and to a secondary degree the aforementioned pressure on "popular" strata to locate in high-density, older-stock areas after the mid-1960's, accounts adequately for the impressive growth of the central zone of Athens between 1961 and 1971<sup>21</sup> that led to the reversal of a long-term trend. Whereas the share of the Athens municipality in the population of "Greater Athens" has been steadily declining since the 1920's, as the following table shows, it increased during the 1960's.

Table 4.6: Share of the Athens municipalities in the Greater Athens Area population, 1920-1971

1920	1928	1940	1951	1961	1971
64.95%	47.97%	42.81%	40.30%	33.87%	34.88%

Source: D.G. Tsaousis, The Morphology of Modern Greek Society, p. 223

21. Hence the impressive population growth in the central zone and the areas to its north and east was not the product of any massive intra-urban spatial mobility but mainly the expression of spatial concentration in the growth of certain social strata due to internal migration and physical growth. For a similar observation, see Crueger, "Socio-Geographic Study", p. 286.

This must surely appear as an anomaly to theorists of urban structure accustomed to unilinear evolutionary models, since it implies a reversal in the expected falling trend of the density gradient of the city.<sup>22</sup> The fact that such an "anomaly" took place during the period of fastest growth in incomes when suburbanisation should be on the increase, compounds the "perversity" of the case. In fact, it strengthens our argument about the crucial importance of the pattern of relations between modes of housing production and housing sectors - an aspect that is seldom paid due attention by simple evolutionary theories of urban structure. However, let us briefly examine the degree to which the increased concentration of households - mostly from the middle class - in central, speculative market areas, could have been produced by forces determining the structure of Athens from a purely spatial viewpoint independently from the dynamic of the housing system *per se*. B.J. Frieden in a well-known study of apartment building in central areas has pointed to three general factors that may account for its growth.<sup>23</sup>

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22. Assuming the familiar density function  $D(x) = Ae^{-bx}$  where  $D(x)$  is density at a point with  $x$  distance from the city centre and  $A$  is the intersection of the  $y$ -axis with the density function, the density gradient is given by  $b$ . It is a near-orthodoxy among geographers that the gradient falls with economic development, urban growth and higher levels of technology. See, for instance, Berry et al., "Urban Population Densities", C. Clark, Population and Land Use, chapter 9. Clark has pointed out (p. 347) that the most appropriate way to measure  $b$  is to calculate the average density for rings of equal width drawn around the city centre at increasing distances. For the purpose, however, of examining the significance of changes in the inner city's share of population, a very simple method proposed by E.S. Mills will do. (Studies in the Structure of the Urban Economy, London, 1972, p. 39). We assume the validity of the exponential function for density and that, furthermore, the given city can be described by an equivalent of circular shape. Given the area of the central zone and its share in total population we can calculate  $b$  from the ratio of the integrals giving population for the central area and the total for the case of the circular city. With the help of this method we found that  $b$  equalled 0.341 in 1961 and 0.343 in 1971. Mills warns that the assumption of zero density at the margin leads to a certain underestimation. This range for values of  $b$ , anyway, indicates an urban form similar to that of large European cities of the Continent between the wars. Cities in the U.S. and England showed substantially lower  $b$ 's even at the turn of the century (Clark, Population and Land Use, pp. 349-350).

23. B.J. Frieden, The Future of Old Neighborhoods, (Cambridge, Mass., 1964).

- a. Expansion of apartment-specific demand based on cultural-historical reasons - in short, "preferences".
- b. Increased profitability of redevelopment as determined by the comparison between old and new (potential) densities and the condition of the old stock.
- c. The "centrality" of the urban structure which refers to:
  - c.1. The technology of urban development, namely the costs of transport and other such factors that influence the cost of peripheral location.
  - c.2. The distribution of employment, mainly non-industrial employment since apartments are mostly related to middle-class demand.

With regard to "preferences" we have already said enough. With regard to the profitability of redevelopment, we can simply point out that it is nothing more than a surrogate of the complex configuration of determinants of demand and supply as distributed among the different housing sectors in their spatial and physical manifestation and therefore adds nothing whatsoever in terms of "explanation", save a consideration of the pattern of decision-making of developers and the simple fact that areas with multi-storied buildings are unlikely to be redeveloped. This leaves the third factor which is purely spatial and has been stressed frequently by students of urban structure at different levels of economic development. We may disregard the infrastructure costs of peripheral development since these have already been stressed as an important factor making for the favourable comparative advantages of non-peripheral housing (see chapter 3) and will be commented upon further in later parts. The relevant question, thus, is to what degree changes in transportation costs and the distribution of employment in Greek cities (in this case Athens) have contributed to the increased concentration of population in central areas.

In relation to transportation costs we can say that conditions between 1961 and 1971 have not worsened so as to justify a significant rise in "centrality". Though increasing congestion may have led to a rise in average travel time, the rapid diffusion of car-ownership during the same period<sup>24</sup> has certainly compensated. Expenses on urban transportation,

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24. See the trends in I.M. Frantjeskakis, Transportation Parameters of Urban Development (Athens, 1971) p. 51 (in Greek).

moreover, play a very limited role in urban household budgets. We know that in Athens in 1957/58 only 3.2% of total household expenditures was spent on the average on running a private car, using a taxi or using city-wide public transport. These expenses have risen in 1974 to a 5.7% of the household budget but most of this increase was due to the rise in private-car ownership.<sup>25</sup> Since transportation expenditures are income-elastic this signifies a greater use of cars and taxis for leisure and prestige purposes rather than an increase in "functional" transportation costs.

Similarly, we can not say that changes in the geographical distribution of employment have been conducive to an increase in the concentration of middle-class residential demand. In 1960-61 the share of total employment located in the CBD of Athens was about 31% whereas in 1971 for a larger CBD area (1.9 sq. kms instead of 1.55) this share fell to 29%.<sup>26</sup> It is true that to a certain extent this was due to the decentralisation of *industrial* employment between 1961 and 1971.<sup>27</sup> It is probable therefore that the "centrality" of middle-class employment has not been reduced to any significant degree. There is no doubt, either, however, that no substantial increase in "centrality" took place capable of justifying a major shift in the spatial distribution of middle-class housing.

In conclusion, we can definitely say that the hypothesis that the relatively faster rate in the expansion of the speculative sector during the late 1960's and early 1970's was the product of a major shift in the preference patterns of households due to economic development and modernisation, as these are expressed in housing choices and intra-urban mobility, must be rejected. The spatial and sectoral changes of the 1960's were the outcome of the inherent tendencies of the postwar "dual-segregated" housing system and its associated social relations and values *plus* the effect of easily discerned objective constraints and incentives distributed unequally among different social class areas and modes of housing production. Let us now turn to a short account of these factors.

25. N.S.S.G., Urban Household Surveys for 1957-58 (table 4) and for 1974 (vol. S.7, table 2).

26. For 1961, see Frantjeskakis, Transportation Parameters, p. 25 and for 1971 P.K. Mandikas, Economic Analysis, vol. 4, pp. 11, 27, 51.

27. Lila Leontidou Emmanuel, Working-Class and Land Allocation, chapter 6.

## 8. Political and economic constraints on petty owner-building, 1967-74

In examining the nature of the constraints on precapitalist building a question of some interest would be to evaluate the role of purely economic trends such as "exogenous" rises in land and construction costs as opposed to institutional controls. Such an analysis, however, would require a sophistication that the available empirical material could not possibly bear. In addition, it would be of questionable significance: the rises in the price of materials, construction labour and peripheral land are not unrelated to the developments in the wider housing system and more specifically to the increased predominance of speculative building and the demand of the latter for productive inputs. After all, between 1968 and 1972 an unprecedented building boom took place; in this, apartment construction dominated the scene. Our analysis thus will take the form of simply listing the various economic and institutional developments during the 1968-1974 period that directly or indirectly generated negative pressures and comparative negative disadvantages. A more general analysis of the significance of such factors, given the socioeconomic basis of precapitalist housing, has been advanced in the previous chapter.

Undoubtedly the most important constraint imposed on popular petty-building on the basis of purely political and administrative decisions was the control of illegal building after 1967. The effectiveness of this policy was due to the strict policing of illegal housing areas during the military dictatorship. The institutional framework concerning the control of illegal building has also been made more restrictive under the junta, especially with Law 349/20.3.74<sup>28</sup> introduced during the last days of the regime. The effects of these restrictions went far beyond the immediate reduction of precapitalist housing supply. As we pointed out in the previous chapter, a crucial factor in the reproduction of the precapitalist sector was the large-scale colonisation of peripheral areas by popular

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28. Law 410/1968 "on Unauthorised Building" made the offence a punishable one and extended the sanctions to those associated with the builder (Government Gazette Issue No 110A/15.5.68). Law 349/1974 "On the Demolition of Illegally Built Structures and the Employment of Sanctions Against Those Building Without Authorisation" (Gov. Gaz. No 72A/20.3.74) increased the intensity and range of sanctions drastically and authorised demolition in all cases, whereas the previous law made some exceptions for humanitarian reasons.



strata and the existence of opportunities for small-plot ownership at low costs to be developed at some later stage in the life of a household. This process was greatly hindered after 1967 as a result of controls on illegal building. It is true that between 1968 and 1970 extensive areas of illegal housing were incorporated into the official City Plan and that most illegal structures were "legalised" after payment of a fine.<sup>29</sup> These measures, however, to a large degree *added* to the negative pressures on precapitalist petty-building: the imposition of an official City Plan and building controls on illegally built areas according to official standards involves a long-drawn process of expropriation of land for public use, the characterisation of a large number of small plots as sub-standard for building according to the imposed rules, the payment of fines and checks of the structural adequacy of existing buildings. Moreover, land values in these areas (for adequate plots) increase drastically. In the case of areas outside the official Plan, "legalisation" may imply security against demolition but *all* development ceases until the incorporation into the Plan - including the most elementary improvements of structures necessary for protection against the weather and structural decay. Given the fact that all illegal houses start as more or less rudimentary structures and that these restrictions may last for well over half a decade, whereas families grow, it is hardly surprising that a substantial part of the existing housing stock in such areas is abandoned.<sup>30</sup>

Equally significant with the above constraints on precapitalist housing was the strong encouragement of the expansion of speculative housing in a manner directly antagonistic to petty-building through Law 395/1968.<sup>31</sup> This raised the permitted ratio of floorspace to plot area by 20% to 40% *throughout* Greece. This amounted in effect to a State-sanctioned universal increase in speculative opportunities and the development value of land. Areas that presented no prospects for apartment-building under the older

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29. Law 410/1968 legalised unauthorised buildings put up before 1968 and imposed as a precondition the payment of a fine. The extensive expansion of the official City Plan into illegal housing areas during the 1968-70 period is documented in Leontidou and Emmanuel, Life Patterns. The increases are also evident in Figure 3.2, chapter 3.

30. For these processes in the case of Athens, see Leontidou and Emmanuel, Life Patterns.

31. Law 395/1968 "On the Height of Buildings and the System of Freely-Arranged Development" (Gov. Gaz. No 95A/4.5.68).

rules were incorporated at a stroke into the area of potential speculative investment, and small landowners in such areas realised *en masse* the possibility of turning their property over to developers in exchange for a share in the final product instead of building with independent means. Since, as we showed, the social and spatial range of the speculative sector had certain limits, the actual medium-run effect of this increase in speculative opportunities was not very radical in terms of a diffusion of normal-sized apartment buildings. It had more important effects at the level of small-holder attitudes and the supply price of land.<sup>32</sup> The geographical diffusion of apartment buildings in lower-income areas, even if it was relatively limited in volume, helped in reinforcing these changes. Thus, although the control of illegal building and of popular appropriation of cheap peripheral land were more effective in terms of the immediate reduction of non-speculative housing supply, the diffusion of speculative opportunities through Law 395/68 had most probably greater significance with regard to the transformation of the housing system in the long run. It had also important immediate effects with regard to the expansion of the intermediate types of building - three-storey and four-storey ones: this small-scale, semi-speculative form doubled its share of residential building in Athens between the mid-1960's and the beginning of the 1970's (table 4.1).

The increase in land values caused by the blanket rise in the permitted intensity of land use imposed heavy costs on low-rise building in the middle and lower-middle-class suburbs of Athens. The institutional rules and the social standards governing detached housing in such areas dictated much higher amounts of land per unit of floorspace than the ones observed in lower-income areas, and at relatively more developed conditions with respect to infrastructure and facilities. The capital cost of non-speculative housing, therefore, must have increasingly appeared prohibitive to middle-class households. These negative developments were accentuated by

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32. The official building (or development) coefficient, i.e. the permitted maximum ratio of floorspace to plot-area, is the main determinant of land values in urban areas. All other factors such as location, environmental quality, or even the rent-class of potential buyers for most cases, are in comparison, of secondary importance: See Appendix 6.1 and D. Emmanuel Three Studies on Popular Housing (Athens, 1977) (mimeo, in Greek): pp. 54-55.

the fact that the supply of land for peripheral middle-class housing was held down to insignificant amounts. Most of middle-class suburbs have been created before the War and during the late 1940's and early 1950's. We can easily see in Figure 3.2 of the previous chapter that between 1961 and 1971 no significant extensions of the City Plan took place in the eastern, south-eastern and north-eastern suburbs, the zones of middle-class low-rise housing. A large segment of the extensions that did take place, moreover, (the one at the eastward limit of the west-east axis through the city centre) concerned exclusively residences for the officers' corps: it did not add to the general supply of land and demonstrates by itself both the desirability of "suburban" housing among the middle class and the *political* nature of decisions over urban expansion.

In fact, the stop of peripheral land development after the mid-1950's expressed specific policy guidelines to that effect. Law 3275/1955 directed that no new expansions of the Athens City Plan should take place.<sup>33</sup> A series of laws and administrative measures after the mid-1960's introduced greatly restrictive controls over the operation of housing cooperatives which until then have been an important vehicle for the acquisition of peripheral "legal" plots by middle and lower-middle-class groups.<sup>34</sup> Thus these strata, unable to use the expedient of illegal colonisation of peripheral land for obvious reasons of respectability, were faced with the choice between "suburban" housing at increasingly denser and more expensive areas and an apartment in the central zone of the city. Law 395/1968 besides increasing the permitted intensity of development and therefore antagonising directly less intensive types of residential building, introduced the system of development with freely-arranged blocks of flats. As a result of this and the previously described forces, high-quality, speculative apartment building in suburban locations has become by the early 1970's a major form of residential development in middle-class suburbs.

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33. Law 3275/1955 "On the Prohibition of Extensions to the City Plan in the Athens Basin and the Rules of Building Within it" (Gov. Gaz. No 166A/30.6.55). This law introduced in addition severe measures for the control of illegal building.

34. See the discussion of the previous chapter and Panos and Klimis, Housing and Building Cooperatives.

These arguments make the reasons for the swift integration of middle-class strata into the speculative sector sufficiently clear. The expansion of the latter was boosted further by the fact that these developments in the 1968-1974 period coincided with an unprecedented increase in the volume of mortgage credit for housing; most of these loans were directed to the middle class of large urban areas.<sup>35</sup> Such favourable conditions for the development of the speculative sector when contrasted with the afore-mentioned constraints on lower-income petty-building and access to land make the transformation of the housing system in the late 1960's easily understandable. In fact, it is quite surprising that the changes were not more drastic - a point that testifies to the resistance of "traditional" housing relations and values against the expansion of capitalist relations assisted by State power.

Developments in the wider economy added to the adverse environment for non-speculative building. We have already drawn attention (chapter 3) to the fact that a stage of relatively full employment has been reached in the Greek economy by the end of the 1960's. The resultant relative scarcity of labour in combination with the building boom and the peculiarities of the construction industry itself made for increasingly higher wages in construction relative to industrial employment. Since speculative builders had a clearly better competitive position in attracting labour at high wage rates and since "formalisation" and regularity of employment were becoming a norm, construction for petty building faced increased costs and fiddiculties in production. To this we must add that the limited opportunities for mechanisation, and thus for capital-labour substitution available to petty builders relative to speculative ones accentuated the negative effects of rising labour costs.

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35. See the discussion in D. Emmanuel, Categories of Households Outside the Existing System of Housing Assistance, DEPOS study Report (Athens, 1979 in Greek), chapter 5.

## Conclusions

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We are in the position now to offer a general account of the transformation of the housing system in the 1960's. In this we integrate the analysis of the present chapter with the concepts introduced in the preceding ones. The Greek urban housing system was initially (and up to the mid-1960's) characterised by a "dual" structure of production and distribution correlated directly with the social class pattern of Greek cities. The reproduction of this structure entailed the reproduction of a "segregated" pattern of behaviour and values with regard to housing at the socio-spatial level. From the institutional and economic standpoint this structure was based on conditions of a relative autonomy of precapitalist housing production and the associated urban areas from the mechanisms and controls that governed land and resource allocation in the "normal" housing sector associated with the middle class and commodity exchange relations. During the second half of the 1960's and the beginning of the 1970's the system moved towards a structure characterised by speculative sector dominance and increasingly higher levels of "integration".

"Dominance" here is understood as a condition where the components of the system function in ways that are not alternative to or in direct antagonism with the reproduction and further expansion of the sector that is associated with higher levels of the socio-economic hierarchy. This sector, as a result, achieves with economic growth an increasing influence in urban development. The concept of "dominance" is closely related to that of "integration", though the latter is a more narrow and specific concept: it refers to the degree that the movement of households and resources through residential mobility is directed, with economic development and urban growth, away from areas of precapitalist housing and into areas of speculative sector growth or, more commonly, to "intermediate" areas of mixed social character, older stock and higher densities. Such areas are connected positively with the functioning of the speculative economy and the wider system of commodity exchange in housing. In part directly but mostly indirectly through the mechanism of "filtering" and the interdependence of the rental market. We have shown that through a systematic evaluation of the implications of alternative models of the housing system, the expansion of the speculative sector was not the result of a trend towards a gradual "assimilation" of social groups, save within the social and spatial confines of the middle class. Thus the "dual-segregated" character of the housing system persisted throughout the

period with clearly negative results on the rates of speculative market growth. Had there been a shift to an "integration-assimilation" model, the expansion of speculative housing would have been much faster.

Thus the sectoral transformation of the system during the postwar period was the product, first, of the "natural" effects of the interplay of rising incomes, housing consumption and the income distribution *within* the limits imposed by the prevailing "dual-segregated" model of demand allocation, and second, of the decline of precapitalist production as such coupled with a limited extent of "integration" implied by certain shifts in the pattern of building and the distribution of population. With regard to this second set of changes, we could not say beforehand to what degree they were an outcome of voluntary or forced household behaviour.<sup>36</sup>

A wider discussion of the postwar pattern in housing preferences, values and residential mobility as these are differentiated among social classes has led us to the belief that the second is more likely the case. The validity of this thesis was reinforced by a description of certain political measures that imposed obvious constraints on popular owner-building and the acquisition of peripheral land, as well as some economic changes that acted in a similarly negative way and were themselves the product of political measures to a very large extent. To complete, thus, the answers to the questions posed in the beginning of this chapter, the sectoral transformation of the 1960's cannot be accounted for by a purely supply-demand equilibrium model: the "political" factor has been a crucial determinant.

The argument thus far has been mainly concerned with the question of the trend in the *share* of speculative building in total housing production. In the introduction to this study we have noted that the more general question of the growth of speculative building in Greece involves two analytically distinct issues: its share in the system and the process of aggregate residential capital accumulation as such. Having established the determinants of the first, we may turn now to an examination of the second issue in the next two chapters.

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36. This question based on a concept of the dialectic between *values*, *preferences* and *constraints* given so much emphasis in this chapter may strike many urban economists as problematic. Within recent social-geographical theory, however, it has been established as an indispensable conceptual approach to the study of social processes in space. See, for instance, Jones and Eyles, An Introduction to Social Geography, pp. 62-63 and *passim*.

## 5. Postwar Investment in Housing and the Pattern of Greek Economic Development

In the previous chapter we examined the growth of speculative building in relation to the changing sectoral composition of housing production. Our analysis, moreover, centred on the demand for housing space, though we found it necessary to incorporate a number of important constraints impinging on housing production. In this chapter we will shift emphasis substantially; we will examine the growth of speculative building in absolute terms and we will pay most attention to aspects of "supply" - more specifically to the nature and determinants of residential investment and finance. It is obvious that the process of speculative building growth is closely related to the wider trends in the pattern of allocation of national resources. This relationship can be treated to a large extent as analytically distinct from the more specific issues of the transformation of the housing system. The aggregate pattern of the flow of savings into residential real estate is not, of course, determined independently from the institutional and "micro-economic" characteristics of the housing system. On the contrary, we will find ample opportunity to show their interrelationships. In the following analysis, however, we will relegate the issue of sectoral composition and more generally that of changes in the mode of housing production to a secondary place and be concerned primarily with the formation of housing finance and investment in macroeconomic terms. When finance and investment assume significantly different forms in different sectors, these will be made clear. Otherwise, most of the following discussion will be concerned with housing investment in general on the assumption that the process of change in the sectoral structure has been sufficiently analysed in the previous chapters and we must turn now to the problem of the determinants of the level of aggregate housing investment in postwar Greece.

It has been repeatedly observed that the Greek economy in the postwar period channelled a very high volume of resources towards residential investment. Accordingly, there has been a widespread belief that Greece constitutes something of an exceptional case in this respect and there has been a recurrent controversy over the significance of the high rate of housing investment for the economic development of the country. Thus, this persistent "peculiarity" was inextricably connected with the whole pattern of postwar economic development and the relevant policies of the Greek State. The issue has been most commonly approached in normative terms: is the high rate of residential investment a "problem"? Shouldn't the State adopt aggressive policies for the reallocation of resources towards more "developmental" economic sectors? Outside the context of debates over policy, the emphasis was placed on explaining the phenomenon. Here again most interpretations stressed the strong interrelationship between the high rate of residential investment and the fundamental attributes of postwar development and economic policy. Such approaches, (developed usually among the Greek Left) considered the latter as given and argued that the "peculiarity" with regard to housing was the systematic corollary of the "model" of development pursued by the Greek capitalist class and the State. This model of development, they pointed out, was typical and "natural" in that it stemmed from the "dependent" and "structurally underdeveloped" status of the country in the international division of labour and the inherent orientations of dominant classes in countries of such status.

In the following discussion we will first examine the degree to which Greece is indeed an exceptional case when viewed in a comparative and historical perspective. We will show that this is not necessarily the case: capitalist countries at similar levels of economic development tend to have similarly high rates of residential investment. We will reject, however, certain comparative and historical generalisations that purport to explain these tendencies with reference to simple "demand" factors like income growth and the rate of urbanisation. Thus the determinant factors lie indeed within the sphere of "supply": the formation of savings, the costs of residential production and the process of capital formation. We will then go into a critical analysis of the theories that consider these as corollaries of the decisions of the State and the capitalist class of "dependent" and "structurally underdeveloped" countries over



the division of investment between industrial and non-industrial sectors (or "productive" and "unproductive" ones). We will argue that such approaches are highly unrealistic on theoretical grounds as well as in relation to the historical evidence. Our own interpretation will lay more emphasis on the "household sector" of the economy and the formation and distribution of income, consumption and wealth within the latter.

### 1. Greek housing "overinvestment" in a comparative perspective

The average share of residential investment in the Gross Domestic Product in Greece approached 6% during the 1950's and 8% during the 1960's (5.8% and 7.7% respectively). It stood at similarly high levels during the 1970's despite the radical drop in building activity in 1974 when the economic crisis coincided with severe restrictions on building and the change in regime: we had a share of 7.36% for 1971-76.<sup>1</sup> Thus the volume of residential construction in the postwar period grew at rates that surpassed the admittedly remarkable rate of growth of the economy as a whole. Moreover, even a cursory glance at international statistics suffices to show that these shares were among the highest observed for capitalist countries in the postwar period and up to the beginning of the 1970's.<sup>2</sup> It appears therefore that Greece is an exceptional case in this respect. In fact, a number of cross-country statistical studies of the ratio of investment in housing to the GDP ( $I_H/GDP$ ) suggest that the Greek case is not necessarily an "anomaly". The  $I_H/GDP$  ratio takes similarly high values in most countries of a "middle level" of economic development (measured by per capita income) like Greece. It has been observed that in a sample of capitalist countries at various levels of economic development this ratio follows either an S-curve or a parabola: it is low in underdeveloped countries, rises to a peak at middle levels of development, and then levels-off as we reach the developed nations of Western Europe and North America and starts to decline in the most advanced of them.<sup>3</sup>

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1. Calculated from the series in Ministry of Coordination, National Accounts of Greece 1958-1975 (Athens, 1976) and the volume for 1970-1976 (Athens, 1978) and 1970, 1973-1977 (Athens, 1979). See also General Appendix, A.7.

2. See L.S. Burns & L. Grebler, The Housing of Nations (New York, 1977) pp. 23-24, 32.

3. See Strassman, "Construction Productivity", U.N. Secretariat, "Investment in Dwelling Construction" and Burns & Grebler, The Housing of Nations, pp. 29-33.

These cross-country statistical analyses show that the most important determinant of the path of the  $I_h/GDP$  ratio is per capita income: the growth of population and the rate of urbanisation do not show any appreciable effects in comparison.<sup>4</sup> The determinant role of per capita income can be easily understood. For one, the rise in the  $I_h/GDP$  ratio as we move from underdeveloped to developed countries signifies simply the increased capacity for the realisation of high levels of capital formation in general. A higher income level, moreover, leads to a greater emphasis on housing consumption and the modernisation of living standards beyond the mere satisfaction of basic needs. Indeed, cross-country comparisons of the income elasticity of housing consumption (measured at the macroeconomic level) show that it varies with income per capita levels according to a parabolic curve similar to that observed for the  $I_h/GDP$  ratio: this curve starts rising from values substantially lower than +1 in underdeveloped countries and approaches +1 in developed ones where it tends to level off (countries of Western Europe) and in some cases to decline with time (Scandinavia and North America).<sup>5</sup>

Greece showed an elasticity of +0.747 during 1950-1961 and +0.930 during 1962-1973 - a pattern that is broadly consistent with these empirical generalisations. We may reasonably argue then that postwar Greece being a country at a middle level of economic development with fastly rising incomes, presents no particular "anomaly" with respect to housing consumption and investment. This point, however, although an important corrective of uncritical impressionistic opinions about the exceptionality of the Greek case, can hardly suffice as an *explanation*. The reasons for this derive from questions of method as well as theory. Let us discuss them in turn.

To begin with, it is not legitimate to derive generalisations about the time-pattern of development on the basis of static cross-sectional comparisons of countries (assumed to be at different levels of development). Otherwise, we would have accepted uncritically a rather strong theoretical assumption, namely that all countries follow a simple evolutionary model, a trajectory that ends to a "stage" described by the present-day advanced

4. Burns & Grebler, The Housing of Nations, pp. 24-25.

5. See T.R. Lakshmanan et al. "Housing Consumption and Level of Development: A Cross-National Comparison", Economic Geography, 54, 3 (1978): 222-223. See also, Burns & Grebler, The Housing of Nations. Chapter 3.

nations of Western Europe and North America. Such a model should not be rejected *a priori* (though a case to the contrary can be very plausibly made on grounds of theory). The fact is, however, that the available evidence can not support a strong argument in its favour. Most statistical cross-country comparisons utilise samples with a heavy overrepresentation of developed nations: most of the underdeveloped ones lack adequate data. Furthermore, the patterns derived from postwar data are strongly influenced by the unique features of the period which was characterised by a worldwide secular movement of capitalist development and modernisation and common ideological and cultural influences supported by the economic interdependence of the capitalist world and the action of international agencies. Thus we should rely more on historical ("longitudinal") evidence in the search for development patterns. Such evidence for the case of trends in the role of residential investment is scant and of rather debatable significance.<sup>6</sup>

A more obvious limitation of the empirical studies of the relationship between economic development and investment (or consumption) in housing lies in the weakness of the statistical correlations derived from cross-country data. Regressions of the  $I_h/GDP$  ratio on income per capita show rather low correlation coefficients; the same is true for housing consumption. In other words there are numerous and important deviations from the "development path" described by the statistical curves. As we noted previously, these deviations are not accounted for by simple "universal" factors like population growth and urbanisation and are, therefore, the result of factors specific to particular countries or groups of countries. We may reasonably assume that such factors are of institutional and historical origin and/or derive from the particular configuration of the urban political economy and social structure observed for each society. Such factors are, of course, of utmost importance in the historical-comparative study of housing systems. Thus, the empirical studies of broad cross-country patterns, although suggestive with regard to the possible influence of "universal" factors (e.g. income, urbanisation), are of little help in a more systematic analysis. Moreover, the concept of "middle-income" countries in the hierarchy of economic development demands a more exact theoretical specification. We may accept that cross-country empirical analysis reveals indeed a significant similarity in the residential investment levels of such countries among which postwar Greece belongs. But this category is usually given theoretical content

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6. See Introduction, note 5.

with a rather simplistic reference to the corresponding level of aggregate demand factors: incomes and the rate of urban growth. The latter hardly cover the range of significant factors which belong more to the sphere of production and capital formation.

## 2. The limitations of simple "demand" models

The last point needs some stressing. The study of the determinants of residential investment has been heavily influenced by two traditions of research: the construction of econometric models which aim more at successful statistical formulations rather than systematic explanation, and the more historically-minded study of "long waves" of building. Both traditions place great emphasis on demand factors. This results from the obvious significance of the latter, their easy operationalisation, and the availability of data in this area. It is also a result of the theoretical influence of investment models based on the "acceleration" principle and the "stock adjustment" principle. These well-known models assume that increases in capital stock are a function of changes in consumption demand.<sup>7</sup> Hence the prominent role of income and urban population growth - the major determinants of housing demand - in the aforementioned traditions of research. The importance of the demographic factor has been more notably stressed in analyses of "long waves" of building.<sup>8</sup> However, we have noted already the limited influence of demographic variables on the  $I_h/GDP$  ratio. As Michael Kalecki pointed in his major essay on the determinants of investment,

"...what matters is not the growth of population but the growth of purchasing power. For instance, the growth of population does not necessarily imply a greater demand for dwellings. Without an increase in purchasing power the result might very well be the crowding of more people in the existing dwelling space."<sup>9</sup>

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7. R.G.D. Allen, Macroeconomic Theory (London, 1970): 70-72

8. See the review of the literature on long swings of building in L. Grebler & S.J. Maisel, "Determinants of Residential Construction: A Review of Present Knowledge" in D.B. Suits et al. Impacts of Monetary Policy: Studies Prepared for the Commission on Money and Credit (New Jersey, 1963): 475-620. For a more recent general review, see Gotlieb, Long Swings. The stress on demographic factors as the most significant determinants of long swings in building is mostly found in American studies: see especially B.O. Cambell, Population Change and Building Cycles (Urbana Ill., 1966) and M. Abramovitz, Evidences of Long Swings in Aggregate Construction Since the Civil War (New York, 1964).

9. Michal Kalecki, The Theory of Economic Dynamics (Greek translation, Athens, 1975) p. 185 (transl. from the Greek).

We may immediately add that in the case of housing it is not purchasing power (effective demand for consumption) in the narrow sense of *rental* expenditures that matters: it is the volume and per capita level of household savings expended on housing. Business investment in rental property in response to demand forms but a part of the flow of funds into residential construction, more often than not a small part - as it is certainly true in the Greek case. Moreover, the accumulation of a substantial volume of money capital drawn from household savings and small rentiers that can sustain an "elastic" supply of finance and permit some concentration of capital in housing production, is a necessary precondition for the emergence and expansion of a speculative sector in a large scale, i.e. for the fast production of housing as a commodity in great numbers in response to demand.<sup>10</sup> As a matter of fact, the American experience of "long waves" of building that has mainly influenced theories stressing the importance of demographic factors, has been characterised by exactly such positive conditions: an elastic supply of local savings and/or favourable international movements of small-rentier capital.<sup>11</sup> We may say that whereas fast urban population growth is in most cases a necessary condition for a major expansion of building, it is not a sufficient one. The same can be said for housing consumption demand in general.

There are deeper reasons why the study of building cycles can not provide a convincing theoretical account of the determination of the level of residential investment. These studies concentrate attention on the morphology of fluctuations in building and their correlations with fluctuations in other relevant variables. This emphasis leads away from the problem of the determination of the absolute level of building and the structure of resource allocation. For instance, the very concept of a "long wave", though important in historical analysis, derives its

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10. See the arguments in chapter 1.

11. See H.J. Habakkuk, "Fluctuations in House Building". Habakkuk's admirable essay with its thoughtful interrelation of Britain's building cycles to changes in the structure and movements of the capital market and the structure of finance in housing production should serve as a model in the analysis of long swings. See also A.K. Cairncross, Home and Foreign Investment 1870-1913 (Cambridge, 1953) and B. Thomas, Migration and Urban Development: A Reappraisal of British and American Long Cycles (London, 1972). Both stress the significance of the movements of capital across the Atlantic for the formation of British and American building cycles. The role of the exceptionally "elastic" supply of savings in the formation of American long swings in building has been stressed in Pribram, "Residual, Differential and Absolute Ground Rents".

significance from a contrast with the normal cyclical behaviour of business activity and income: the latter usually follows cycles of much shorter duration than the fifteen to twenty-year cycles observed in building.<sup>12</sup> Though the severity of a cycle has implications for the problem of the structure of the economy at any given time, the issue of the *duration* of cycles is less significant. In simplistic terms postwar building activity in Greece (and in most countries at that) forms a long wave - though an exceptionally long one. But unless we have some theory of a mechanism producing long waves peculiar to building and operating independently of the cyclical movement of the wider economy, we learn very little from this. After all, the whole economy followed the path of a long-term growth upswing. We have rejected in the previous chapter certain models that base the generation of long waves in building on instability mechanisms (due to pronounced time lags) peculiar to housing investment.<sup>13</sup>

The statistical analysis of fluctuations might be important for the study of short-term and medium-term behaviour but tells us little about the pattern of *growth*. For the postwar period, it has an additional defect in that it usually produces spurious explanations based on the predictable correlation between building and demand variables. This criticism applies similarly to the majority of econometric "explanations" of housing investment. They commonly offer statistical formulations of obvious associations between variables: during the postwar period incomes, urban population, consumption and housebuilding showed parallel growth trends and therefore

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12. The concept of long waves has also been applied to business activity in general. In this case, however, it refers to the well-known Kondratieff cycles spanning on the average a period of fifty years. These should not be confused with long-waves in building often referred to as the "Kuznets cycle". For a recent review of the theory of "long waves" in capitalism which makes some important observations on the nature of the postwar "wave", see, E. Mandel, Late Capitalism (1972, London, 1978): Chapter 4.

13. S. Parry Lewis in an effort to account for the formation of long cycles in building suggested that they are the product of the overlapping of shorter regional cycles of different timing. See his Building Cycles and Britain's Growth (London, 1965). As with other theories that search for determinant factors located in some specific characteristics of building itself, this has little relevance for the postwar period.

can easily provide the material for successful - but uninformative - correlations.<sup>14</sup> In conclusion, the various traditions of methodological and theoretical emphasis on simple "demand" factors in accounts of the allocation of resources to housing present serious limitations. It is necessary to examine the formation of savings and the mechanism of investment, most especially so in the case of a developing country. Let us then turn to this issue.

### 3. Greek economic development and "over-investment" in housing

From 1948 to the present there has been a recurrent debate among Greek economists, policy makers, and the professions involved in building, over the proper interpretation and evaluation of the alleged over-investment in housing. The controversy has mainly centred on questions related to strategies for economic development and the allocation of productive resources rather than on issues of household behaviour and demand for housing. Thus, the "problem" of the high rate of residential investment in Greece has been defined in terms of the high share of the latter in total fixed capital formation ( $I_h/FCF$  for brevity). The  $I_h/FCF$  ratio has been unquestionably among the highest in international statistics. Before 1954 and after 1958 it has fluctuated between 26% and 32% - usually around the 30% mark (with the exception of 1974 when it hit a record low of 21.3%). During 1954-1957 it reached unprecedented levels - around 40% - while the share of industrial investment was very low (see Table 5.1 in the next page). An average  $I_h/FCF$  ratio in the order of 30% does not in itself suggest the presence of an "anomaly": although comparatively high, it is not uncommon in countries of middle and higher levels of economic development. It assumes the character of a major problem when contrasted with the dictates of certain theories of the preconditions and necessary form of fast and

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14. For such cases see P. Pavlopoulos, A Statistical Model for the Greek Economy 1949-1959 (Amsterdam, 1966): 64-66, 128-134 and P. Kassimatis, The Construction Industry in Greece, pp. 48-50. Pavlopoulos relates investment in housing with real disposable income and household formation (indexed by the number of marriages). Kassimatis prefers (for a longer period: 1951-1971) a regression of residential investment on per capita National Income and an index of "relative costs": the ratio of the price index for rents to the price index for housing construction. This is more in the nature of an *ad hoc* choice since he found that GNP per capita alone "explains" 97% of the variation in residential investment. The latter "finding" suffices to show the banality of simple econometric analyses of postwar trends.

"balanced" economic growth. The desirability of the latter with the implied necessity for the structural transformation of the economy - meaning an emphasis on the increase of the role of industry - in conjunction with the worrying experience of the 1954-1957 period<sup>15</sup> have influenced strongly the climate of opinion over this issue in the beginning of the 1960's. It was during these years that the controversy over the "unproductive" character of housing and its detrimental role for development took form as official circles began to advocate the need for a reallocation of resources at the expense of the housing sector. International opinion on the matter has been an additional influence, of course: the issue and the associated dilemmas were neither new nor peculiar to Greece.<sup>16</sup>

Table 5.1: Annual gross investment in dwellings and manufacturing in relation to total fixed capital formation in Greece, 1948-1977 (five-year averages).

Period	Total FCF	FCF in dwellings	%	FCF in manufacturing	%
1948-1952	13,090.6	4,067.8	31.07	2,779.2	21.23
1953-1957	16,620.0	6,791.8	40.86	2,190.4	13.17
1958-1962	28,831.6	8,847.6	30.68	3,468.2	12.02
1963-1967	45,756.2	14,015.8	30.63	5,947.4	12.99
1968-1972	75,249.6	23,200.4	30.83	10,030.2	13.32
1973-1977	83,120.6	23,056.0	27.73	13,665.8	16.44
1948-1977 average	43,778.1	13,329.9	30.44	6,346.8	14.49

Source: National Accounts 1958-1975 and 1978 Statistical Yearbook, NSSG.

15. It is interesting that both the Gross Domestic Product and investment in manufacturing grew at rather high rates during 1954-1958 - a period alleged to have a strongly non-developmental structure of capital formation. The first grew by an average annual rate of 6.36% and the second by 16.54% (1954-57, 1970 prices) (data from the 1958-75 National Accounts).

16. For a good review of the issues involved and the relevant literature see C. Abrams, Man's Struggle, Ch. 8. For more recent material and a comprehensive discussion of the effects of housing investment on economic development, see Burns and Grebler, The Housing of Nations, Ch. 8. It should be remembered, of course, that the first widely influential systematic study of the issue in relation to Greece was by foreign economists. See, H. Ellis et al, Industrial Capital in Greek Development (Athens, 1964): Ch. 8.



The question of "overinvestment" in housing in relation to capital formation as a whole and more particularly in relation to industrial investment can be viewed in either of two ways. The first concerns the *evaluation* of these relations in the light of development strategies. The second is directed to the theoretical-empirical problem of establishing the determinants of the investment pattern. The relevant question here is to what degree investment in housing is a systematic consequent of the overall pattern in the allocation of resources and more specifically of the fact of "under-investment" in industry. It is the second view of the matter that will occupy us here, though it will increasingly become apparent that the two are interrelated. This is so for two reasons: first, because the view relates to the wider object of this study, namely, the formation and growth of residential building, its economic and social nature and the origins of savings channelled into housing; second, certain highly influential theories should be rejected that purport to explain housing investment in connection to particular "models" of capitalist development in which industrial and residential investment are negatively related at the level of investment decisions and processes. Thus the following analysis will be mainly negative in nature. It will clear the ground, however, for the more positive task of providing a systematic analysis of the determinants of residential investment.

The theories in question view the low level of industrial investment as well as the tendency towards excessive investment in real estate in Greece as the systematic corollary of the economic relations, the attitudes and the class structure of an essentially underdeveloped society. This pattern, it is argued, contrasts sharply with the "normal" model of capitalist development evidenced in the history of advanced Western societies or the one that we should theoretically expect to hold in cases of "genuine" development. Thus, although development in the narrow sense of growth in incomes per capita has indeed taken place in Greece, we had a case of "distorted" development in that the *structure* of the economy has been reproduced in a form akin to underdeveloped countries. Admittedly, our account of these theories is highly schematic and omits significant differences among particular theoretical approaches. The latter are evident in the more specific explanations given for the structure of capital accumulation and the role of residential investment. But one can easily confirm that all theories follow arguments that in logical structure imply similar contrasts of the Greek record with "normal" or

genuine" development. The specific attributes of the Greek economy and society that are offered as explanations of the "anomaly" in the structure of investment are the following:

- a) The local bourgeoisie is characterised by a conservative and commercial outlook. This stems from a tradition of commercial activities during the formative years of Greek capitalism when capitalists played a role of intermediaries between the local agricultural economy and the advanced West: hence the widely accepted concepts of a "comprador bourgeoisie" and by extension of a "comprador society" applied to the nineteenth and early twentieth-century Greek society. As a result, Greek capitalists show a strong preference for investment in commerce, real estate and speculative ventures instead of industry.<sup>17</sup>
- b) There have, in general, been limited opportunities for medium and small capital to enter industry. This resulted from the constraints imposed by powerful international competition and the fact that most significant industrial sectors in Greece are effectively controlled by local and

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17. For the characterisation of Greece in the 19th and early 20th century as a "comprador" society see K. Moskof, National and Social Consciousness in Greece 1830-1909 (Thessaloniki, 1972, in Greek), passim. Historical-cultural explanations of the alleged tendency of Greek capitalists towards economic conservatism and speculative ventures (and thus investment in commerce, real estate and tourism) can be found in N. Mouzelis & M. Attalides, "Greece" in M.S. Archer & S. Giner (eds), Contemporary Europe: Class, Status and Power (London, 1973): 162-197, M. Malios, The Current Stage in the Development of Capitalism in Greece (Athens, 1975, in Greek), p. 79 and "Economic Observer" "Greece: A Case of Neo-colonialism", Monthly Review, Dec. 1972, pp. 23-37. A.P. Alexander in a sociological study of Greek industrialists found that most could be described as "commercial" rather than as "progressive" entrepreneurs. He rejects, however, the thesis that this orientation is the product of the commercial tradition in the formation of the modern Greek bourgeoisie. He argues that the behaviour of Greek industrialists can be interpreted as the outcome of rational economic choices in the context of the conditions and limitations prevailing in the Greek economy during the postwar period. See his Greek Industrialists (Athens, 1964): 120-125. Theories of the unproductive and speculative tendencies of the local bourgeois class in underdeveloped countries are commonplace, of course, in studies of the Third World. To refer to the most influential, see Paul Baran, The Political Economy of Growth (1957, Pelican edn, 1973): 310-11 and Samir Amin, Unequal Development (1973, Greek transl. 1976), p. 321. For similar theories in relation to housing and land, see, A.G.H. Dietz et al. Housing in Latin America (Cambridge, Mass., 1965): 50-51 and Hans-Dieters Evers, "Urban Expansion and Landownership in Underdeveloped Societies", Urban Affairs, 11,1 (1975): 117-129.

international monopolies. Thus, medium and small capital, for lack of other outlets, *had* to expand into non-productive sectors and real estate investment.<sup>18</sup>

- c) The postwar "model" of economic development and official economic policy reflects the "dependent" status of the country and the determinant influence of "neo-colonial" relations. The bourgeois class and the State have in general acted in conformity with the political and economic interests of international centres of power. They more or less opted deliberately for a long-term strategy of development which chose agriculture, light industry, and more especially, building as the leading sectors of the economy. This accorded with the policy directives of U.S. agencies formulated during and immediately after the years of the Marshall Plan. Therefore the imbalance between industrial and residential investment reflects directly such long-term development strategy choices.<sup>19</sup>

We will argue that these theories are scarcely relevant for an understanding of the nature of Greek "overinvestment" in housing and its determinant mechanisms. To anticipate, we will advance the view that the structure of capital formation in the postwar period is the product of two largely distinct phenomena: a chronic tendency for a relatively slow expansion of industry and a tendency for high rates of accumulation of personal wealth and more specifically real estate assets in the household sector of the economy. Thus, industrial underdevelopment is a problem peculiar to *industry itself*. Housebuilding, if anything, has acted *positively* for industrial growth. Its level and trend has been determined by the characteristics of the household sector in Greece and the associated process of personal wealth formation: the historically given distribution

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18. This view has been very influential among Greek architects and civil engineers after 1974, especially those attached to the C.P.G. and the far Left. See Architects' Association, Committee for the Study of DEPOS (Public Corporation for Housing and Urban Development), Theses on DEPOS (Athens, 1976, in Greek mimeo) and All-Scientists Democratic Movement, Branch for the Technical Professions, (connected with the C.P.G.) The Proposed Law for DEPOS (Athens, 1976, in Greek mimeo).

19. Such theories refer usually to the famous Varvaressos Report as the crucial document that expressed the American influence as well as the tendencies of the Greek elite towards a non-industrialisation "development model" with the consequent emphasis on building and housing. See, S.P.A.D.A., The Housing Question, pp. 9-10, G. Burgel, Athens: The Development of a Mediterranean Metropolis (Athens, 1978, in Greek): 396-97. See also for the document in question K. Varvaressos, Report on the Economic Problem (Athens, 1952).

of personal income and real assets, the character of the "dual" housing system, and lastly, "exogenous" factors such as the inflow of substantial personal savings from abroad and the favourable trends in housing production costs up to the early 1970's.

#### 4. Some questions of theory and method

Some theoretical clarification is at first essential. The validity of theories (a) - (c) is based on the validity of either of two underlying general assumptions (or a combination of the two). First, that there is a systematic functional relationship of determination between the "model" of economic growth of a country and the composition of capital formation (and more specifically the share of housing investment in the latter). The argument must take this form: in a "proper" model of fast economic growth the share of housing investment will be small; therefore, the very existence of a "non-proper" model of growth goes a long way in explaining a high share of residential investment since, whereas in the "proper" case the latter would have been "dysfunctional", in the "non-proper" case it is not and it may even be "functional". Second, that there is a determinate real mechanism that connects investment decisions in industry and housing in a negative way: an increase in the first causes a decline in the latter and (for some views) the reverse is also true. I will argue that the first assumption boils down to one similar to the second and that therefore it is the second one that deserves critical examination.

Now the arguments about the functional prerequisites of "proper" economic growth are essentially a mixture of logico-technical *prescriptions* and some generalisations from the experience of capitalist development in Western countries in the nineteenth century and the theory and experience of socialist industrialisation. In this context, housing belongs more to the category of consumption rather than to productive capital formation. The latter, especially in capital goods industries, is from a logical point of view an obvious priority in the development effort. Even if we include housebuilding in investment we still have an activity that contributes comparatively little to the growth of income; the ratio of capital to income in the case of housing (the "capital coefficient") is often more than five times larger than the one in industry or agriculture.<sup>20</sup> Thus we

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<sup>20</sup>. The average marginal ratio of capital to income in Greece for the 1951-1975 period has been (in constant prices) 15.32 in housing, 2.36 in industry and 3.88 in agriculture. See National Accounts 1953-1975, p. 36.

spend a large volume of resources for a small addition to national income. Such observations have led to the formation of a body of economic literature that considers housing a low priority in economic development. It is of course admitted that *some* housing must be built in order to achieve a productive utilisation of labour, especially in view of the fact that better housing most probably influences positively the productivity of workers. In the context, however, of a rational approach to the problem of growth under conditions of scarcity in resources, it is argued, the emphasis must be placed on the sectors that produce material commodities instead of services, and capital goods instead of consumption goods. On both counts housing is a low priority.

It may be easily granted that these arguments are of great value from a technical-logical and normative point of view. But do they say anything important in the order of *explanation*? Are investment patterns in capitalist countries determined in the context of choices over the preferred "development strategy", in which case the aforementioned "rational" model would have been a powerful tool of comparative analysis? Is there commonly any effective societal mechanism for such comprehensive "choices"? The answer should be negative. It is well-known that such mechanisms do not exist in capitalist countries unless they are extensively managed through State intervention which is a rather rare occurrence, especially in the more advanced developing nations (like Greece and some Latin American and South European countries). In fact, the kind of "rationality" that governs market economies leads to a radically different set of "priorities" in the process of economic development. Thus, from a technical and logical point (i.e. from a *planning* point of view) the growth of consumption presupposes the expansion of the productive base. In capitalist economies, however, it is the exactly opposite sequence that is necessitated for growth: the expansion of productive capacity presupposes the growth of consumption or, more generally, the expansion of markets. This is simply another way of expressing the well-known "principle of effective demand".<sup>21</sup> This may sound paradoxical or even irrational (and in a very real sense it is indeed a fundamental irrationality of capitalism) but Keynes, in his provocative manner, has familiarised us with this "irrationality" with his examples of the beneficial role of pyramid-building and his advise to dig holes in the ground and then fill them up in order to boost the economy.

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21. For a concise discussion of the principle of effective demand and the long tradition of "underconsumption" theories of crises in capitalist development, see L. Pasinetti, "The Economics of Effective Demand" in his Growth and Income Distribution (Cambridge, 1974): 29-53.

The strategic importance of effective demand for capitalist growth makes nonsense of abstract models of the rational ordering of priorities according to the productive significance of each sector. Thus housing may be a low-priority sector from a planning point of view, but it is essential in boosting up demand for industrial investment goods as well as consumption goods through the incomes it generates. It helps, furthermore, in the mobilisation and spending of money savings which might have otherwise been hoarded up or held in some other liquid form, in which case they would have a negative effect on the expansion of employment and income (an argument made familiar since Keynes' "General Theory"). It has been repeatedly observed that the small volume of market outlets constitutes an important limiting factor for the economic growth of low-income countries, especially ones of a small size like Greece. For a *capitalist* path of locally-oriented development to be realised in such countries the following "scenario" must take place: (i) a rise in incomes, (ii) an increase in unproductive consumption, (iii) an expansion of light industry to cater for expanding local demand, (iv) expansion of heavy industry in response to the latter, (v) an inflow of capital from abroad attracted by the expanding market or secured by other means (loans, foreign aid), in order to cover the lack in accumulation funds due to excessive "unproductive" consumption, (vi) an increase in productivity and further rises in incomes, etc. This scenario is radically different from the one prescribed for a *planned, quasi-closed* economy where it is necessary in the initial stages to keep unproductive consumption (and household incomes) at low levels and increase the share of capital accumulation at the expense of consumption, and where reliance on foreign capital is ruled out.<sup>22</sup>

The upshot of this argument is that the explanation of the pattern of investment with reference to a choice between major alternatives in "development strategies" is meaningful when and only when we have a planned, quasi-autonomous economy. This amounts to saying that if dominant groups in Greece have opted for a model of development more or less along the lines of socialist industrialisation, housing investment would have been less and, therefore, the fact that they did not, explains the "anomalous" structure of investment. This is obviously absurd given the character of postwar

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22. For this contrast of the capitalist and socialist ("planned economy") models of development see Arghiri Emmanuel, Unequal Exchange, pp. 130-133.

Greece. The possible argument that a progressive, puritan and nationalist bourgeoisie could have effected similar developmental policies is no less absurd since the historical existence of such a virtuous class is largely a myth. Anyway, if we accept as historically given the existence of a liberal-capitalist economy (in the sense of a State sector subordinate to the private sector with limited planning of investment and production) the latter alternative is as hypothetical as the socialist one. Thus theories in terms of choices between "development models" as strategies have little explanatory value in relation to the issue we examine. More generally, the concept of a "development model" in its strong sense has limited operational meaning in the analysis of economic trends in capitalist countries.<sup>23</sup>

Let us consider a possible objection to our argument. Suppose one does not use the concept of a "development model" or "strategy" in the strong sense we rejected above as inadmissible for capitalist societies. Assume that the concept is applied only in a weak sense as a description of the tendencies of public economic policy, however limited the role of the latter. Now since housing is one form of investment that is customarily and rather easily regulated by the State, is it not that a high level of such investment implies a certain ordering of priorities by dominant groups *vis-à-vis* development policy, and thus explains in turn the phenomenon itself? The answer depends on the meaning of "development policy". If by the latter we mean by definition and implication *all* relevant Government policy, the argument is valid but tautological (as most functionalist accounts). If "development policy" is defined rigorously, i.e. as policy over the structure of capital formation in the light of long-term growth objectives, the argument *may* be valid but only under specific conditions. Its validity can certainly not be derived from easy assumptions about the

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23. A similar point can be made with regard to the usual application of the categories of "productive" and "unproductive" economic activities in the analysis of growth. The distinction, as applied, has operational value only in the context of a rationally planned economy. As Marx insisted, the concept of "productive labour" must be defined with reference to the specific economic system involved. In capitalism, the opportunities for the formation of surplus value are the sole criterion for judging the degree to which certain uses of labour and resources are "productive" - if the concept is to have any explanatory value. See Ian Gough, "Marx's Theory of Productive and Unproductive Labour", New Left Review, 76, (1972): 47-72.

"dysfunctional" character of housing for "proper" development and the corresponding assumption of its necessary "functionality" for "non-proper" development. These are imposed (mostly normative) criteria and do not constitute arguments about real processes. We have already pointed to the normally "functional" significance of housing for short- and medium-term development (which are the time-spans that concern capitalist States) through the boost of effective demand and the mobilisation and realisation of savings. Such an evaluation of the "functions" of housing is of course absolutely realistic: postwar Greek development can not be understood without the high rate of housing investment and this fact is widely perceived.<sup>24</sup> It is thus necessary to demonstrate empirically the actual functions of housebuilding in terms of the development process, the way these were perceived and defined by dominant groups within the State and the capitalist class, and the extent and real significance of public regulation over the rate of housing investment.

This lengthy digression has been necessary in order to arrive at an important methodological point: the question of the validity of the theories that explain housing investment in postwar Greece (listed in section 4 above) with reference to one or another form of "structural underdevelopment" reflected in the tendencies of the State and the capitalist class can be reduced to three much narrower hypotheses:

- a) The Greek State has consistently and *actively* promoted/encouraged investment in housing.
- b) Such positive actions were decided in the context of "development policy" decisions and thus antagonised *directly* industrial investment (to a small or large degree).
- c) There has been a direct or indirect *negative* relationship between the levels of industrial and residential investment. These have been based either on the behaviour of the agents of investment, namely the actual or potential members of the capitalist class, and/or on the functioning of the "impersonal" capital market (i.e. the process of allocation of accumulated savings).

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24. This in no way implies that housebuilding was *the* crucial determinant factor behind postwar growth. The argument in favour of the positive economic significance of housing has been sometimes carried to extremes by interest groups associated with the building sector - builders, civil engineers, landowners, and certain finance groups. See, for instance, K.T. Triandafyllides, "Housing Activity as a Factor in the Development of the Greek Economy", Technika Chronika, 6, (1972): 579-588.



The two conditions added to the third hypothesis have been included for two reasons: they reflect the content of the views we examine, as well as exhaust the logical possibilities for such a negative relationship. It may be argued that the previous list is incomplete without a fourth hypothesis, namely that the State through *inaction* in the face of an excessive level of residential investment has "accepted" and/or promoted a pattern of relative industrial underdevelopment. However, the validity of this hypothesis presupposes the validity of hypothesis (c). It is therefore superfluous. We intend to show that hypotheses (a) to (c) are ungrounded in the light of postwar developments and thus reject the relevance of the "structural underdevelopment" theories of housing investment. After this negative task we will advance an alternative view of the "societal" factors ("peculiarities" of Greek society) that have acted towards the formation of high levels of residential investment.

#### 5. The role of public economic policy

Let us start with a review of the policies of the Greek State towards housing as related to the wider economy. Let us define as *economic* policy for housing that sub-set of official actions which (a), have demonstrable *direct* effects on the level of residential building *and* (b), involve publicly proclaimed or circumstantially implied considerations (objectives) as to the effects of the expected change in building on economic activity in general *or* (c), instead of (b), involve demonstrable, direct, and important effects on sectors of the economy other than housing by virtue of a necessary connection between State actions towards these sectors and actions towards the housing sector. This last condition covers cases of *objective* conflicts in the allocation of publicly controlled resources irrespective of the particular objectives of housing policy. We take it for granted, moreover, that the concept of "public policy" *does not* extend to the fundamental functions and orientations that are a constituent part of capitalist States committed to a capitalist path of development, relatively limited State intervention and liberal ideology. These functions and orientations may shift in history but for a given period and set of countries form a general background and set broad limits that determine a common denominator or more properly a set of "invariants" in policy. The latter may, from a certain viewpoint, conform to the definitional criteria we advanced and entail conclusions about the role of the State in the formation of housing investment. But these conclusions can be justifiably considered

banal for the purpose of this analysis. Thus, we are interested in significant variations *within* these broad limits.<sup>25</sup> With this proviso in mind we can say that postwar economic policy towards housing can in no way be understood as consistently favourable for increasing rates of housebuilding. On the contrary, it has undergone a number of important shifts one way or the other. We can roughly distinguish four periods: two effectively favourable, 1948-1954 and 1967-1973, and two relatively unfavourable, 1955-1966 and the post-1974 years.<sup>26</sup> The latter have been periods characterised by widely manifested signs of a critical official attitude towards housing "overinvestment", by restrictions of a monetary and fiscal nature and by a restrained application of disincentives - "restrained" in the sense that the essential role of the housing sector in the short and medium-term functioning of the economy was taken for granted alongside the assumption (a right one) that the "problem" lay more in insufficient *industrial* growth.

The difference between the 1948-1954 period and subsequent years lay at a deeper level than a mere conjunctural shift in policy. During that period the Greek State took, in contrast to later periods, an *active* part in capital formation. The main issues involved in this activity were the reconstruction of the country in the aftermath of the war and the allocation

25. The reader will notice that I am rather brusquely disposing of some controversial issues in political theory and method. It is well-known that whereas long-term orientated Marxist analyses of the capitalist State see few significant variations in policies, those inclined to "behavioural" methods and the short term arrive at the exactly opposite conclusion about the role of the State. There are sharp differences, moreover, as to what constitutes relevant empirical material. Without wishing to underplay the important differences in theory and method involved in these controversies, I would advance the opinion that most of the debate has been fruitless and distorting with regard to the real issues. This can be avoided if one starts by specifying the temporal scope of analysis and the range of variation that will be considered as theoretically "significant". These decisions will determine, to a very large extent, the nature of the conclusions.

26. This time-pattern follows quite closely the development of international opinion on the issue. As Strassman summarised

"During the early 50's the heart of development theory was capital shortage and capital formation. Special attention was given to construction because this sector seemed able to produce capital without using capital. (Afterwards)...construction fell out of favor... housing appeared as unproductive and inflationary and causing problems for the balance of payments." Later, however, building regained favor: "unemployment, urban squalor and political unrest in developing countries led to the reinstatement of construction as a key part in development strategy in the 60's... Aid and the Inter-American Development Bank initiated programs of housing loans and mortgage guarantees". (Strassman, "Construction Productivity").

of American Aid among the multitude of pressing needs and claims for priority. The singularity of the period lay in the fact that the State managed directly substantial funds aimed for investment. Thus a choice to expand housebuilding antagonised in an immediate sense the growth of investment in sectors of higher priority from a developmental point of view. The pressures from foreign agencies on the Government towards the adoption of a view of the Greek economy as one based mainly on agriculture, combined with the concern to "stabilise" the countryside after the end of the Civil War, made for the allocation of substantial funds for programs of housing in rural areas.<sup>27</sup> As a result, the share of the public sector in residential investment reached record levels of more than 35% during 1948-1950. As private activity rose and American aid was cut off<sup>28</sup> the share of the public sector in housebuilding fell drastically: during 1951-1958 it fluctuated between 8% and 15%. Similar conditions of active involvement of the State in the allocation of investment funds were not repeated; throughout the rest of the postwar period this share has stayed down at an insignificant level of 3-4% or lower (see General Appendix, A.5,A.7).

During 1948-1955 the State promoted private building activity, too. The most relevant measure in this respect has been a Law passed in 1947 ("KH Psiphisma") aiming explicitly at a boost of the private redevelopment of central areas in Greek cities granting tax exemptions for income from dwellings built between 1945 and 1955 and, to a lesser degree, from those to be built between 1955 and 1960. This has been widely recognised as a

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27. For the rural housing programs of the period, see Part 1 in Housing in Greece: Government Activity, pp. 150-160 (English translation of the Greek text). For a short discussion of the period with references to urban development policies, see A. Voivonda et al., "The Management of Space in Greece: A Short Historical Account", Architecture in Greece, 11 (1977): 130-51 (in Greek). For information about the American Aid see, C.A. Munkman, American Aid to Greece: A Report on the First Ten Years (New York, 1958), W.H. McNeil, Greece: American Aid in Action 1947-1956 (New York, 1957), and D. Psilos, "Postwar Economic Problems in Greece" in Committee for Economic Development, Economic Development Issues: Greece, Israel, Taiwan and Thailand (New York, 1968): 1-77.

28. In the beginning of the 1950's American Aid funds permitted high levels of budget deficits, as well as a measure of public finance for private investment. In the succeeding years the volume of aid diminished sharply and was mainly directed to military purposes. As a result, the effort to keep the budget deficit within bounds led to a radical drop in the volume of public sector investment. See, X. Zolotas, Monetary Equilibrium and Economic Development (Princeton, 1965), p. 101.

significant incentive for urban building.<sup>29</sup> We may add that the favourable attitude towards housebuilding has most probably been a significant positive factor in the formation of the 1948-1954 upswing in illegal building (see Figure 3.1 in Chapter 3).

The favourable attitude towards housebuilding (and building in general) that informed official policy during the period was based on several arguments. There was a pressing need to reduce unemployment and construction seemed ideal for this. There was also the need to alleviate the tremendous housing shortage created by the years of war, the occupation, and the civil war. Lastly, housebuilding could induce dishoarding and thus inject some needed energy into the economy.<sup>30</sup> The fear of social unrest due to a widespread housing and unemployment problem coupled with fresh memories of communist influence must have certainly added weight to the pro-housing economic argument. This argument was presented in a most comprehensive form in the famous "Varvaressos' Report" (1951) with which it is customarily associated in all later accounts, though it was certainly present in earlier policy proposals and plans. It is important to say, however, that this report in no way represented an undisputed majority view even among official circles.<sup>31</sup> This is easily understandable given the exceptional role of the State at the time, namely its direct involvement in the allocation of investment funds and more notably foreign aid and loan funds. The appropriation of aid funds required the drawing up of comprehensive and detailed economic plans for the country as a whole and for particular sectors. The character and objectives of the plans were hotly debated both among Greek authorities and between the latter and foreign agencies (U.N., The Organisation for European Economic Cooperation, the American Mission). This led naturally to polarised controversies over priorities: obvious economic and ideological conflicts were involved. One of the issues was the drain of funds into housing when the building of a solid base

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29. Ellis et al. Industrial Capital, p. 215.

30. We must keep in mind that during that period, due to a long experience of hyperinflation, the public's confidence in the banking system was very limited. Housebuilding was largely based on personal savings outside financial institutions - literally "kept under the mattress". See J.L.Crane, "National Housing Policy in Greece", Technika Chronika, 105-106, (1955):50-54.

31. See vol. 7 of the Review of Economic and Political Science (1952, in Greek) devoted to a critical review of the Varvaressos Report by a number of prominent Greek intellectuals. Most of these (Zolotas, Evelpidis, Zigdis, Koulis, Dertilis, Aghapitidis) held at the time or in the following years highly influential posts in the Administration, in political parties and in the universities.

for the industrialisation and electrification of the country required funds for crucial public works. In fact, the policies of the period were to a large extent a compromise between the industrialisation priority and the more conservative alternative stressing immediate palliatives and the role of the traditional economic structure (e.g. agriculture).<sup>32</sup> The formative period of the postwar pattern, then, though relatively favourable for the growth of the housing sector, is much more complex and contradictory than purported by simplistic accounts which, with easy hindsight, "explain" later developments with reference to the "choices" made then. A more important point, however, is that the period was exceptional both in terms of the role of the State and the structure of housing politics.

After 1955 the nature of economic policy as well as the structure of relevant political conflicts changed drastically. Up to 1967 the principles that directed Government policy were the achievement of a relatively balanced budget, a check of the balance of international payments against excesses and, in general, monetary conservatism - in short, a cautious effort to promote expansion with a measure of Keynesian recipes without risking inflation. Since housebuilding, a major booster of effective demand, displayed an autonomous dynamism that was deemed excessive, and in view of the sluggish performance of industry and the obvious possibility that there existed serious productive bottlenecks in the economy (which would cause inflation in case of excessive demand), housing was considered as a very low priority in the context of fiscal and monetary policy. Thus the provision of bank credit to building enterprises was strictly forbidden. The fact that speculative housing catered for luxury demand offered an additional economic argument (and public legitimacy) in support of restrictions, for luxury consumption (and the consequent imports) were deemed disproportionately high. Similar arguments led to keeping mortgage credit to households at a minimum. Housing was thus defined as "unproductive"

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32. See I. Zigdis, "The Industrialisation of Postwar Greece and the Essential Role of U.N.N.R.A.", Economicos Tachydromos, 6.1.1972 (in Greek), and L. Nikolaidis, "The Effort for Industrialization Has Its Foundation in the 1948 Plan", Economicos Tachydromos, 9.12.1971 & 16.12.1971 (in Greek). For references to the relevant official documents of this period, see, D. Emmanuel, "State Action and Policy for the Housing Sector in Greece" in Technical Chamber of Greece, Housing in Greece (Athens, 1979, in Greek): 34-84.

among official circles but in a sense that belonged less to the concerns and rationale of long-term development strategy than to the day-to-day management of the economy through monetary and fiscal instruments where "unproductive" signified "more-inflation-conducive".<sup>33</sup> Official policy and practice conformed closely to the rule that whatever resources and fiscal incentives the State controlled must be channelled as a priority to industry, agriculture and infrastructure works. The latter two received most of public sector investments. In the beginning of the post-1955 period the housing sector was left to its resources, the dominant attitude being one of critical *laissez faire*.

This attitude turned increasingly to a strongly negative one.<sup>34</sup> The chronic imbalance in the structure of capital formation (despite the relatively high rates of industrial growth during 1955-1963), the growing emphasis on economic planning, and the fast modernisation of the economy in the early 1960's have led the main agencies responsible for the formation and implementation of economic policy (the Bank of Greece and the Ministry of Coordination) to express open alarm over the alleged "over-investment" in housing.<sup>35</sup> It was recognised, however, that the core of the problem lay in the slow rates of growth of industry itself rather than in any conflict over capital resources between the two sectors: it lay more in the sluggish *demand* for productive capital rather than in a scarcity of savings in general. Hence the economic strategy proposed envisaged a boost of incentives offered to industrial investors, monetary stability and the modernisation of the capital market, so as to facilitate a more productive allocation of savings. It was proposed that housing investment should be reduced less by the use of direct restrictive measures than by indirect, long-term methods based on institutional reforms in the process of the mobilisation and allocation of savings. A measure of restriction by means of increased taxation was considered

33. See Zolotas, Monetary Equilibrium, Chapter 2.

34. Ellis et al. point out that this change in attitude took place during 1958-1959 (Industrial Capital, p. 215).

35. The association of Greece with the EEC in 1960 has been an important factor behind the increased emphasis placed on economic planning and modernisation of the economy. For a short account of postwar economic planning up to the mid-60's see Psilos "Postwar Economic Problems".

necessary, however, especially in the case of luxury housing for middle and upper strata in cities.<sup>36</sup> A number of restrictive measures along these lines have indeed been introduced.<sup>37</sup> The real effects of this negative policy context on housebuilding have been insignificant: the 1960-1965 boom in building as a whole and speculative apartment building in particular testifies to this. The downturn in building permits observed in 1966 which was interpreted at the time as a "crisis" in direct result to the official "victimisation" of building has certainly been in its greatest part the natural downswing phase of the usual three-year building cycle characteristic of postwar speculative building. After 1967 - a real crisis year but for reasons unrelated to housing policy - the start of the 1968-73 boom in housebuilding and the extremely favourable policies of the military dictatorship put an end to this phase of housing policies.

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36. See C.P.E.R., Draft of the Five-Year Economic Development Plan for Greece 1966-1970 (Athens, 1965): pp. 9-10, 113-114 and C.P.E.R., Housing (Athens, 1967, in Greek). The basic arguments for a critical stand toward housing "overinvestment" and the suggestion for a policy of limited restriction and emphasis on the modernisation of the capital market and the supply of incentives to industry has been presented in the highly influential study by Ellis et al. Industrial Capital, Ch. 8. The necessity for institutional changes in the capital market has been also stressed in D.D. Psilos, Capital Market in Greece, passim. Criticism of the tendency toward over-investment in unproductive sectors in the Greek economy has been a constant theme in the writings of X. Zolotas. It is significant that Zolotas has been throughout the postwar period (excepting the dictatorship years) the Governor of the Bank of Greece - a post of exceptional power with regard to the formation of economic policy. See his Reconstruction and Viability (Athens, 1948, in Greek), Monetary Equilibrium, and Consumption, Investment and Monetary Equilibrium (Athens, 1977). We must add, however, that Zolotas, though strongly "developmentalist" in his normative and theoretical pronouncements, has been, in actual policy-making, mainly concerned with the inflationary impact of over-investment in "unproductive" sectors.

37. These measures were: a) Taxation of certain building materials as luxury imports (1958, 1960 - see Zolotas, Monetary Equilibrium, pp. 109-110). b) Revision of the tax on built property transfers so that the value of the property be calculated according to the *final* form it will have after completion of building. Since it was a widespread practice to sell apartments at the initial stages of building, previous laws offered an opportunity for a gross undervaluation of the property sold. The new measure (Law 4242/1962) thus increased substantially the amount of the transfer tax (see Ellis et al., Industrial Capital, pp. 215-216). c) A raise of the nominal value per cubic meter determined administratively for new buildings on the basis of which certain taxes and social security fees are calculated. d) Increase of the tax on land value gains due to public works from a rate of one-third to one-half of the gains (Law 4459/1965). The Law was repealed in 1967 - one of the first measures of the dictatorship - with Law 82/1967. See, I. Michael, Management of the Land Factor in the Athens Master Plan (Athens, 1973, in Greek): 235-237.

The negative policy climate of the first half of the 1960's and the official pronouncements about the "unproductive" character of housing had a lasting and formative impact on the structure of the politics of housing in Greece. They provoked widespread violent reactions from economic interests involved in speculative building, as well as the professions associated with the building economy (notably civil engineers and to a lesser extent architects). Such counter-attacks utilised the stock arguments in favour of housing: its social significance, its beneficial effects on labour productivity and its importance as a generator of income and employment.<sup>38</sup> These views became official orthodoxy during the military dictatorship (up to 1973); high rates of housebuilding were promoted through a variety of measures in urban planning, taxation and credit supply. The immediate objective of these policies was to "reflate" the economy most especially in response to the 1967 slump and the need for popular measures felt by the new regime.<sup>39</sup>

It could be said, however, that this pattern of housing policy was an integral part of a wider economic and socio-political outlook dominant during the period. Its principles were easy credit, active promotion of capitalist relations and encouragement of speculation, and the protection and enhancement of middle-class property under the guise of "populist" policies. These were coupled with severe restrictions of non-capitalist

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38. See Second Panhellenic Congress of Architects (1962), "Conclusions", pp. 122-127; Technical Chamber of Greece (T.E.E.), "Contribution of T.E.E. to the Solution of the Country's Housing Problem", Technika Chronika, 275, (1964, in Greek). See also the statements of various building entrepreneurs and professionals on the "building crisis" and the economic and social significance of housing in A.K. Alexandropoulos (ed.) "Greek Housing: Present and Future", Economicos Tachydromos, issues 740, 741, 742 (1968, in Greek). E. Kouloumbis, the then president of the Technical Chamber, expressed aptly the opinions prevalent among professionals associated with building when he said of 1963-66: "during the last four years the State effected policies hostile to building activity". See his "A Program for Social Housing Must Be Designed", Economicos Tachydromos, 26.10.1967 (in Greek). The reader must keep in mind that civil engineers - the dominant professional group in the Technical Chamber - are commonly involved in building both as engineers *and* as entrepreneurs. Thus the Technical Chamber has been strongly influenced by business interests associated with speculative building.

39. See, C.P.E.R., Development Plan of Greece 1968-1972 (Athens, 1968) and C.P.E.R., Long-term Perspective Plan for the Development of Greece (Athens, 1972), Vol. 2. Ch. 10 (in Greek), and more especially the quantitative projections in National Monograph (1973). See, also Triandafyllides, "Housing Activity".



sectors be them precapitalist low-income building or programs for workers' housing.<sup>40</sup> The sharp reversal of policy in 1973 (i.e. the introduction of highly restrictive measures) did not signify any serious change in approach or principles; it expressed orthodox counter-inflation measures as well as the fear of a major flight of savings away from commercial banks and into building.<sup>41</sup> After the change in regime in 1974, official policy reverted to a large degree to the pattern of the early 1960's, monetary conservatism, restrictions on housing credit (though not below a certain "floor" established by the previous period), introduction of taxation of real property and a diffused critical attitude towards housing "overinvestment".<sup>42</sup>

This short review of economic policy towards housebuilding helps sufficiently in dispelling any notions that the postwar pattern of aggregate investment and by implication the level of residential investment has been the direct result of a "pro-housing" *development strategy*, or that housebuilding has been consistently favoured by the State. Of course, in the last analysis, the Greek institutional framework and public policy have never been restrictive for real estate investments in any radical or extensive way; this is certainly true for speculative building. But this, needless to say, does not point to the opposite conclusion, namely that the State generally promoted housebuilding. In fact, after the early 1950's, the State did not have any determinant involvement in the mechanism of capital formation and, if anything, its constant concern was *industrial* expansion. Moreover, after the early 1950's Governments exercised policies of strict financial austerity: no more than insignificant amounts of bank credit were allowed to either builders or households, regardless of the volume of savings accumulated in banks and ostensibly aimed for this very purpose. A major exception was the 1968-1972 period

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40. See chapter 4 and D. Emmanuel, Three Studies of Popular Housing, pp. 12-23.

41. The measures introduced in this occasion were a rise in the nominal unit value of buildings for which permit was asked (and thus a rise in the rate of taxation and the various fees), as well as a sharp credit squeeze. For a chronological list of the measures see O.E.C.D., Economic Surveys: Greece, the 1974 and 1975 volumes.

42. For discussions of the post-1974 period, see A. Romanos, "A Review of Housing Policy After July 1974", in Chair of Architectural Design, Problems of Greek Housing (Thessaloniki, 1976): 133-151 (in Greek), D. Emmanuel, Three Studies, pp. 24-38. Post-1974 quasi-official orientations for housing policy can be studied in C.P.E.R., 1976-1980 Development Plan: Housing.

when bank credit added an important "exogenous" boosting factor to the growth of autonomously financed housing investment. But even during this period credit to *developers* was extremely limited.<sup>43</sup> Thus interpretations of the postwar pattern that assume an antagonistic relationship between industrial and residential finance and investment effected through State policy and in some manner favourable for the housing sector, are certainly ill-founded. In consequence, hypotheses (a) and (b) as presented in page 214 should be rejected.

#### 6. The relationship between investment in industry and investment in housing

The force of the last point becomes obvious when we consider certain broader theories about the alleged negative relationship between industrial and real estate capital formation (hypothesis c in page 214). Such theories advance the following thesis: due to cultural and historical reasons and/or due to local and international economic conditions owners of capital "prefer" or "have to" mainly invest resources in non-industrial activities and more specifically in speculative real estate. Hence the "distorted" structure of capital formation in postwar Greece. We must immediately stress that insofar as these theories pertain to the issue of inadequate industrial expansion *as such*, they are of limited interest for this discussion. Our object of study is not the structure of capital formation in itself, but only to the degree that it *explains* (causes through a determinate mechanism) residential investment. The same holds for the controversial issue of the relative importance of various factors in the determination of capitalist investment behaviour, namely the significance of cultural-sociological factors (derived from historical tradition or present social structure) as opposed to purely "economic" ones (i.e. economic rationality in conjunction with various adverse economic conditions peculiar to Greece).<sup>44</sup> We are only interested in the hypothesis of

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43. For the National Mortgage Bank (the main agency for mortgage credit and the exclusive supplier of loans to developers) we have:  
 Total Credit Supply 1945-74 (in mill. drs): 30.654,5  
 of which, housing loans to households 16.138,1  
 of which, loans supplied during 1968-74, 12.638,6 (78,3%).  
 Loans to building enterprises for the whole 1945-74 period (supplied mainly during 1968-74) amounted only to 1.331,1 mills. See, National Mortgage Bank, Report for 1974 (Athens, 1975, in Greek): Statistical Appendix.

44. As far as I know Alexander's Greek Industrialists is the only systematic study addressed to this issue. As we noted earlier, Alexander rejected the "socio-cultural" hypothesis.

a determinate negative relationship between the two types of investment; this, as we noted earlier, can be realised in either one of the following ways: through the behaviour of capitalists (including small ones) or through the "impersonal" mechanism of the "capital market". Let us consider the first case.

The derivation of the trend and level of housing investment from the investment behaviour of the social category of "capital owners" (rentiers and active capitalists) obviously implies the existence of *business* investment in residential property in a large scale. In the case of postwar Greece, however, no such investment flow took place. Substantial rentiers, who may justifiably be considered as potential or actual members of the social category of capitalists, have played a negligible role in residential real estate. We have already noted this lack of substantial rentiers in Chapter 3, but we may add some pertinent facts. In 1967, owners of built property who received income from buildings of *all kinds* in excess of 200,000 drs a year (roughly £ 2500) constituted a mere 0.9% of the building owners included in the tax rolls. These received 17% of all the declared income from buildings. This may appear as a rather large degree of real wealth concentration but it results from the great diffusion of built property among a large number of very small owners - mainly owner-occupiers of housing. In fact, the category of relatively significant rentiers was composed by very modest units of wealth; the average size of the latter did not exceed eight million drachmas (corresponding to annual receipts of 400,000 drs - roughly £ 5000 - assuming a 5% capitalisation rate). If we examine the same category in 1974 as defined by a minimum income from buildings of 300,000 drs per year (in order to take inflation into account), the average wealth unit was in the neighbourhood of ten million drs - surely a very modest sum for purported capitalists.<sup>45</sup> The crux of the matter, however, lies elsewhere: the wealth of this tiny category is concentrated in its largest part in *non-residential* real estate, i.e. offices and commercial property. We may add to this the small market of luxury housing in downtown Athens and Thessaloniki. It is these types of real estate that attract business investment. Moreover, the extensive redevelopment of such high-return central areas in conjunction with the arrangements of "anti-

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45. For 1967 see Table 3.2. Ch. 3 and for 1974, N.S.S.G., Statistics of Declared Family Income and Its Taxation, 1974 (Athens, 1975, in Greek).

parochi" (the appropriation of part of the building by the landowner in exchange for the land) must have certainly created a large part of this wealth *without* any need for the investment of funds. With regard to non-personal rentiers (insurance institutions, incorporated enterprises) similar points can be made. It is well-known that these channel their investments into the same limited area of high-rent non-residential property. It is evident, then, that for the great bulk of residential investment in the country the role of the capitalist-rentier class is of no consequence.

It has been said at times that the return on property investment has been higher than profit rates in industry with the result that funds are drawn away from the latter. We can dismiss these views as ungrounded on this basis of the previous observations alone. However, they also run against direct evidence. Relatively high returns on real property (8.5% - 9.0%) could be observed during the late 1950's and early 1960's.<sup>46</sup> These fell drastically later to a mere 3% - 4%.<sup>47</sup> Such rates of return, even when combined with the capital gains of real property and its security as an asset, may successfully compete with the current rate of interest on bank deposits but scarcely with the much higher returns on own capital in industry.<sup>48</sup>

The above suffice to show that we may justifiably approach the issue of the determination of the level and growth of residential finance and investment for the period under study *outside* the sphere of business capital accumulation. The relevant determinants must be searched for in the sphere of the household sector and the factors that shaped the formation and distribution of household income and wealth. Was there a mechanism that

46. See Ellis et al., Industrial Capital, p. 213. Alexander in Greek Industrialists gives a 10% rate (p. 69). It is interesting that with the current (post-1974) stagnation in industrial investment the thesis of the draining of capital away from industry due to the alleged high return rate in real estate, has gained new life (see O.E.C.D., Economic Surveys, 1978 volume). It seems that the radical discontinuity between capitalist industry and the household economy of residential investment can not be easily grasped by economists accustomed to the integrated capital markets of advanced countries.

47. C.P.E.R., Development Plan for 1976-1980: Incomes Policy, Report of the Study Group, (Athens, 1976, in Greek), p. 81.

48. See the series of profit rates in industry in G. Coutsoumaris, Finance and Development of Industry (Athens, 1976, in Greek): Chapter 6.

connected the latter in an antagonistic way with capital formation in industry through the general "capital market"? We can easily answer in the negative. Postwar Governments after all were right in treating the issue of industrial investment as largely separate from that of housing "overinvestment" as far as the distribution of savings was concerned. The reason was that there was slight probability after the early 1950's for a direct antagonism in the open market between residential and industrial needs for finance. The postwar level and growth of available savings was such that, in comparison to the finance requirements of industry, no problem of capital scarcity arose. Were the case different, an antagonism between industry and housing would have been provoked and this would have led to an inverse relationship between the two types of investment.

Greece is distinguished from other developing countries by a high level of savings in relation to national income. In this respect it approaches the patterns of developed countries.<sup>49</sup> A number of influential economic studies have established that a permanent characteristic of the post-1955 economic scene has been a *surplus* of savings in relation to investment demand - especially in relation to demand from industry.<sup>50</sup> Whereas the volume of savings held in banks increased between 1953 and 1975 by a factor of 16.4 (in real values), bank credit channelled towards the financing of industry increased much less - 10.9 times. It is significant that these funds for industry concerned mostly short-term finance. Bank credit utilised in the formation of *fixed* capital in industry rose during this period by a much smaller factor of 6.8 - surely, a tremendous gap between the demand for and the availability of funds.<sup>51</sup> That this growth in industrial investment credit reflected the growth in the demand for such funds follows naturally from the fact that throughout the period under study Greek Governments implemented policies of generous incentives, low interest rates and easy credit as far as industry was concerned. Orthodox economists, of course, will always argue that more successful monetary policies and better banking institutions would have resulted in different and better outcomes (wishing, in effect, for easy solutions to the problem of industrial

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49. Coutsoumaris, Finance and Development, p. 108.

50. See Ellis et al., Industrial Capital, Ch. 1, Psilos, Capital Market, Ch. 2, Coutsoumaris, Finance and Development, passim.

51. Coutsoumaris, Finance and Development, p. 110.

growth). We know, however, after Keynes, that the really determinant variable in the growth of a capitalist system is the largely "exogenous" datum of investment decisions by capitalists. After all, their relation with savings is not passive: it is determined by the decisions of firms over the desired "structure of finance."<sup>52</sup>

Industrial enterprises in Greece (limited liability companies and Sociētēs Anonymes) base their investments on "internal" financing (withheld profits and derpeciation funds) and to a lesser extent on funds from shareholders and from abroad. Their reliance on the banking system for fixed capital formation is therefore limited. Only a share of just over 20% of the investment in fixed capital and inventories is covered by resorting to bank credit. The easily supplied bank loans are used less for investment in fixed capital and more for the financing of circulating capital, i.e. in the distribution of industrial products.<sup>53</sup> In short, there is a strong emphasis on financial autonomy and on keeping the control of the firm within a limited circle. The same motive explains the well-known reluctance of Greek industrialists to seek finance in the open capital market through the issuing of new attractive securities which could obviously contribute to the much-desired reallocation of small savings away from real estate and towards industry. The saving public has repeatedly showed that it is in ready demand for the supply of such securities as the fast sales of bank and government bonds, whenever these were issued, has proved in the past.<sup>54</sup>

To finish this long discussion, the fact that there was no capital scarcity and no significant overlap between industrial and residential investors *qua* business investors removes the reasons for a necessary negative relationship between the movements of the two types of investment.<sup>55</sup>

52. For a most elegant and illuminating formulation of the Neo-Keynesian macroeconomic model placing emphasis on capitalists' decisions to invest and the structure of financing, see N. Kaldor, "Marginal Productivity and Macroeconomic Theories of Distribution", Review of Economic Studies, 33 (1966): 309-319.

53. Coutsoumaris, Finance and Development, p. 84.

54. See Bank of Greece, Report for the Year 1975 (Athens, 1976): 61-63

55. As Richardson and Aldcroft point out "a high level of building activity need not restrict an economy's capacity for growth except in cases where there is a fundamental scarcity in investment resources" Building in the British Economy Between the Wars, pp. 278-279).

There is, on the other hand (given these conditions), a very strong case for a *positive* relationship between the two. Both sectors relate positively with the movement of incomes and the economy as a whole. Moreover, movements in building are connected positively with industrial activity (and the expectations of industrialists) through the demand for material inputs for building. Postwar movements in investment offer ample evidence for this argument. A linear regression of private residential investment ( $I_h$ ) on private investment in manufacturing ( $I_m$ ) gives the following results:

$$I_h = 3.3770 + 1.5744 I_m \quad (R=0.884) \quad (\text{mill.drs. 1970 prices, 1948-77}).^{56}$$

It may be pointed that this strong positive correlation does not say much since both sectors followed a similar growth path. This is a reasonable point and a helpful reminder against the all-too common reliance on easily successful correlations performed on postwar data which in general show parallel upward trends of growth. Still, the positive relationship is quite significant seen from a broader historical perspective rather than a short- and medium-term one. In order to examine interactions at the more short-term level we have measured the deviations of each type of investment from the respective trends for 1948-1977. These fluctuations are presented in Figure 5.1. It is immediately evident that there are no grounds for an argument in favour of a negative correlation between the two types of investment. Nor is there evidence of a significant positive correlation: linear regression of the deviations of  $I_h$  on the deviations of  $I_m$  gives us

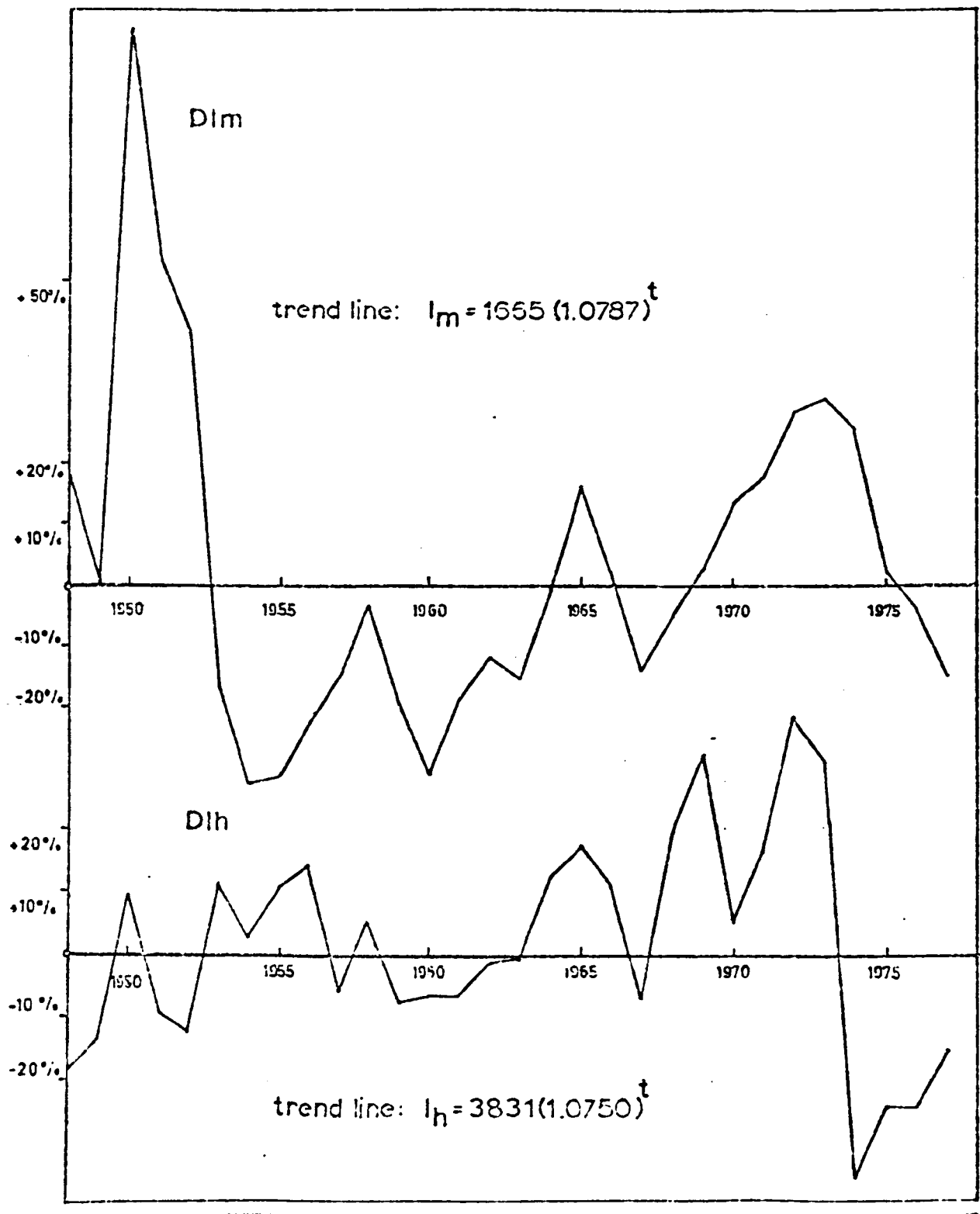
$DI_h = 2.9030 + 0.1519 DI_m \quad (R=0.0993)$ . ("D" is the per cent deviation from the 1948-1977 trend).

After a closer inspection of the time-series, however, a clearer pattern is revealed. We may notice that the shorter duration of the housebuilding cycle makes obviously for a weak correlation between the two series. If we smooth out the series by means of moving averages we would certainly get a stronger correlation. Second, it is evident that the two series relate in a different way before and after the late 1950's. This accords well with our analysis of the postwar period: the relatively strong involvement of the Greek State in capital formation in the earlier part of the postwar period should be expected to distort the pattern generated by private investment behaviour in the market system and create an inverse relationship between residential and industrial investment. Indeed, if there was

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<sup>56</sup>. See, National Accounts, 1958-75 and 1970-77 and General Appendix A.7.

Figure 5.1: Gross Investment in manufacturing ( $I_m$ ) and dwellings ( $I_h$ ) 1948-1977, per cent deviation from trend ( $DI_m$ ,  $DI_h$ )



Source: National Accounts of Greece, 1958-1975, and 1978 Statistical Yearbook. See also General Appendix, Table A.7. The equations represent the respective trends in gross investment which include both private and public investment in constant 1970 prices.



a significant relationship between the two sectors in this earlier part of the period, it was most probably a weak negative one.

A linear regression for 1948-1958 verifies this hypothesis: we have

$$DI_h = 7.3969 - 0.9873 DI_m \quad (R = 0.2905).$$

This contrasts sharply with the pattern of the 1959-1977 period where we have a rather strong positive association (especially in view of our previous point about the different duration of short-term cycles): the respective regression is

$$DI_h = 0.4380 + 0.3649 DI_m \quad (R = 0.4294).$$

Thus for the largest part of the postwar period and certainly the more relevant one (at least in relation to this study), the case for an inverse relationship between residential and industrial investment should be rejected and the opposite one accepted as a matter of fact. We must immediately add, however, that this does not necessarily imply a *direct* determinant association between the two categories of investment decisions. More to the point, the evidence of positive association in the short run, though indicative of definite indirect interrelationships, does not disqualify our argument about the essential autonomy of the residential investment process *vis-à-vis* industrial capital formation. The pattern is simply the result of wider determinants that influence both kinds of investment similarly, namely the movements of income and effective demand and the fluctuations in the "expectations" of the broad class of capitalists (which includes speculative builders).

#### 7. Formation of residential wealth within the household sector

We have shown thus far that the level and growth trend of aggregate residential investment ( $I_h$ ) cannot be understood as the corollary of the structure or "model" of fixed capital formation ( $FCF$ ) as a whole as this has developed in the postwar period. In short, the determinant relations do not lie at the level of the formation of the  $I_h/FCF$  ratio. The reasons are many but the crux of the matter lies in the fact that neither the State nor the business sector of the economy or the organised capital market are the determinant spheres for the allocation of funds into residential wealth. The proper level for the understanding of the structure and determinants of the accumulation of residential wealth is thus to be found within the household sector of the economy. More specifically, the determinant mechanisms are, first, the formation of wealth among households (including small rentiers), i.e. the division of disposable income between

consumption and wealth with all the social-structural and institutional-historical influences involved, and second, the allocation of household demand for wealth among residential and non-residential forms as well as the mechanism of the realisation of the former into actual real estate.<sup>57</sup>

In more systematic terms we argue that the level and growth trend of private residential investment in the postwar period can be explained as the product of the following theoretical framework:

- a. Household demand for additions to wealth ( $dW$ ) is a function of available resources ( $R$ ), and is mainly determined by the relatively stable propensities of households to allocate resources among consumption and wealth as resources change. Resources are composed by previous wealth ( $W_{t-1}$ ) ("historically" given at the beginning of the analysis), disposable real income ( $Y_d$ ) earned at present (including income transfers from the State and abroad) and wealth transferred to the household sector of which the most significant part is that transferred from abroad ( $S_a$ ).<sup>58</sup>

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57. To someone accustomed to the urban economics of developed nations this may sound as going the long way to arrive at an obvious point. Isn't, after all, household demand for real assets the first candidate for the status of a major determinant of building to come to one's mind? The uncritical acceptance of such an assumption, however, would simply betray a lack of comparative and historical perspective. It is hardly obvious in the context of a developing country that the household sector has the substantial autonomy as well as the capacity for extensive capital accumulation; these definitely presuppose a certain level of economic development, a lack of capital scarcity for given investment demand, and a certain "political economy" (a limited involvement of the State in the process of capital accumulation). The absence of these preconditions, moreover, would have important implications for the character of the system of housing production (see Chapter 1). We would expect a very limited precapitalist owner-building sector and the emergence and growth of an extensive speculative sector would involve predominantly "business" capital (more properly, capital of the bourgeois class) and thus follow a radically different dynamic from a sector based on household asset formation. Incidentally, it would also involve direct antagonisms with investment in industry: hence the developmentalist critique of investment in housing. Thus the controversy over the nature of Greek housing "overinvestment" may have often been misdirected but was certainly not irrelevant.

58. We take it that normally  $dW$  corresponds to annual household savings. Since, however, the latter is usually defined as the non-consumed part of disposable income and we wanted to include the effect of shifts in the asset "portfolio" of households and of capital transfers, we opted for the more general concept. A more rigorous formulation of the model is given in the next chapter.

- b) Household demand for additions to housing wealth ( $dW_h$ ) is a function of ( $dW$ ) and is mainly determined by the relatively stable propensities of households to allocate resources among residential and non-residential wealth.
- c) Both the  $dW$ -function and the  $dW_h$ -function ( $dW$  in relation to  $R$ , and  $dW_h$  in relation to  $dW$ ) take forms characteristic for a given country and historical period. More specifically they depend on those aspects of the socio-structural and institutional context that determine the extent of access to wealth and the benefits attached to wealth. Since in countries of lower and middle levels of economic development household savings are mainly channelled into housing wealth, it is access and benefits (social and economic) with regard to the latter that are the most significant component in this relation. The higher the access of households to housing wealth and the benefits accruing to such wealth, the higher is the propensity to channel resources to investment in dwellings (i.e. the higher is the  $dW_h/R$  ratio). "Access" in this context is determined by the cost of land and building, the cost of finance and the "elasticity" of supply of these inputs of housing production. Both past conditions of access to wealth and current conditions exert a determinate influence on the level and trend of the propensity to accumulate wealth (and housing) for given levels of resources.
- d) The ratio of gross private residential investment in dwellings ( $I_h$ ) as measured in National Accounts (i.e. net of the value of land) to the volume of household demand for housing wealth ( $dW_h$ ) is a function of the structure of social relations of housing production, and more particularly the share of the land factor in the product (share of land in the full production price) and the extent of participation of the same factor in the investment. The lower the share of land in costs and the higher its participation in investment, the higher the  $I_h/dW_h$  ratio. This first part of this proposition is less of a substantive hypothesis and more of a self-evident accounting formula. The second part involves a more complex argument: it starts from the observation that in important cases the payments to landowners will not flow outside the housing sector but will take the form of a share in the product and that a part of this share will be kept by the landowner as an addition to his assets. We assume that such investment is induced and should be added to household demand  $dW_h$ .<sup>59</sup>

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59. We expand on this complex relation in chapter 6.

This is highly relevant in a comparative and historical approach to housing investment where the system of housing production varies substantially with regard to the division between landowners and investors in the process of residential development.

Propositions a-d should be understood as tendencies and pressures applying in the medium and long term rather than as formulas for the analysis of short-term fluctuations. They point mostly to certain relations (mainly "propensities") that are "exogenous" historical and institutional facts which, in conjunction with the similarly "exogenous" trends in incomes and capital receipts of the household sector, determine the level and trend of residential wealth accumulation. They also point to a number of relevant conditions that are essential in distinguishing the "peculiarities" of a given country and period in this regard and will thus help us shed light over the issue of housing "overinvestment" in postwar Greece. Still, they do not form a full and coherent model for the explanation of housing investment; there is no specification of the structure of relationship and, more importantly, no account of housing *consumption* demand or any mechanism for the equilibrium of the latter with the postulated formation of "supply". A more analytical and comprehensive treatment of these processes, however, will be advanced in the next chapter. In this chapter we only intend to provide the broad outlines of a model accounting for housing investment in the postwar period, specify the conditions making for the phenomenon of "overinvestment", and thus offer an alternative to the theories reviewed and rejected in the previous part. Starting from propositions a-d as given, we will examine the relevant facts and then list the factors making for the "peculiarity", if any, of the Greek case. Since the matters of costs, access to property and the structure of housing production are dealt with in other parts of this study, we will make summary references to them; only the formation and allocation of household savings and therefore the demand and capacity for accumulation of wealth by the household sector will occupy us in the following.

Table 5.2. presents the trends in gross private residential investment ( $I_h$ ), personal disposable income ( $Y_d$ ) and household savings. The latter, as is customary, is the difference between disposable income and national private consumption and thus falls short (in the case of Greece) of savings in a wider sense which should include savings accumulated abroad and transferred home (apart from remittances). Let us denote the latter by "S" and the former by " $S_h$ ".

Table 5.2: Private investment in dwellings, disposable income and household savings 1948-1976

Period	Personal disposable income ( $Y_d$ )*	Household savings ( $S_n$ )	Gross Private investment in dwellings ( $I_h$ )	$I_h/Y_d$	$S_n/Y_d$	$I_h/S_n$
1948-52	27,739	1,203**	1,185	0.042	0.043	0.985
1953-57	61,829	5,230	3,534	0.039	0.084	0.675
1958-62	90,566	7,933	5,807	0.064	0.087	0.732
1963-67	149,500	18,986	11,025	0.073	0.126	0.580
1968-72	245,827	39,534	22,345	0.090	0.160	0.565
1973-74	431,564	90,909	34,254	0.079	0.210	0.376
1975-76	616,446	(122,000)***	42,118	0.068	(0.197)	(0.345)

Source: National Accounts of Greece, vols 23 & 25 (1958-1975, 1973-1977).  
 (\*):  $Y_d$  for 1948-57 and 1975-76 includes savings of corporations. These amount to 4-5% of  $Y_d$  in the later period but are substantially smaller in the earlier. (\*\*): Savings estimates for this early part should be considered unreliable. (\*\*\*) : Our estimate based on the difference between  $Y_d$  and national private consumption increased by 9% - the average difference between the direct and the residual estimate of  $S_n$  in National Accounts of previous years.  $S_n$  in the Table is based on the residual estimates of national private consumption.

Table 5.2. presents also the trends in the  $I_h/Y_d$ ,  $S_n/Y_d$  and  $I_h/S_n$  ratios. Before we examine these trends it is necessary to stress an important limitation of the data. Since we are dealing with National Accounts, the operational definition of the "Household" sector (or "personal" sector) is more inclusive than the one dictated by the theoretical distinction between "households" and "firms" in a "pure" capitalist economy. In our case it also includes unincorporated enterprises which in Greece form a substantial part of the economy: we may say that roughly between one-quarter and one-third of the urban product originates in small-scale, unincorporated units similar to a large extent to household production.<sup>60</sup>

60. In 1958 industries of the Société Anonyme and Limited Liability form controlled only 42% of total fixed assets in industry: their share, however, grew fastly to a 90% in 1973 (Coutsoumaris, *Finance and Development*, p. 13). Of these, incorporated enterprises proper (Societes Anonymes) formed the largest part: in 1960 of a total of 447 S.A. and Ltd firms publishing annual "balance sheets" 409 were of the S.A. form. Ltd-form companies grew fastly in numbers but their relative economic role remained marginal: in 1970 S.A. firms, though 755 in a total of 1009 (those publishing "balance sheets"), held 98% of fixed assets! (See Federation of Greek Industrialists, *The State of Greek Industry* in 1971 (Athens, 1972), p. 124, Tables III, VII). Thus

This is even more pronounced in agriculture (though cooperatives are not included in the "household" sector). We must keep in mind, therefore, that these imperfections introduce into the observed pattern of savings elements that belong less to "household behaviour" and more to the sphere of producers' decisions.<sup>61</sup> We will neglect at this stage the complexities arising from this problem. We will assume that the household unit proper (i.e. one concerned exclusively with decisions over consumption and the accumulation of "passive" wealth) is the dominant element in the system, and leave the examination of the significance of such "intermediate" categories as the self-employed, artisans, peasants and small businesses for a later stage (in the next chapter).

The data in Table 5.2 present a clear-cut pattern.

- a) The savings ratio ( $S_n/Y_d$ ) increases rapidly throughout the period with the exception of the last two years. Either the high rate of inflation during 1974-1976 or the stagnation in incomes in 1974-75 in itself, or both, led to an increase in the marginal propensity to consume. For the period we study (1948-1974), it is evident that Greek households have attained by the end of the 1950's a remarkably high savings ratio comparable to that of more developed countries, and showed throughout the period an impressively high marginal propensity to save.<sup>62</sup>

during most of the 1960's and certainly during the early 1970's the incorporated sector in industry involved more than three-quarters of industrial capital. This share was, however, lower in other urban sectors - especially retail, construction and personal services.

61. By definition, only the distributed part of corporation profits is included in personal disposable income ( $Y_d$ ) retained profits for corporation savings and for the depreciation found are excluded. In the case of unincorporated enterprises, the total of profits is included in  $Y_d$ . Therefore, part of "household savings" as recorded in National Accounts, consists of the savings necessary for the growth of small firms and the capital of independent producers, and thus lies outside the sphere of the household unit proper. The distinction, however, is analytical and extremely difficult to apply in a petty-production, household-centred economy.

62. In the U.K. and the U.S. during the first half of the 1960's the average savings ratio in the household sector was 0.069 and 0.103 respectively. See, N. Kaldor, "Marginal Productivity and Macroeconomic Theories of Distribution". For the comparatively high marginal propensity to accumulate wealth observed among Greek households, see also chapter 6.

- b) The amount of savings channelled into residential investment has been very high up to the early 1970's.<sup>63</sup> The  $I_h/S_n$  ratio, however, in contrast to the savings ratio, shows a declining trend (with the exception of a reversal in 1958-62). It is evident that as savings (and wealth) grow, households devote an increasing share of savings to non-residential assets. The sharp drop after 1973 partly continues this trend, but is otherwise exceptional, manifesting the extreme dimensions of the 1974-1975 building slump.
- c) As an implication of our theoretical assumptions about the determinant role of the  $S_n/Y_d$  and  $I_h/S_n$  ratios (conceived mainly as exogenously given "propensities"), the  $I_h/Y_d$  ratio must be simply considered as a composite product of these relations. Its trend in Table 5.2 reflects the opposite trends in the other two ratios; it is obvious that the influence of the high marginal propensity to save is much stronger than the low marginal propensity to accumulate residential wealth, with the effect that the  $I_h/Y_d$  ratio shows a fast rise (with the exception again of the 1974-1976 period).

#### 8. The significance of capital inflow

Current savings out of disposable income do not exhaust the flow of resources available to households for wealth accumulation. We must also consider the net inflow of capital from abroad towards the household sector, an item that is well known to be of exceptional importance in the case of Greece. The inclusion of the capital inflow from Greeks working abroad or repatriating ( $S_a$ ) raises substantially the savings-income ratio ( $S/Y_d$ ).<sup>64</sup> The inflow of private non-business capital has remained at high levels throughout the postwar period. Its composition and origins, however, have changed substantially in ways that have direct bearing on the social character and level of residential investment.

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63. We may compare this again with the pattern in the U.K. and the U.S.: the ratio of private investment in dwellings to household savings during 1960-65 was 0.405 and 0.456 respectively - well under the ratios observed in Table 5.2 (Kaldor, "Marginal Productivity").

64. Thus we assume that  $S=S_n+S_a$ . However, we have also assumed that  $S_a$  is part of "resources"  $R$  and therefore adds to the demand for wealth (expressed in  $S$ ) after the allocation of resources into consumption and assets. This implies that the propensity to consume out of  $S_a$  is zero. Given the character of  $S_a$  (most of which is earmarked for real estate), this is a reasonable assumption.

During the late 1950's and early 1960's a large number of Greek families of the "diaspora" communities - mainly in Egypt and Istanbul - had to take permanent residence in Greece. This involved a substantial inflow of capital and a consequent boost of real property demand. During the same period most of the normal inflow of household capital from Greeks living abroad originated in the United States and Congo. The greatest part of this inflow of funds concerned the middle-class housing market. Since the early 1960's the fastly rising number of immigrant workers in Western Europe (mainly Germany) generated a growing inflow of capital that soon became a very important new component in the inflow of funds; this was largely channelled into the working-class and lower middle-class housing market. Parallel to these inflows dependent on the movements of immigration and the behaviour of Greek communities, we had the equally significant inflow of funds from Greeks working in the merchant marine. Most of the capital inflow from all these sources has been directed towards investment in housing in urban areas. It has been estimated that between one-fifth and one-quarter of new dwellings built in Athens in the late 1950's was purchased (or directly built) by Greeks living abroad. This share was probably lower for the country as a whole. During the first half of the 1970's something like 20-25% of total residential investment could be accounted for by the inflow of resources transferred from Greeks living and/or working abroad; thus the importance of external funds has not diminished.<sup>65</sup> This whole phenomenon constitutes a factor of major significance in the formation of the comparatively high rates of residential investment in the postwar period and points to a definite "peculiarity" that sets Greece apart from other developing countries. Table 5.3 presents the trends in the inflow of capital and Table 5.4. their relationship to  $I_h$  and  $S_n$ .

The figures in Tables 5.3 and 5.4 suffer from a number of imperfections inherent in the recording of international transactions. Nevertheless, they provide a fair approximation of the magnitude of "exogenous" savings flowing into the household sector as well as of the part of these channelled into real estate *directly* (i.e. "earmarked" at the point of entry). The latter is represented roughly by the figures in column (1) of Table 5.3; it involves

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65. For Athens in the late 1950's, see Ellis et al., Industrial Capital p. 222. The estimates for the country as a whole for the mid-70's are from OECD, Greece (1978), p. 35.



Table 5.3: Net inflow of capital for the household sector, 1953-1976

Period	million drs., current prices			
	(1) Net inflow of non- business capital	(2) Foreign Exchange deposits in Banks	(3) (1)+(2)	(4) (1)/(3)
1953-57	(850-900)*		(850-900)	(1.000)
1958-62	(2,335)**	Insignificant for	(2,335)	(1.000)
1963-67	4.533***	1953-67	(4,533)	(1.000)
1968-72	17,283	9,390	26,673	0.647
1973-74	15,477	7,200	22,677	0.682
1975-76	23,400	4,644	28,044	0.834

Source: Bank of Greece, Reports for the Years 1970 & 1977 (Athens, 1971 & 1978), and Statistical Yearbooks. Amounts in drs have been derived from the equivalents in U.S. dollars; the conversion rate was 30 drs for the period up to 1974, 32.3 for 1975, and 36.9 for 1976. (\*): Estimate based on the net inflow of capital in the 1948-70 National Accounts minus capital imported under Law 2687/53 (business investments) reported in Ellis et al., *Industrial Capital*, p. 287. Since we have not subtracted capital transfers for corporations, the figure may be an overestimate. (\*\*): The figure refers only to capital imported for building and land. However, this is marginally less than the total of category (1). (\*\*\*): Includes an estimate for 1963 based on a comparison of Bank of Greece data with O.E.C.D. data for 1960-69 (O.E.C.D., *Greece*, 1978, p. 34). See also General Appendix, A.8.

Table 5.4: Private investment in dwellings and net capital inflow for the household sector 1953-1976

Period	(annual averages, million drs, current prices)			
	Net inflow of non- business capital and foreign exchange deposits ( $S_a$ )	Current household savings plus $S_a$ ( $S_n+S_a$ )	$S_a/S_n+S_a$	$I_h/S_n+S_a$
1953-57	(180)	(5,410)	(0.033)	(0.653)
1958-62	(467)	(8,400)	(0.055)	(0.691)
1963-67	1,625	20,611	0.078	0.534
1968-72	5,335	44,869	0.119	0.498
1973-74	11,338	102,247	0.111	0.335
1975-76	14,022	125,836	0.111	0.334

Source: Tables 5.2 and 5.3. " $S_a$ " has been calculated from column (3) of Table 5.3. Parentheses indicate estimates.

the greatest share of the incoming funds, though from a share near 100% it rapidly fell to a level slightly over 50% in 1972. Between 1973 and 1976 this share followed a sharp upswing.<sup>66</sup> This pattern of resource allocation between real estate and other (mostly liquid) assets resembles the one observed for the  $I_h/S_n$  ratio and thus the composite long-term trend in the relationship of residential investment to total savings ( $S_n + S_a$ ) shown in Table 5.4. expresses clearly the fact that residential wealth diminishes in importance as household wealth grows. With respect to "exogenous" savings, the increasing importance of foreign exchange deposits in Greek banks as opposed to capital inflow for real estate should be understood in the light of this tendency. Certain institutional changes, however, may have been of some importance. After 1968 the Greek State and the Banks pursued an aggressive policy for attracting foreign exchange deposits from Greeks abroad. An important element of these policies and institutional innovations has been the introduction of a housing savings scheme in the Mortgage Bank of Greece with especially favourable terms for foreign exchange deposits. It is equally important that the depositors of the latter category were entitled to a housing loan proportional to their deposits on demand, thus exempted from the usual strict limits imposed by the Currency Committee on the annual level of bank credit for housing.<sup>67</sup>

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66. See the detailed series in General Appendix A.8. Similar estimates for the share of capital inflow "earmarked" for real estate have been made in OECD, Greece (1978), pp. 34-35. The following figures are given (mills of U.S. dollars, annual averages):

	1960-69		1970-76	
1. Capital Transfers for Real Estate from Greeks Abroad	51	90%	210	50%
2. Foreign Exchange Deposits by Greeks Abroad	6	10%	214	50%
	57	100%	424	100%

There seems to be a certain discrepancy between these estimates for foreign exchange deposits and those in Table 5.3. Our series have been based on the category "Other Deposits" in the Bank of Greece series of capital transactions. This category excludes deposits in the Central Bank, foreign loans and other credit to banks and the deposits coming under L.D. 2687/53 - which concerns foreign *business* investments.

67. For the fast growth of foreign currency deposits and the volume of loans to such depositors, see the graphs in National Mortgage Bank, Annual Report for the Year 1975.

The previous observations suggest that the share of savings inflow finally channelled towards housing may have been substantially larger than the division between bank deposits and capital earmarked for real estate presented in Table 5.3 indicates. This increases the importance of capital inflow for residential investment. It also reflects the social character of Greek savers abroad: mainly working-class and lower middle-class strata. It would be wrong, however, to deduce from this that most of these funds were channelled into the popular non-speculative housing sector. The sectoral effect of household capital inflow is ambivalent. It may be argued that it infused into autonomous popular owner-building substantial economic resources that were of crucial importance for its reproduction during the late postwar period. It may also be argued, however, that it was mainly directed into the vigorous petty-speculative, intermediate sector fastly expanding in popular areas in the 1960's and early 1970's. After all, contrary to a current misconception, the household capital inflow during this period was not predominantly composed by the savings of workers in Germany, though their importance has been certainly growing in the 1960's. Of equal importance was the inflow of funds accumulated in U.S. and U.K. banks - presumably from incomes earned in the merchant marine and by the sizeable Greek community in the United States. Table 5.5 shows the distribution of the types of net capital inflow we have been examining by country of origin: "origin" in this context refers more to the respective banking systems from which the capital flow originates rather than strictly the place where the savings were produced. This distinction becomes important in the case of Greece with her large shipping fleet.

Even by the beginning of the 1970's the savings of workers in Germany, though certainly substantial, were hardly more than a third of the total. During the 1960's they were much less. Since the large inflow in U.S. dollars can hardly be accounted in its great part by the Greek overseas community, we must conclude that the largest single part of the inflow consists of the savings from earnings in the shipping fleet. This assumption gains credence by the fact of the much higher remuneration of employees in ships compared to that of manual workers in Europe. The latter, after all, channel most of their non-consumed earnings in regular remittances to their families back in Greece; these are not included in the capital transactions account.

Table 5.5: Main countries of origin of net capital inflow to the household sector 1966-1975 (selected years).

Country of Origin	Millions of U.S. dollars, current prices.							
	1966		1969		1972		1975	
E.E.C.*	11.3	(17.2%)	22.4	(24.4%)	120.3	(35.2%)	156.4	(32.0%)
U.S.A.	31.8	(48.6%)	37.9	(41.4%)	122.3	(35.8%)	154.8	(31.6%)
U.K.**	12.1	(18.5%)	19.3	(21.0%)	53.8	(15.7%)	83.1	(17.0%)
Rest of World	10.2	(15.7%)	12.0	(13.2%)	45.5	(13.3%)	94.7	(19.4%)
All areas	65.4	(100.0%)	91.6	(100.0%)	341.9	(100.0%)	489.0	(100.0%)

Source: 1968, 1970, 1973, 1977 Statistical Yearbooks. "Net Capital Inflow" includes Non-business Capital Inflow and Foreign Exchange Deposits in Greek Banks. (\*): Excluding the U.K. (\*\*): Including Ireland and Iceland.

Conclusions: The "peculiarity" of the Greek case and housing "overinvestment"

Let us now summarise the argument. The level and trend of residential investment in the postwar has been the corollary of the growth of household sector resources (income and wealth). The pattern of "propensities" governing the particulars of the structure of consumption and asset accumulation mediated this relation. These "propensities" reflect on the one hand certain "universal" behavioural tendencies, and on the other, influences peculiar to the country and period under examination - parameters determined by the sociostructural and institutional context. The distinction is analytical and obviously difficult to apply; it is nevertheless an important one. "Engel's law" on the diminishing role of food in household consumption as incomes rise and some generally applicable distinctions between "luxuries" and "necessities" have been fruitful universals in consumption studies. An income elasticity of saving higher than +1, a wealth elasticity of housing investment lower than +1, and an S-curve for the income elasticity of housing consumption are plausible candidates

for such universal behavioural tendencies, though even here certain conditions with regard to the relevant range of development levels seem necessary. Anyway, even a cautionary acceptance of such "universals" in conjunction with the fundamental uniformities found among a large number of countries with respect to economic growth, urbanisation and modernisation under capitalism, makes the postwar Greek pattern of housing investment predictable ("natural") to a very large extent.

Still, the Greek rate of housing investment has been high even in terms of such an approach. This calls for a certain insistence on the relevant "peculiar" conditions. We have rejected the theories that explain housing "overinvestment" as a product of the determinants of the structure of capital formation as a whole (more specifically as a corollary of industrial "underinvestment"). We have singled out the following "peculiarities":

- a) A relatively high household propensity to save. We noted that this should not be understood simplistically as a "psychological-cultural" attribute for it may be derived directly from the structure of the Greek society and economy, namely the persistent reproduction of a highly diffused distribution of small property which in turn points to the strong precapitalist and petty-bourgeois component in the economy and the class structure.
- b) An exceptionally high rate of capital transfers to the household sector from abroad. This again relates to a structural "invariant" of Greek society - the significance of Greek communities and economic activity abroad.
- c) A relatively high propensity to allocate household savings in housing wealth. A somewhat high rate should have been expected for a country in a "middle level" of economic development where substantial household savings become possible and more necessary assets like housing take precedence and consume the best part of household resources. However, it is only reasonable to assume that the exceptionally "democratic" distribution of land and house ownership in postwar Greece encourages by itself a high propensity for residential wealth accumulation. After all, the degree of access to a certain form of wealth and the benefits historically associated with such wealth are significant determinants of the propensity to choose this form. Though from a capitalist's view-

point residential real estate does not offer obvious comparative advantages, it does so from the viewpoint of households. While rental rates have been low in the postwar period, property values have kept abreast of inflation. Housing in the Greek social context, moreover, satisfied the needs of the household sector for relative autonomy and security and the needs derived from the emphasis on the transmission of wealth through dowries and inheritance. On the institutional side we may note the fact that for most of the period, access to land was widespread and taxation of landed property and development gains was virtually non-existent. Thus the socio-structural and institutional factors that formed part of the "dual" system of housing production in Greece have also induced high rates of real wealth accumulation through an influence at the level of behavioural tendencies.

- d) Though the favourable trends in housing costs have not been discussed in this Chapter, they must be certainly added to the factors making for high investment rates (for a detailed account see Appendix 6.1). It suffices to say that from the mid-1950's to the beginning of the 1970's construction costs have increased with rates similar to the rate of general inflation; in real terms, therefore, they remained stable. This implies favourable trends both in the "elasticity" of supply as well as in the rate of productivity growth in construction and the set of related industries, especially in view of the fast rises in real construction wages and the lack of labour surpluses after the 1950's. Similar observations can be made about the cost and the supply of land. Though land prices increased with fast rates the *share* of land in housing prices remained fairly stable. There is evidence, however, that conditions in this respect got increasingly worse after the mid-1960's (see Appendix 6.1).

There are certain aspects of the Greek housing system that also merit attention in any systematic examination of the "peculiarities" making for high rates of residential investment. One is the high ratio of participation of the land factor in the finance of housebuilding, which makes for a high ratio of actual housing investment to the initial property demand. Another may be found in the particular form of the supply-demand relation prevalent in the Greek "dual" housing system that safeguard

against the crises of over-supply and crashes in market values observed in more "modern" housing markets. These additional factors, however, will be discussed in the next Chapter. For the purposes of the present analysis the former list will suffice.

Having said all this, I would argue that from a theoretical viewpoint the conceptualisation of these factors as "peculiarities" in the sense of a *fortuitous* combination of factors is misleading. The whole set of factors listed above is not only sufficient for a high rate of residential investment; it is to a very large extent *necessary*, too. The presence of these factors is *implied* by the very occurrence of the combination of a "middle-income" capitalist country and fast economic development. The case thus becomes to a great extent typical and there is no need to place any great theoretical weight on the concept of "peculiarities". The reasons for this become apparent after a simple elaboration of the main prerequisites for fast economic development in the case of an underdeveloped country under a liberal-capitalist regime. We have stressed already the crucial role of the expansion of effective demand (mainly consumption) for fast capitalist growth. Now, this expansion is most likely to take place under the following conditions: first, a sufficiently high initial level of national income per capita - hence a "middle-income" country; second, a relatively non-skewed distribution of personal income which, in terms of a two-class model, implies comparatively high wages, and in a less "pure" capitalist economy, high petty-bourgeois incomes so as the effective demand of the non-capitalist class (within which housing construction is a major element) may sustain a substantial and growing local market relative to the capacity of the economy as a whole. These conditions constitute crucial parameters for a sustained expansion of effective demand and thus for a long-term mobilisation of capitalist investment.<sup>68</sup> Such a dynamic of growth, however, in the context of an

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68. It may be pointed out that this thesis is neither self-evident nor uncontroversial. (For one, we abstract from the complications that the possible existence of a major export sector will introduce into the argument). I will refer the reader to the rich Marxist and Keynesian literature on "underconsumption" and the "realisation problem" (in essence the problem of effective demand) and on the significance of the distribution of income and property for capitalist growth. The classics (Malthus, Marx) first pointed to the stagnationist tendencies of a "polarised" capitalist economy, i.e. one with a small bourgeoisie and a mass of wage labour living at subsistence levels. These tendencies stem from the lack of consumption markets large enough to effect the "realisation" of the expanding capitalist product. Malthus argued that the extensive consumption of the

underdeveloped country - i.e. one lacking in productive capacity and capital resources - requires, in order to succeed, the presence of a third crucial condition: a substantial net inflow of capital from abroad. For it is obvious that such a "model" of growth is prone to scarcity of capital and excessive imports and thus balance of payments crises and an endemic lack of foreign exchange.<sup>69</sup>

The effective operation of such a model of growth - which, with the exception of "anomalous" cases like the oil-producing countries, should be viewed as the logically typical scenario of capitalist economic development in the modern world-system - implies precisely the configuration of the "socio-structural" factors we listed before as "peculiarities" of postwar Greece. A non-skewed income distribution and relatively high non-capitalist incomes imply, in the context of early capitalist urbanisation-industrialisation, the presence of a relatively diffused property distribution:

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landed aristocracy provides the necessary counteracting force. The significance of such a class, however, measured by its distinct socioeconomic identity, consumption patterns and its size, has been limited in advanced capitalist countries for some time (P.M. Sweezy, The Theory of Capitalist Development, New York, 1970, pp. 228-229). This is also true in the case of developing societies that went through agrarian reform or developed a thoroughly capitalist agriculture. The expansion of consumption should therefore come either from wages or from "unproductive" incomes - service workers, State-employees, the professions etc. Some Marxists, reluctant to accept the fundamental role of wage-rises for capitalist growth, stressed the importance of the latter (Sweezy, The Theory, pp. 230-231). Others, without denying the importance of "unproductive" consumption in general, lay emphasis on the autonomous rise of real wages (Arghiri Emmanuel, Unequal Exchange, pp. 372-380). Part of the difference, of course, revolves around the definition of the "wage-labour" class. It is evident, in the case of Greece, anyway, that rises in both wages and urban "unproductive" incomes have been important (and interacting) factors. The idea that cities and the growth of petty-bourgeois "unproductive" strata may solve the growth problem of capitalism (the celebrated "realisation" problem) has some history in Marxism. Struve's theory of the "third persons" was such a case; it was reviewed and rejected by Rosa Luxemburg in her Accumulation of Capital (London, 1963), pp. 292-297. Henri Lefebvre has returned to the potential value of this idea and has pointed some weaknesses in Luxemburg's critique (Marxism and the City, 1972, Greek Transl. 1976, Athens, pp. 131-132). See also the reference to Passinetti in note 21.

69. The systematic interrelationship between fast growth and high capital inflow in the case of developing countries is substantiated in H. Chenery and M. Syrquin, Patterns of Development 1950-1970 (London, 1975), p. 101. See also Arghiri Emmanuel, "Myths of Development and Myths of Underdevelopment", New Left Review, 85, (1974): 61-82. Emmanuel stresses, however, that despite the fashionable myths of "investment imperialism", developing countries with a high capital inflow and a successful realisation of the model of fast capitalist growth are very rare - he points to Greece as such an exceptional case.



a historical pattern characterised by a strong petty-commodity production sector, a substantial petty bourgeoisie and widespread access to ownership of land and means of production. This will also make for high wages in the capitalist sector. As we argued, however, in the first chapter, these conditions make highly probable the existence of a "dual" housing system with a high access to land and widespread house-ownership. This, as well as the wider pattern of class structure (property distribution), will induce high propensities to save among households and a high share of expenditures on real estate. A high capital inflow will either consist mainly of transfers to the household sector (as in Greece), or will come in the form of substantial direct foreign investments (a more rare case). Both will facilitate further borrowing from abroad. In all cases, capital inflow will reduce the chances of capital or foreign exchange scarcity and thus permit a rapid expansion of household sector expenditure. The availability of external finance, furthermore, will make possible a fast mechanisation of production with imported machinery (made necessary in the face of rising wages) and thus prevent rising costs and supply inelasticities (bottlenecks). These mechanisms facilitating fastly rising expenditures and a check on costs, concern the whole of the economy; they are especially relevant, however, in the case of housing investment which is distinguished by its high resource consumption.

There is thus no need to resort to any fortuitous combination of "cultural-historical" peculiarities in order to account for the Greek pattern. The "peculiarity" that is suggested by cases like Greece results from the simple fact that the successful realisation of the aforementioned "model" of growth is *highly uncommon*. "Middle-income" developing countries in the postwar form a small minority in a global perspective. Few of these, moreover, showed fast rates in the growth of per capita incomes. This select group tended to present the configuration of features expected on the basis of the previous argument. From a sample of 49 capitalist developing countries with a GNP per capita between 67 and 1126 U.S. dollars in 1965 (which leaves out more than 35 very poor countries) only 15 could be considered of "middle-income" level (having more than 400 dollars GNP/capita - Greece had 587). Of the ten of these for which construction data are available, only four (Greece, Spain, Puerto Rico, Israel) show both high rates of income growth during the 1960's (around 6%) and high shares of housing investment in the GDP (between 5% and 8%). In the other extreme there are four Latin American countries (Venezuela, Argentina, Chile, Uruguay) that show very low rates on both accounts: income growth

between 0% and 2.5% and  $I_h/GDP$  ratios lower than 3.5%. The former cases, with the exception of Puerto Rico, showed distinctly low indices of inequality in the income distribution, as well as very high rates of capital inflow (a high index of inequality in the case of Puerto Rico was balanced by an exceptionally high capital inflow). The exact opposite, on both accounts, was true for the Latin American countries. The remaining two cases of "middle-income" countries - Ireland and South Africa - could not be as easily categorised.<sup>70</sup> This pattern is fairly suggestive of the realism of our argument. It is also obvious that such a small number of cases cannot support broad generalisations. The case for the systematic character of the interrelationship between housing investment and the pattern of economic development in postwar Greece must be ultimately based on theoretical grounds. Having said this, we may add that the fact that only three or four cases follow this pattern (of which the most clear-cut are Greece and Israel - admittedly very exceptional) justifies indeed the use of the term "peculiarity".

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70. Data for GNP per capita growth rates, income distribution and capital inflow are from Chenery and Syrquin, Patterns of Development, pp. 102-103. Data for the share of residential construction in GDP from United Nations, Compendium of Housing Statistics 1971 (New York, 1974), Table 16 (shares for 1964 and 1969, averaged). For Uruguay, Argentina and South Africa, the share of residential construction in GDP, being unavailable, has been estimated on the basis of the share of construction as a whole and the relationship of housing construction to total construction typical for this group of countries.

## 6. Structure and Determinants of Residential Capital Formation

In the previous chapter we have indicated the most important determinants of aggregate residential investment in postwar Greece. The terms adopted in that context have been highly general and our analysis has advanced no further than a very broad outline of the more relevant aspects. This sufficed for our immediate purposes, namely the critique of some widely accepted but misleading approaches to the issue from the viewpoint of conflicts over economic development and the pattern of capital accumulation. It also served in directing attention to the proper objects of analysis, that is, the pattern of consumption and wealth formation within the household sector and the institutional and economic context of the housing system. In essence, that analysis aimed at a clearing of the ground and the establishment of certain important starting points. It can hardly be considered a thorough and rigorous explanatory model of the structure and determinants of residential capital formation in postwar Greece. In the progress of our analysis we had to brush over certain major issues that are essential to a logically consistent account. These concern the relationship of the demand for residential wealth (i.e. savings earmarked for housing) with the demand for housing consumption, on the one hand, and actual investment in housing or, more properly, housing production, on the other. Another important gap in the analysis concerns the specific role of "exogenous" influences such as the price of urban land, construction costs, inflation, and the rate of interest on mortgage credit as well as the volume of the latter. More importantly, in our account of the trends in residential capital formation during the postwar period we have not stated in an explicit and, if possible, formal manner the assumptions about the behavioural and "socio-structural" tendencies governing these trends. An adequately systematic account must certainly consider these issues. Given the current lack of theory and empirical research on the economics of early capitalist "dual" housing systems such as the one prevailing in Greek cities, and the immediate relevance of the formation of aggregate residential capital for an understanding of the growth of speculative building which is

the object of this study, the necessity of going into the specifics of a comprehensive model is obvious.

In the present chapter we will be occupied with the elaboration of such a model. First, we will set forth a number of theoretical propositions that appear relevant and realistic in the light of what we know about the Greek housing system as well as in the light of current economic theory and comparative evidence. Then, we will give a full formal description of the model thus derived. Last, we will present the "empirical superstructure" of the model, that is empirical estimates of the parameters involved and checks of the goodness of fit between the assumed relationships and the patterns found in the evidence for the period under study.

### 1. Savings and consumption in the household sector and the formation of residential wealth

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In the previous chapter we presented the postwar trends in household disposable incomes, savings and investment in dwellings, whereas in the fourth chapter we examined the trends in housing consumption in relation to total household consumption and incomes. In both cases certain clear-cut patterns in the long-term relationships between these magnitudes have been observed with the implication that these patterns represent the aggregate manifestation of a set of "propensities" with regard to consumption and wealth on the part of Greek households. They also reflect, of course, the influence of factors operating or originating outside the sphere of household behaviour. Nevertheless, from a logical point of view and in accordance with our thesis (defended in chapter 5) that the proper locus of analysis is the behaviour of the household sector, a model of savings and consumption behaviour is the necessary starting point. In the following we will advance a number of theoretical propositions constituting such a model. This will serve as the main building block in the construction of an explanatory model of the process of residential capital formation as a whole. In doing this we will be guided by three reference points: certain well-corroborated theories of household behaviour; the specificities of the Greek housing system and household economy; and the implications of the empirical patterns examined in previous chapters.

The theoretical assumptions we propose are the following:

- a) Total household consumption ( $C$ ) as well as housing consumption ( $C_h$ ) are not determined by (are not a function of) current income but by "normal" income or "economic resources". The latter, at the level of the household unit, are of necessity subjective estimates based on (1), past incomes, (2), current available resources (earnings *and* assets) and (3), future prospects for earnings and wealth transfers. We further assume that at the level of social groups the obvious difficulties inherent in such a "subjective" variable are drastically reduced and that a successful operationalisation of the concept can be effected in the light of the historically patterned and structurally determined distribution of "life chances" among groups (Weber's "market situations"). The main point is that the traditional Keynesian consumption (and saving) function  $C_t = f(Y_{d,t})$ , where  $Y_d$  is current disposable income, should be rejected and that other forms of resources (such as wealth) and the structured pattern of opportunities should be fully considered. This theoretical argument has been also stressed in previous chapters,
- b) The two conceptualisations of "normal" income that are most widely accepted in current economic theory, namely Friedman's "permanent income" and the concept of "current resources" incorporated in the "life-cycle" hypothesis (Ando, Brunberg and Modigliani) suffer from serious weaknesses.<sup>1</sup> On the one hand they suggest formulations that are extremely difficult to apply empirically, and on the other they are based on the restrictive general assumption that consumption is the *sole* object of household behaviour. Thus in the case of the "life-cycle" model where the matter is considered explicitly, the accumulation of wealth (including, presumably, housing) serves no other purpose than the planning of the

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1. See the excellent review in M. Bruce Johnson, Household Behaviour, Chapters 4 and 5. "Current resources" in the "life-cycle" model are defined as the sum of current and discounted future income earnings over an individual's lifetime and his current net worth. See, Ando, A & Modigliani, F. "The Life Cycle Hypothesis of Saving: Aggregate Implications and Tests", American Economic Review, 53, 1 (1963). Friedman conceives income as the sum of a permanent and a transitory component. The former reflects those factors that a household unit regards as determining its capital value or wealth. These are nonhuman wealth, the personal attributes of the earners in the household such as training, ability and personality, and the attributes of the economic activity of the earners, i.e. their occupation, the location of their activity, etc. See, M. Friedman, A Theory of the Consumption Function (Princeton, 1957).

consumption stream in a household's life given expected changes in earned income. In short, wealth does not convey "utility" *as such*.<sup>2</sup> In contrast we postulate here that wealth is valued in itself. The reasons may be diverse - social power, prestige, security or the desire to provide for one's offspring. Given the significance attributed to dowry and inheritance especially in the form of real estate in the Greek context, the pertinence of the last point should be obvious. We may add that in conditions where an economy of the household type (peasant-like) is widespread, household wealth provides to petty businessmen a hedge against adverse circumstances and a base for much-valued "autonomy". Here the concepts of "household" and "business" lose their analytical precision and, in terms of behaviour, become intermingled. With these points in mind, we may advance the general proposition that households' decisions over the accumulation of wealth and current consumption are determined by a "utility calculus" that balances the utility of wealth as against that of consumption within the constraints imposed by given "resources" (accumulated wealth and current income).<sup>3</sup>

c) In formal terms the previous propositions imply the following:

$$C_t = q \cdot W_t^b \quad (1) \text{ within the constraint of a given } R_t$$

where  $R_t = W_{t-1} + Y_{d,t}$  (2) (definition)

and  $C_t + W_t = Y_{d,t} + W_{t-1}$  (3) (identity)

( $C$ ) is total consumption, ( $Y_d$ ) is disposable income, ( $R$ ) "resources", and ( $W$ ) is "wealth" or total household assets or in common usage "net worth". We abstract in this formulation from problems resulting from the presence of wealth transfers, capital gains or depreciation; all assets are created

2. Both the "life cycle" and the "permanent income" models are based on the theoretical assumption that

"... the typical household chooses a consumption stream such that its utility function defined on present and future consumption is maximised subject to a long run or lifetime resource constraint". (Bruce Johnson, Household Behaviour, p. 66).

3. This formulation and the formal model that it implies follow closely the arguments in Bruce Johnson, Household Behaviour, Chapter 6. We have added, of course, an explicit treatment of housing wealth and housing consumption.

by equivalent savings, i.e. the difference between  $Y_{d,t}$  and  $C_t$ . This is stated by expression 3: savings  $S$  equal  $Y_{d,t} - C_t$  equal increases in wealth  $W_t - W_{t-1}$ . Depending on the desired levels of consumption and wealth with given resources, savings may be negative (dissaving) - a common occurrence in cases of hardship and among pensioners. Although the previous formulation lends itself more easily to mathematical analysis, most especially when  $Y_d$  follows a stable growth path, nothing prevents the incorporation of exogenous wealth transfers such as the substantial inflow of capital from abroad in the case of Greek households. The new term (say  $S_a$ ) would be simply added to the righthand side of expressions 2 and 3.

The significance of this formulation derives from expression 1 which relates consumption and wealth in an extremely simple manner. The underlying rationale is the following. Households have a utility (preference) function that includes both consumption and wealth; their object is to maximise utility by achieving the desired relationship between the two within the constraint of a budget ("resources") which is necessarily the sum of the two. The preference schedule that determines the relationship is reflected in the two parameters ( $q$ ) and ( $b$ ). An important implication of these assumptions is that expression 1 signifies a *state of equilibrium*: households consume and save in a way that *tends* towards the desired level of wealth. Assuming an initial level of wealth and stable earnings, the equilibrium state will be reached after some time. But then, presumably, (if the necessary time is shorter than a life span) savings will be zero since wealth will be at the desired level.

How is this result reconciled with what we know about household behaviour? We know, furthermore, that current incomes change constantly both due to economic development, business fluctuations etc., and during a household's life-cycle. As a result the notion of a desired relationship between wealth and consumption as an equilibrium solution for a certain budget, though probably useful as theory, would seem to present formidable problems in terms of empirical analysis.

These difficulties are real (though they do not diminish the validity of the model as a theoretical device). They may be avoided, however, with an appropriate choice of household categories, namely *economic classes* defined by criteria other than current income and wealth but such that we may reasonably assume that for each class the pattern of opportunities and prospects for consumption and wealth accumulation are well-known and relatively stable. With the use of such categories, the multiplicity of economic

circumstances due to random factors and transitions in the life cycle can be collapsed into a composite "typical" household representative of the class. In this context then expression 1 represents essentially a state of *dynamic* (moving) equilibrium, the aggregate composite of the underlying constant flux of the behaviour of the various sub-types of households in the context of economic circumstances typical for that class. With the same logic the argument can be extended to the population of a given city or country as a whole. It is in this sense that we will apply our theoretical model since we will restrict our analysis to macroeconomic data for the household sector as a whole. Since we will be based exclusively on time-series patterns, the usual difficulties confronting efforts to integrate both time-series and cross-sectional observations will not arise here. This formulation implies the neglect of important influences on savings and consumption, namely inter-class differentials in behaviour, the effects of the life cycle of households and shifts in the composition of the population. However, since the aggregate propensities of the household sector are not in themselves the object of analysis but are taken here as "exogenously" given parameters, this neglect may be justified.

- d) The aggregate data reviewed in the previous chapter show that the ratio of consumption to household disposable income has been steadily declining during the postwar period in Greece though consumption increased. This would at first seem to imply that the exponent in expression 1 (the "elasticity" of  $C$  with respect to  $W$ ) is positive and less than +1, i.e. that the urgency of consumption diminishes as resources and wealth rise or, put in another way, that wealth is a "luxury" good. As a general assumption about household behaviour this sounds quite plausible. In fact, both the theory and research of consumption and saving in the process of development are riddled with controversies over this issue. First, what may appear as the result of behavioural tendencies reflecting the effects of rising income, may very well be the product of *structural* changes, brought about by economic development, that increase the role of high savers relative to the role of non-savers. Second, the empirical study of cross-sectional and time-series data of saving in relation to economic development has not established unequivocally the validity of such a general behavioural assumption.<sup>4</sup>

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4. For a short review of the arguments in the literature, see Chenery and Syrquin, Patterns of Development, pp. 23-24, 122-23.



Nevertheless, we will accept that this assumption is both relevant and true in the present context for the following reasons: first, no structural changes that may sufficiently account for these trends took place in the case of postwar Greece; second, a similar tendency is common among developing countries at the intermediate stages of development such as Greece (on the strength of postwar evidence at least).<sup>5</sup>

- e) We will assume that housing consumption ( $C_h$ ) is determined in relation to total consumption ( $C$ ).

$$C_h = \lambda \cdot C^\delta \quad (4)$$

This follows from the fact that total consumption reflects indirectly the level of resources of the household, as well as the interdependence of the level of housing consumption with other categories of consumption (mainly necessities) at the various levels of household income.

- f) With regard to the accumulation of household residential wealth we start from the hypothesis that *planned* housing wealth  $W_h^*$  is determined in the context of household choices between the different forms of assets constituting household wealth as a whole, and therefore it is a simple function of total wealth. We write

$$W_h^* = k \cdot W^Y \quad (5)$$

The specific nature of this process of "choice between assets" will be examined later. Household residential wealth may, of course, exceed the value of owner-occupied housing. Expression 5 in conjunction with the value of housing wealth at the previous time period will determine the amount of savings or other available assets intended for housing wealth accumulation. Disregarding the complexities arising from the time-lags involved in this process of owned stock adjustment, changes in values during the transformation of savings into real capital, and assuming an equality between planned and actual accumulation, we may write

$$(6) \quad W_h = k \cdot W^Y \quad \text{where } W_h \text{ is actual residential wealth.}$$

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5. It is a common assumption among economists that recipients of non-labour income are high savers. A structural change that brings an increase in their role should therefore have accounted for a rise in the savings ratio. However, the relative shares of income from wages and property have not changed significantly in Greece during the period we study. A most important

g) With regard to the values of  $\gamma$  and  $\delta$  in functions 4 and 5 we can not say anything definite beforehand. It would seem that abstracting from the specificities of class and the historical-institutional context and on the basis of certain widespread models ordering types of consumption and wealth according to their relative significance as "luxuries" or "necessities", both elasticities should be expected to be less than +1. We have seen, however, in chapter 4 that in a historical and comparative context no such generalisation holds for housing consumption. The same proves true in an examination of the consumption behaviour of different social classes through time (Appendix 4.1). We lack suitable empirical material for patterns of wealth accumulation; it therefore appears risky to advance a general behavioural assumption. As it happens, the material reviewed in the two previous chapters suggests that for the postwar period and for the household sector as a whole the two elasticities are indeed less than +1. With regard to the present analysis we may consider this as a given datum with a note that to an important extent it reflects the economic development level and social structure of postwar Greece.

## 2. The institutional and socio-structural component of household "propensities" towards wealth

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The last point is directly relevant to the issue of the particularities of a given country during a given period *vis-a-vis* residential wealth accumulation that occupied us in the last chapter. We have observed there that Greek households show relatively high "propensities" to save in general and for housing wealth in particular. We accounted for this "particularity" with reference to certain institutional and socio-structural conditions concerning the access to and social distribution of household wealth (of which housing wealth is the most important part). Let us now recapitulate in a more rigorous manner within the terms of the simple theoretical model expounded above.

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structural change has been, of course, the reduction of the share of agricultural income. This, however, should have resulted in a *decrease* in the aggregate savings ratio since peasants are notoriously high savers. Thus we see no reason for a structural explanation of the trends in the saving ratio. With regard to the relevant comparative evidence, Chenery and Syrquin had observed that the saving ratio follows a logistic curve (S-shaped) rising fastly at middle levels of economic development (Patterns of Development, pp. 109-111).

For a given historic stock of household wealth, steadily growing disposable incomes per household, and certain functions  $C=qW^b$  and  $W_h = k \cdot W^\gamma$ , the trend and level of savings in general and savings for housing in particular can be determined. Assume that the dynamic (time-series) parameters  $b$  and  $\gamma$  for the various economic classes (suitably defined to reflect the pattern of "normal" income and to incorporate "demographic" variations) are broadly similar and that, furthermore, the differentiation of  $C$ ,  $W$ , and  $W_h$  among these classes (the cross-sectional pattern tends to follow in terms of household behaviour the same functions. Now, after a suitably lengthy period of steady growth or over a shorter period but with suitable initial conditions in the distribution of wealth, the actual parameters describing the variation of  $W$  and  $W_h$  among economic classes will correspond closely to the dynamic parameters governing behaviour over time. This correspondence may be viewed in two ways: that under conditions of "equilibrium" growth (steady rate, constant proportions), "behavioural" tendencies determine in the long run the pattern of wealth distribution; or, alternatively, that the historically given distribution of wealth, the current social distribution of wealth influenced by socio-structural and institutional factors, and the behavioural tendencies of households, interact with each other, hence the parameters in question reflect both behavioural and historical-institutional-sociostructural aspects (the historically given patterns are not alterable in the real sense, of course, but in the sense that they can be *interpreted* in different ways).

In formal terms, since it is  $C = q \cdot W^b$  and thus  $W = k \cdot C^{1/b}$  where " $k$ " a constant parameter, " $b$ " reflects both household propensity for wealth accumulation *and* the social pattern of wealth distribution in a given country (a similar point can be made for parameter " $\gamma$ " for housing wealth). This social pattern involves such matters as access to property (residential and non-residential), the rights and security of property and its taxation, among other things. These matters may differ widely among societies, most especially in relation to real estate wealth. We lack sufficient comparative material for the corroboration of a systematic correlation between behavioural parameters towards wealth accumulation, the social distribution of wealth, and the institutional context governing property acquisition and holding. The hypothesis, however, has obvious appeal and some known cases suggest its validity. There is thus a significant difference between the values of " $b$ " for households in the U.S. and the U.K. - these are estimated at around 0.4 and 0.3 respectively. This suggests that property is much more widely distributed in the U.S. than in Britain, despite the fact that the *income*

distribution among households is similar in the two countries.<sup>6</sup> The difference is consistent with what we know about the historic and institutional patterns that make the U.S. a country with a much more diffused distribution of opportunities to acquire wealth - especially land and housing - and with fewer official impediments on holding wealth compared to Britain.<sup>7</sup>

We have repeatedly stressed in this study the widespread access to property that characterises Greek social structure - hence the frequent allusions in sociological accounts to a "petty bourgeois" society. This socio-structural and institutional feature is reflected in the reproduction of the pronounced "precapitalist" component of the social formation: of household production in agriculture as well as of the numerous small-scale units of production and self-employment in the urban sector.<sup>8</sup> In the present context, however, the widespread access to the ownership of urban land and residential property reflected in the highly "democratic" distribution of rates of owner-occupation and the persistence of the "dual" housing system has been of greater importance. These patterns are mainly reflected, of course, in the actual distribution of households along the spectrum of wealth differentials. They also have undoubtedly exerted strong influences, however, on the prevailing attitudes *vis-à-vis* consumption and wealth. We may add that taxes on property and capital gains have been especially insignificant in Greece, particularly in the case of urban land, whereas

6. See, Bruce Johnson, Household Behaviour, pp. 130-131.

7. In connection to this, see the discussion on the significant differences between the nineteenth-century urban systems of the two countries in the first chapter.

8. The reproduction of these patterns in the structure of production and employment is exhaustively documented for the case of Athens in Lila Leontidou Emmanuel's Working Class and Land Allocation. See also her account of the economic history of modern Athens in the Papyros-Larousse-Britanica Encyclopaedia to be published in 1981 (in Greek). The existence of pronounced "dualism" in the structure of production and employment should not lead to the misconception, widespread among studies of "Third World" cities, that it also implies a "polarised" pattern in the distribution of incomes and wealth where the great mass of people living in relative poverty and insecurity face a small affluent minority. This concept of "polarisation" has been inspired by the classical Marxian model of the early stages of industrialisation, though in this case there is no generalised wage labour. On the contrary, however, as the case of Greece signifies, the reproduction of a "dual" pattern in the distribution and control of means of production may sustain a large sector of middle-income groups and a semi-affluent petty bourgeoisie of the traditional type. As evidence on the non-polarised distribution of urban household incomes, see the material in Appendix 4.1.

the institutional protection of property rights and the social value and security attached to real wealth have been exceptionally strong.<sup>9</sup> This sociostructural and institutional background must be kept in mind in any account of savings and consumption behaviour regardless of more specific differences in behaviour between social classes. It will tend to influence strongly the dynamic parameters of the system towards higher propensities to accumulate wealth - which in the case of most households consists of residential wealth (a point already stressed in the previous chapter). Thus, while systematic data on households' net worth are not recorded in Greece, estimates based on a somewhat narrower definition of wealth that considers only residential wealth and liquid assets, give a value for parameter  $b$  that approaches 0.9 in both the cross-sectional and the time-series dimension. This is certainly impressively high both in terms of the "equality" in the distribution of household wealth and the behavioural propensities for wealth accumulation.<sup>10</sup>

### 3. Asset-choice and demand for housing wealth: The role of costs, inflation, rents and interest rates

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Whereas the previously acknowledged institutional and sociostructural background factors may be considered as relatively invariant in the short and medium term, there are a number of probable determinants of residential wealth accumulation that fluctuate through time - in other words, "conjunctural" influences. Standard economic theory suggests in this context all the variables that influence the economic attractiveness of residential wealth both in absolute terms and relative to other types of assets, and more specifically those that determine the rate of return on residential assets (defined in a way that incorporates capital gains). These include the level of housing rents, the rate of inflation and the level and structure of interest rates. (The *volume* of housing credit operates in a wholly different manner and will be considered later). We will advance some hypotheses with regard to each in turn.

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9. For reviews of the taxation of real property and capital gains in Greece, see, Break and Turvey, Studies in Greek Taxation; Michael, The Management of the Land Factor; C.P.E.R., Development Plan 1976-80: Housing; Appendix 3.

10. See also, Emmanuel, Categories of Households, chapter 2 and section 12 of the present chapter.

Before we embark on the particulars of this analysis, however, a more general point is in order. It is seldom stressed with adequate emphasis that the significance of these "economic" variables is conditional on the overall character of the housing system and, more precisely, conditional on the type of economic "rationality" governing the behaviour of households in this concrete system. Up to now we have not introduced any specific assumptions with regard to the rationale governing household behaviour towards the accumulation and allocation of wealth. We may start by stressing that the model of economically rational behaviour commonly depicted in household economics should be considered as a highly biased one, appropriate for special conditions only. For our purposes it is useful to distinguish patterns of household behaviour according to their place in a continuum defined by two "ideal types" of rational behaviour conceived as polar opposites. Let us define the first as the pure *rentier* type and the second as the *family needs - orientated* type. In the case of the first type we assume that household behaviour towards the acquisition of residential wealth (including owner-occupied housing) is governed by principles of strict economic rationality in the sense that savings as well as the choice between different assets follow the criterion of the assets' average and relative income-producing and wealth-increasing capacity as this is determined by the structure of investment costs, rents, interest rates and capital gains. In the case of the second type, we assume that the accumulation of residential wealth is determined by the needs and long-term preferences of the family unit for housing space. "Family unit needs" in this context may involve both the "nuclear" and the "extended" family as well as the provision for the next generation through dowries and bequests. "Needs", moreover, should be understood in a social context involving the historically determined standard of living and such aspects as social prestige, emphasis on owner-occupation, conspicuous consumption etc.

Now, neither of these "ideal" types by itself represents adequately the workings of any concrete housing system, though it is common in modern housing economics to postulate the existence of the pure rentier-investor model.<sup>11</sup> The degree to which a pure "rentier" rationality dominates the behaviour of the system depends on a number of factors: the share of rental

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11. Notably in Richard Muth's comprehensive model of the housing system in his Cities and Housing, chapter 3. See also our comments on this issue in chapter 1.

housing in total housebuilding as well as the share of business investments (as opposed to small household asset placements) in the former; the involvement of modern financial institutions in household wealth formation and more specifically in the sphere of housing and land; the development of the capital market as a whole, i.e. the availability of a variety of assets and a strong interdependence between the markets for different assets; lastly, and more generally, the extent of diffusion of market relations in the housing system as expressed in the levels of speculative production, property transfers and residential mobility relative to the whole of the housing stock. We may expect that the increased presence of such factors will be correlated with a stronger component of rentierist-speculative behaviour in the system as a whole as well in the behaviour of households. It is arguable, however, that due to the inherent characteristics of housing as a real asset and its significance for family life, it is highly improbable that a pure rentierist-speculative framework of asset choice *vis-a-vis* housing will obtain in real societies, however "advanced" these are in terms of the aforementioned structural-institutional factors. Thus the "rationality" underlying the behaviour of any housing system will always be a *mix* of these general ideal types, though one or the other may be the predominant one. It is in the latter sense that the typology may be applied fruitfully in a comparative context. In such a perspective the housing systems of the advanced capitalist countries should be expected to contain a very strong component of "economic-rational" behaviour towards household wealth formation and asset choice. In contrast, and on the strength of the whole of our previous analysis, the Greek housing system should be understood as a much more "balanced" mix of these opposed types of behaviour and even, plausibly, one where "family needs" criteria predominate. This particular contrast is essential to our analysis since most theory and research in the economics of housing concerns advanced Western nations: it is necessary therefore that its findings be approached in a highly critical manner.

In the light of the previous theoretical argument and given the character of the Greek system of housing production and social distribution of housing and land property, we will advance the following two general hypotheses:

- i) The behavioural substratum of aggregate patterns in household wealth formation and asset choice involves a plurality of preference schedules based on radically different criteria of evaluation. Among these, the

criteria of the marketable value of housing wealth and the rate of return on invested capital are of secondary importance though their influence probably gets stronger with time and as we move up the social class hierarchy.

- ii) There is no marked difference between the behaviour of households that are exclusively owner-users and the behaviour of households that are owners of rental housing as well, save in the case of really substantial rentiers who act in terms of business rationality but who, controlling a very small part of housing investment in Greece, exert an insignificant influence on the pattern of aggregate wealth formation.

The stress on the "marketability" aspect is essential in proposition (i). By diminishing the importance of the rentierist-speculative motive we *do not* claim that economic values in general are not important in housing behaviour. We diminish only the determinate influence of a *certain kind* of economic rationality. Consider the case of an owner-builder household accumulating housing wealth within the context of non-commodity relations. This household will behave according to non-speculative criteria: it will not "invest" in housing with an eye to a future sale which would produce an adequate return to its investment but in order to satisfy housing needs (as these are defined socially). Nevertheless, this does not imply that housing is not appreciated *also* as economic wealth in monetary terms measured at current market values. For one, it would cost as much to a family or its offspring to acquire or build such a property afresh which would, of course, imply efforts, forsaken consumption, etc. These are measured in monetary terms. Second, the possibility that the need may arise for the sale of the property in the market or for the earning of rental income is certainly taken into account. After all, for most households housing wealth is the main form in which accumulated savings are held and is therefore directly involved in the "economic" calculations for present and future arrangement of resources. Thus such variables as market prices and rents are indeed important but only in a long-run perspective and as setting broad limits within which accumulation decisions are taken. On the other hand, the capacity of housing to be immediately *marketable*, i.e. to belong to a well-patterned exchange system where its potential value or its yield as an asset may be always realised in response to short-run considerations, is not an overriding criterion for such a household.



As a contrast, envisage a situation where housing wealth is held by investors managing large portfolios composed of various types of assets, or a case where a similar role is played by a number of capital market institutions in the hands of which a multitude of households have placed their savings. In these cases the demand for and the sale of housing wealth will respond directly to the short-run fluctuations in the *fine structure* of prices and rents relative to other assets. Obviously then, the marketability of a housing type is an essential prerequisite. No known housing system is governed wholly by such a purely speculative mechanism, but the Greek housing system must certainly be ranked among the more extreme cases on the opposite side of the spectrum in that it lacks such "modern" property market mechanisms even in relation to the middle-class apartment housing sector. This, coupled with the diffused distribution of housing property among households, suggests that the behavioural tendencies of the pure type of the owner-builder acting in the context of non-commodity relations described above, will also apply to the household sector as a whole to a substantial extent.

Let us now turn to the examination of the influence of the various "economic" variables on the demand for housing wealth keeping in mind the previous remarks about the underlying character of the system. Now, this demand is determined both by the trend and level of household wealth as a whole ( $W$ ) and by the pattern of allocation between housing and non-housing wealth expressed in the ratio  $W_h/W$ . In the present context, we are more interested in the latter and more specifically in the determinants of the ratio  $dW_h^*/dW$ , i.e. the ratio of the desired increase in housing wealth to the increase in wealth as a whole. We have already advanced the general assumption that the relationship  $W_h^*/W$  (and  $dW_h^*/dW$ ) is determined by the pattern of "asset-choice" by households expressed in the simple formula  $W_h^* = k \cdot W^Y$ . It is obvious now in the light of the previous arguments that this "asset choice" behaviour diverges sharply from the model of economic-rational behaviour expected in the case of a typical rentier-speculator. The pattern of "asset choices" in this context reflects more the relatively stable tendencies resulting from the structure of household needs and preferences (including the economic considerations as to the appropriate disposition of accumulated wealth). A general proposition follows immediately: we should expect the short-run fluctuation in the economic variables determining the absolute and relative market value and rate of return of residential capital to exert a minimal influence on  $dW_h^*/dW$ .

Given this general proposition we may examine more closely the role of particular variables. The interest rate on mortgage credit can be easily dismissed as unimportant. For one, housing credit concerns a rather small part of residential investment in Greece: before 1968 an insignificant part; after 1968 it covered something between a quarter and a fifth of gross investment in dwellings. Second, its possible influence on the *cost* of housing is certainly overshadowed by the fact that the demand for housing credit has always exceeded supply whatever the level of the interest rate. Rationing thus has been a constant feature of the mortgage market. In consequence, the *volume* of available credit funds has been a more important influence than interest rates (this aspect will be examined later). *A fortiori*, the relationship of the mortgage rate of interest to the interest rates on other assets should also be considered as irrelevant; the possibility of such an influence is precluded anyway by the hypothesised lack of any strong rentierist motives. We know, after all, that the mortgage rate of interest does not exert any significant influence on residential investment even in countries with a highly developed system of housing finance, notably in the U.S.A.<sup>12</sup> Similar findings have been reported by an econometric analysis of aggregate housebuilding in Greece.<sup>13</sup>

The possible effect of interest rates or yields on other assets *antagonistic* to housing is of less clear nature. As we pointed above, for small "portfolios", as is the case for the great bulk of investors in housing, marginal differences in yields do not matter. This, in conjunction with the lack of a varied spectrum of assets accessible to the small investor in Greece and the modest level of savings accumulated by most households, makes that decisions about the composition of household wealth involve predominantly the choice between housing and *liquid* assets. In relation to this, it has been asserted that conditions in the postwar period have more often than not predisposed households towards investment in housing as against holding wealth in liquid form, i.e. in bank deposits. More specifically, it has been argued that the interest rate on bank deposits was often lower than returns on housing property (rents plus capital gains)

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12. See, L. Grebler and S.J. Maisel, "Determinants of Residential Construction", in D.B. Suits et al. Impacts of Monetary Policy (New Jersey, 1963): 475-520.

13. P. Kassimatis, The Construction Industry in Greece, p. 48.

and thus induced households to invest in residential property.<sup>14</sup> Now, while the observation about the relationships between the economic attractiveness of the two assets is to a large degree valid, the conclusion about household behaviour does not necessarily follow. For it presupposes the predominance of rentierist-speculative motives and behaviour we have rejected previously. Take the case of house prices. These are obviously the main factor making for the alleged advantage of housing wealth *vis-à-vis* bank deposits, especially in Greece where house rents offer a very small rate of return on the value of capital. Rising prices, especially when they rise faster than general inflation, offer positive capital gains while liquid wealth loses in value as a result of inflation. The point is valid and it is undoubtedly taken into account by households. For it to have significant effects on the aggregate  $dW_h^*/dW$  ratio, however, we must assume that households react in the short run *positively* to price rises and negatively to price falls. This is highly improbable. For most households we should expect the price of housing to be perceived mainly as *cost* and thus act negatively in the case of rising relative prices by limiting access to owner-occupation, increasing the advantages of rented accommodation and causing delays in buying or building. Only in the case of owners of substantial wealth will there be sufficient conditions allowing the easy transfer from one form of wealth to another and a sufficient predominance of the speculative motive, for the positive relationship to apply.

Similar remarks can be made about the effects of general inflation on the  $dW_h^*/dW$  ratio. Inflation affects the real yield of bank deposits and the value of liquid wealth. In relation to this our comments about the minor importance of relative yields also apply. Moreover, to the degree that a rise in the general inflation rate is accompanied by fastly rising housing investment costs, the overall effect on the  $dW_h^*/dW$  ratio may be negative for the reasons given above. Still, it has often been said in Greece that periods of very high inflation, especially when combined with diminished confidence in the banking system, lead to drastic shifts towards

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14. See, J.M. Papadakis, Money and Economic Activity: The Greek Experience 1950-75 (Athens, 1979, in Greek): 261-63. Papadakis' estimates of the marginal yield of residential assets, however, are questionable. He takes as a basis the physical marginal output-capital ratio of dwellings as derived from National Accounts data. Thus, neither the land value component nor the costs of upkeep, management etc. are taken into account, a fact that raises substantially the estimated rate of yield relative to actual levels.

investment in dwellings. Barring really exceptional periods (like the immediate postwar years up to 1954) the argument does not carry much weight. First, during such periods excessive investment in housing will be checked by sharply rising land and construction costs and the credit squeeze that is sure to follow an inflation crisis. Second, high inflation, especially when accompanied by a stagnation or fall in real incomes, will lead most probably to a decrease in the marginal savings ratio in favour of consumption. This will be reinforced by a shift away from monetary assets and towards consumer durables, given the limited range of alternatives offered to Greek small savers. Due to the high cost of housing and the inflexibility that necessarily characterises most households in the case of investment in dwellings, the fluctuations in the  $\frac{dW_h^*}{dW}$  ratio should be expected to be small, coming mostly from the side of wealth formation as a whole.<sup>15</sup> This aspect, however, is of limited interest to the present discussion.

In conclusion, we would venture the following hypotheses. The level and structure of interest rates, including the mortgage rate of interest, should be dismissed as unimportant. We should expect the aggregate rate of housing wealth formation to react to the cost of housing investment (land and construction costs) in a non-speculative way, i.e. show a negative price elasticity on the whole, though most probably a rather weak one given the contradictory considerations involved and the fact that substantial fluctuations in housebuilding are mainly caused by the behaviour of the apartment sector which contains the rentierist-speculative segment of housing wealth owners. Since for the greatest part of the period under study the inflation rate showed minimal fluctuations and for the theoretical reasons outlined previously, we should also expect an insignificant influence of this variable. With regard to the sign of the relationship we can not venture a definite hypothesis. Given the correlation of

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15. This seems to be the case with developments during the 1974-77 high-inflation period. All too often, Greek monetary authorities have mistaken the combination of the relative inflexibility of investment in housing with sharp drops in bank deposits as a "flight" of savings towards real estate whereas, in fact, such a reallocation involved more a turn towards consumption, durables, gold, etc. The whole argument about the alleged strong relationship between housing construction and the fear of inflation has been based on the 1946-1953 precedent of minimal trust on bank deposits and the value of money and the presumed power of this collective historical memory. See, for instance, Ellis et al., Industrial Capital, pp. 212-213.

inflation with rising housing costs and the overriding importance of the latter, it is most probably negative.<sup>16</sup>

Rents, which have not been considered thus far, present a more clear-cut case. Since both from a rentierist viewpoint and from the viewpoint of family needs and preferences a rise in the level of rents (relative to the general rate of inflation) will induce in theory a rise in the marginal rate of aggregate housing wealth formation (the  $dW_h^*/dW$  ratio), we should expect a positive elasticity of the latter in relation to the rent level. In the non-rentierist case this will be mainly based on an increased willingness to move away from higher rents and into owner-occupation. However, due to the same reasons making for a weak element of "economic-rational" behaviour in the system as a whole, this positive influence should be expected to be of limited significance.

#### 5. The role of the volume of housing credit

Whereas the mortgage rate of interest can be safely disregarded as a significant determinant of aggregate asset formation and allocation within the household sector, the same can not be said for the *volume* of housing finance available to households. The latter, being institutionally controlled, shows substantial fluctuations with shifts in monetary policy. Moreover, during the period we study there have been drastic structural changes in this respect. Up to 1967 the volume of mortgage loans has remained at insignificant levels relative to the level of gross private investment in housing. After that year it has shifted to a substantial share (upwards of 20%) of private investment regardless of short-run fluctuations. It is widely believed that both aspects of the financial framework - the long-run structural change and the short-run fluctuations - have been important determinants of housing investment. Let us examine their role in relation to the demand for housing wealth relative to household wealth formation as a whole.

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16. Christine Whitehead has found in her econometric analysis of housing investment in the U.K. that the rate of inflation exerts a negative but very weak influence on private housing completions per head. This conforms with our hypothesis, though such a formulation does not distinguish between the effects of inflation on the demand for housing wealth and those on savings as a whole. It is interesting that the same study found, contrary to our hypothesis, that housing wealth formation behaves in a speculative manner *vis-à-vis* house prices, i.e. it shows a positive price elasticity. See, The U.K. Housing Market: An Econometric Model, (London, 1974), p. 89.

The relevant "dependent" variable here is the  $dW_h^*/dW$  ratio. Therefore, the appropriate formulation of the "independent" variable in this case is not the absolute level of mortgage lending but the ratio of this flow of funds to household savings during the same time period or  $F_h^*/dW$  where  $F_h^*$  signifies the funds for housing loans advanced by financial institutions to households. An alternative index for the same variable, much easier to apply operationally, would be  $F_h^*/S$  where "S" signifies household savings (including capital inflow from abroad).<sup>17</sup> An increase in these ratios will probably affect both the savings-consumption pattern and the allocation of wealth to residential capital. With regard to the first, i.e. its effects on the propensity to consume (or, inversely, on the propensity to save) we can say little beside some speculative conjectures. For the short-term, we see no reason for not adopting the usual Keynesian assumption that the savings ratio can be treated as an exogenously given datum. An increase then in credit funds may lead to an increase in housing investment but it will also lead to increases in income and savings with the effect that the savings ratio is kept constant. Certain complexities due to time lags will be involved in this relationship, of course, but this rough formulation suffices here.

The effect of a long-term expansion of mortgage credit is a more complex matter. If credit expansion is realised through a *diffusion* of credit availability to social groups with limited access to property and/or with the introduction of "cheaper" and "easy" credit, the most probable effect will be an increase of the propensity to accumulate wealth. On the other hand, if credit expansion is based on the relaxation of rationing for loans that are both expensive and restricted to the more well-off social strata, the effect will be more in the direction of an increase in the propensity to *consume* since these strata will be then able to divert funds that would have gone to housing investment towards increased consumption instead. These two alternative patterns will influence the  $C = h \cdot W^b$  function in drastically different ways. Credit expansion in Greece followed more the second pattern; we should therefore expect the marginal propensity to consume relative to wealth (parameter "b") to increase after 1968.

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17. It should be added, however, that since from an operational point it is not feasible to examine directly the  $dW_h^*/dW$  ratio, the credit variable must be expressed in terms of absolute levels. See the following formal expression of the model and the attendant empirical analysis.

More important in the context of this study are the effects of an increased credit supply on the allocation of assets - the  $dW_h^*/dW$  ratio. We must again distinguish between long-run and short and medium-run effects or more properly, given the existence of long-cycles in building, between *trend* effects and *cyclical* effects. In terms of cyclical fluctuations, an expansion or contraction in housing credit relative to changes in household wealth and savings will induce similar movements or residential capital formation relative to the latter. The truth of this relationship is widely accepted and forms the basis of decisions by speculative builders as well as governments pursuing a counter-cyclical policy. Speculative builders are particularly sensitive to credit fluctuations, as a simple inspection of the time-series of apartment building and credit fluctuations in Greece testifies. This short-term relation has been instrumental in forming the belief that there is a *general* strong positive association between housing credit and residential investment. However, this is not necessarily true. The expansion of mortgage credit is effective mostly by acting through and enhancing the speculative component of the housing system.

The latter takes place in two ways. First, by the introduction of "speculative" criteria (in the common use of the term) in the decisions of households to invest since the latter are increasingly based on *expected* savings rather than real ones and on expected decisions by the authorities and banks. Second, it facilitates the expansion of the role of speculative builders in the system as a whole by increasing the size of the market relevant to them as well as by supplying favourable conditions of finance in a context characterised by capital scarcity for the production of housing as a commodity. The combined effect is an increase in the cyclical character of housebuilding and in the severity of short and medium-term fluctuations.<sup>18</sup> The pronounced severity of fluctuations in speculative apartment building relative to non-speculative building, especially after 1967, is easily observed in time-series (Figures 4.1 and 4.2). Moreover, an "elastic" credit supply, when available for a sufficient period, is a crucial precondition for the formation of the familiar "long-cycles" of housebuilding, though

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18. See the discussion of the relationship between the growth of mortgage credit and speculation in housing production and the severity of building fluctuations in C. Long, *Building Cycles*, pp. 187-89. See also the comments on this issue with regard to the capitalist-speculative transformation of the housing economy in chapter 1.

the latter may be triggered-off and sustained by other factors.<sup>19</sup> This last point is of limited relevance to the Greek case but it shows that the positive association between a credit expansion and an increase in the ratio of residential investment to savings may be observed even for periods longer than the short and medium-term. Nevertheless, these effects are restricted to cyclical phenomena. More importantly, they mainly concern the formation of housebuilding or *actual* residential investment  $I_h$  in response to property demand  $dW_h^*$ : in short, they belong to the analysis of the  $I_h = f(dW_h^*)$  relation rather than the  $dW_h^*/dW$  pattern. To disentangle the effects of credit on each of these aspects empirically may be difficult but from the point of the  $dW_h^*/dW$  pattern there is no reason to assume a similarly positive association. In fact, the effect of credit expansion on the allocation of household assets to housing, especially in terms of long-run trends, will most probably be *negative*, expressed in lower values for the constant and the elasticity parameter in the  $W_h = k \cdot W^Y$  function.<sup>20</sup> Such an effect will take place if households substitute the savings earmarked for housing with borrowed funds and divert the former to consumption or other assets. Let it be noted that it is sufficient for this response to be realised at the level of the relevant aggregates of households in order to have the assumed negative effect. These, as we argued, are economic classes: it is immaterial, therefore, if shifts in wealth allocation towards housing take place within the "life-cycle" of households.

Now, the occurrence of this "diversion" effect in the system as a whole will depend on the social distribution of housing credit, a point we already made with regard to the cost of credit. If credit opportunities were made available to low-income social classes in a manner that increased their aggregate life-chances for the acquisition of residential property, the previous case will not apply. In view, however, of the pronounced middle-class bias of the institutional and political framework of housing credit supply in Greece during the 1968-1974 period, the argument for a negative

19. See, Pribram, "Residual, Differential and Absolute Ground Rents" and the discussion in chapter 1.

20. A well-documented case of a long-term fall in the propensity to invest in housing while, during the same period, the extent of institutional housing finance increased fastly, is the U.S. for the period from the beginning of this century up to the early fifties. See, Grebler et al., Capital Formation in Residential Real Estate.



long-run effect seems more plausible. This, combined with the limited role of bank and State financing in the system as a whole, will most probably also make for a substantially reduced strength of the positive association between housebuilding and the flow of credit observed in the short run.<sup>21</sup>

#### 6. The response to the demand for property: conditions of production of residential capital and the role of input costs

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Given the demand for residential wealth ( $dW_h^*$ ) at any given time which for all practical purposes may be thought of as an earmarked volume of funds, what is the level of the generated actual residential investment in money as well as in real terms? Let us define the latter variable ( $I_h$ ) in the usual manner of the National Accounts as equivalent to "Gross Capital Formation in Dwellings", thus excluding the role of depreciation, the value of land, and capital gains. A consideration of this relationship involves a rather complex set of factors: the short- and medium-term behaviour of housing "producers"; both the short-run and long-run conditions in the supply of the "factors" of production, namely land and those partaking in building (regardless of the accounting convention excluding land from the value of "output"); it involves, lastly, certain aspects of the prevailing "relations of production" in housing mainly with regard to the size, distribution and utilisation of the share of land in the value of the product. Let us concentrate first on the more "material" issue of the supply of structures.

We take it as self-evident that the nature and significance of the above factors are contingent on the specific character of the system of housing production and that of the wider economy. Our hypotheses, therefore, will include as conditions the pertinent attributes of the postwar Greek urban system understood as a particular type of an early capitalist urban economy. We have referred at length in previous chapters to the relevant aspects of such a system. The most important from the point of the present analysis are surely the existence of a substantial precapitalist owner-building mode of housing production and the specific morphology of the

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21. It has been observed that in the U.K. the flow of mortgage funds exerts a positive but relatively weak influence on housing capital formation, despite the major role of institutional housing finance in the owner-occupied market. (Whitehead, The U.K. Housing Market, p. 96). This is probably explained by the relative flexibility of Building Societies in the U.K. *vis-à-vis* Government controls of the funds available to them.

relatively "primitive" speculative mode. To the extent that the first determines the relation between housing savings and residential capital production, we should expect such relation to be *direct*, influenced only by the trends in the cost of land and construction and by exogenous political-institutional interventions. No endogenous mechanism creating fluctuations and disequilibria is relevant here. This, of course, does not apply to the case of speculative production. We have already referred to the strong component of short-term instability that is introduced by the expanded role of speculative building; in the last part we also noted that the introduction of a substantial volume of housing credit accentuates the severity of fluctuations and thus the extent of disequilibria. The more drastic effects of credit, however, have been mainly exogenous, due to sharp reversals of monetary policy. We can say then that the systematic, endogenous tendencies for disequilibrium between household property demand and speculative supply are, comparatively speaking, limited in size and restricted to very short time periods. Thus we have here a similar relatively direct relationship between savings and the supply of structures. This derives from the very morphology of the "primitive" character of the speculative economy: the fragmentation of speculative builders into small units as well as the small size of projects; the competitive and "easy entry" conditions prevailing in this sector; the cooperative character of the production process that draws upon the easily mobilisable resources of a multitude of small firms and contractors, professionals and small landowners; the limited requirements for large amounts of capital sustained by the small size of projects and land holdings (a largely institutional fact) and the participation of landowners in the finance of development. These make for a very "elastic" supply of building in response to property demand and for very short time-lags. Though they also make for violent short-term fluctuations due to "easy entry" (as well as easy exit) in the business, there is a direct dependence of the finance of projects on household savings that safeguards equilibrium over the medium and long term.

This elastic supply of short-term finance and of what economists would call "entrepreneurial services" is coupled with conditions of elastic supply of the factors of production.<sup>22</sup> This derives, of course, from the background

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22. The hypothesis that under the conditions of an early speculative housing economy and a wider context of fast urban modernisation there is, in general, an elastic supply of structures as well as of factors of housing production, is corroborated by analyses of housebuilding in the U.S. between the Wars. See, Muth, "The Demand for Non-Farm Housing". In relation to this,

conditions implied by the existence of a "dual" system of housing production and a developing economy undergoing rapid capitalist modernisation. These are a relatively diffused pattern of landownership and widespread access to land, certain unemployment and underemployment, and fastly rising productivity in the economy as a whole. The latter includes the production of construction materials. Such conditions prevailed in Greece at least up to the beginning of the 1970's. The implication of such a state of affairs is that both a short-term and a long-term expansion of building in response to growing property demand will not encounter "bottlenecks" of production, neither generate prohibitive rises in the cost of the factors in housing production. As we argued before with regard to the "feedback" of input costs on building, limited fluctuations in housing costs (relative to the overall rate of inflation) will most probably affect the aggregate pattern of asset allocation by households but to a limited extent. This issue can be settled decisively by empirical enquiry only. We can say with more certainty, however, that fluctuations in costs will not exert a strong influence on the decisions of speculative builders.<sup>23</sup> Speculative builders operate with very wide margins and imperfect cost calculation, especially so in Greece where the size of projects and reliance on institutional finance are extremely limited. As long as there is a sufficient rate of flow of household funds and the price range acceptable to these small investors is broadly consistent, given construction costs, with the established expectations of landowners with regard to the development value of land, there are ample speculative building opportunities. It is possible, of course, that landowners will have excessive expectations and thus undercut expansion. However, with competitive conditions and relative oversupply in land for high-density building we should expect landowners to be in general satisfied with the rise in development values that the inflation of construction costs brings automatically. We will return to this argument later.

Costs will emerge as important long-run determinants of the real value of new residential capital for a given volume of household savings channelled

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see the informative account of urban change and modernisation in the U.S.A. during the 1920's and 1930's, in C. Glaab & T.A. Brown, A History of Urban America (New York, 1967), chapter 7.

23. For the very weak response of speculative building to fluctuations in construction costs, see Grabler and Maisel, "Determinants of Residential Construction" and Long, Building Cycles, p. 110.

to housing, in the following two cases. First, in the transition to conditions of relative factor-scarcity and near-full employment which, when accentuated by income-distribution conflicts, will lead with every major expansion in investment expenditure to an inflation spiral. Second, in the case of a long-term trend of rises in relative construction costs due to a systematic lag in the productivity of labour in construction and in industries producing construction materials. Both of these conditions are more relevant to advanced capitalist economies than to developing countries that, having established a modern industrial base and a capacity for fast capital accumulation, can still draw on unused supplies of labour and on widely available productivity-enhancing innovations (we abstract from the case of less-developed countries which face more severe cost problems due to fundamental bottlenecks in the production and import of capital goods). Still, with fast economic development these problems are bound to arise *some* time. Greece started to face such problems in an acute form after the early 1970's. Thus in a truly long-run perspective of the economics of postwar building the supply of inputs and costs must certainly be included as an essential aspect. For the greatest part of the period we study, however, such "structural" mechanisms of cost formation have been unimportant. Trends in costs may be considered "exogenous" data. Moreover, they have in general been very favourable; they have followed with limited fluctuations the general trend of price changes in the postwar period. For these reasons, the substantiation of the above arguments and the empirical examination of construction costs, especially in the light of our points about their limited role in the dynamic of housing production, will be given in an appendix to this chapter (Appendix 6.1).

#### 7. The role of the "social relations" of housing production: the share of land and landowners' behaviour

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In contrast to the issue of construction inputs which depend more on conditions in the wider economy, the role of non-labour shares in the price of housing must be systematically considered. In the context of a housing economy in the process of capitalist transformation their role will change according to definite trends and thus the relationship between housing savings and real housing product will vary significantly in the long-run depending on the extent of changes in the underlying "social relations" of housing production.

The expansion of the role of speculative production in the housing system as a whole will in general bring a rise in the aggregate share of non-labour costs. The obvious case here is, of course, developers' profits. The latter as well as institutionally fixed overheads and indirect taxes (in the Greek case the transfer tax) form well over a third of the production price of speculative housing whereas they are insignificant in traditional petty owner-building.<sup>24</sup> Most probably, these differentials in full normal prices between the two modes are reduced to a large extent by differences in mechanisation. In a context of fastly rising construction wages and an integrated labour market - conditions that applied for the greatest part of the postwar period - the extensive mechanisation of speculative building will provide a comparative advantage *vis-à-vis* simple methods of production in the precapitalist housing mode. More important for a gradual reduction in the efficiency of household savings in terms of real product will be the broader concomitants of speculative expansion, namely, the reduction of popular access to cheap, non-urbanised land and the decline of non-modern, flexible and gradual methods of urban development including "installment" building. The significance of these processes has been discussed in chapters 3 and 4.

This brings us to the issue of land. This factor is relevant in two senses: first, as cost in the formation of normal production prices and second, in relation to its share in the product in the process of residential development as a whole and, more specifically, with respect to the role, the social distribution of this share and its utilisation. Modern urban economics, being notoriously ahistorical, have conspicuously neglected this latter aspect. The role of land as a factor-cost, on the other hand, is certainly familiar and will not occupy us much in this discussion. The trend of land costs and their determinants are considered at some length in Appendix 6.1. It suffices here to accept a very general and simple hypothesis for land costs, namely that they are determined as monopolistic mark-ups on the average construction cost per square meter of the housing normally built in any particular urban area.<sup>25</sup> We assume, moreover, that

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24. See the discussion in chapter 3 and the data on price formation in housing (particularly apartment housing) in D. Emmanuel, Three Studies, pp. 78-80 and P. Mandikas, "Costs, Fees and Taxes in Housing", Epiloghi, 8, (1972): 593-600.

25. Our concepts are analogous to Kalecki's model of price formation where profits are conceived as monopolistic mark-ups on costs. See his Theory of Economic Dynamics (Greek translation), pp. 26-31.

the ratio of land costs to construction costs per floorspace unit tends in the long run and under conditions of "equilibrium" urban growth to remain *constant*, unless the price of agricultural land increases disproportionately. Given a constant share of land in housing costs, changes in the average value of land are determined by the development values of an area and thus vary according to the average construction value of the residential floorspace built in the area and the average permitted intensity of development. We abstract in this from intra-urban differentials in the share of land costs which, as we argue in Appendix 6.1, are the product of spatial differentials in the degree of monopoly of landowners relative to the average degree of monopoly in the city as a whole and thus do not affect the main point of our argument. This hypothesis is based on a number of assumptions: a generalised and integrated land market (this, as we argued in chapter 1, is not inconsistent with the lack of a generalised and integrated *housing* market); a diffused distribution of landownership and thus a tendency for the stability of the degree of monopoly of landowners *vis-à-vis* household demand for housing wealth; lastly, a certain pattern of relationship between urban spatial structure, housing preferences, and transport costs that make for insignificant "differential" ground rents. These assumptions seem appropriate for the type of housing system we study but their validity can be also argued on general grounds (see Appendix 6.1). The proviso for "equilibrium" in urban growth refers to a lack of major fluctuations in household property demand and major shifts in the pattern of institutional controls over the supply of urban land relative to the former. These conditions have been to a certain extent violated in postwar Greece. There are indications, moreover, that the price of agricultural land has risen faster than the price of housing. As a result there is evidence that the share of land in housing cost has increased during the 1960's (see Appendix 6.1). For analytical purposes, however, we will accept here the simple assumption of a fixed land-cost ratio.

In current economic thinking the universal implicit assumption concerning the distribution and utilisation of the share of land in costs is that the latter is transferred to a distinct class of landowners that consume the proceeds or add to their other assets and thus functions as a purely extraneous factor, similar, say, to taxes, without having any determining role in the finance and production of housing. We have already argued (in chapter 1) that this model of a full division of labour between the various owners of capital involved in residential production is historically inaccurate. It certainly does not apply in the Greek housing system both in the

case of speculative building and that of precapitalist owner-building, though for different reasons. Having rejected the full division-of-labour model we must now explore the implications of alternative patterns in the "social relations" of production.

Let us view the housing production process from the landowner's point. We will call " $v$ " the ratio of the full production price of new residential capital ( $V_h$ ) to its investment cost without land ( $I_h$ ). Since  $v = V_h/I_h$  the expression  $v \cdot I_h - I_h$  provides us with the share of land in the product and the latter's ratio to unit price is  $v-1/v$ . Let us call by " $i$ " the part of investment costs ( $I_h$ ) that the landowner *does not* finance with his funds. Then the increase in the value of his housing wealth ( $G$ ) due to investment  $I_h$ , is obviously

$$G = v \cdot I_h - i \cdot I_h \quad (1')$$

Let us conceive relationship (1') as applying for the aggregate annual activity in a whole housing *sector*, i.e. a relatively separate housing sub-system characterised by uniform relations of production, certain geographical boundaries, and a distinct class of households-investors. During each time-period the group of owners of currently developed land finance part of their consumption or the accumulation of non-housing assets by selling part of their housing wealth. We will define by " $c$ " the ratio of the net flow of these sales in the property market to the increase in landowners' housing wealth ( $G$ ). It can be easily seen then that the total net supply of new housing properties offered in the market during any time period is given by the sum ( $c G + i \cdot I_h$ ). This, in equilibrium, must equal the demand for new housing assets, i.e. the net flow of savings for an increase of the housing assets of households that are not owners of currently developed land. If these are defined as  $SH_h$

$$SH_h = c G + i \cdot I_h \quad (2')$$

From (1') and (2') we derive  $SH_h = i \cdot I_h + c(v-i) \cdot I_h$  (3') and finally

$$I_h = \frac{SH_h}{i + c(v-i)} \quad (4')$$

If the funds invested by landowners in currently built stock are  $SH_0$  we also have the definition  $I_h = \frac{SH_0}{(1-i)}$  (5')

If we disregard the role of transfers of land assets and land gains, the volume of invested savings  $SH = SH_h + SH_o$  constitutes the effective demand for new residential capital and may be considered proportional to  $dW_h^*$ . The previous formulation<sup>26</sup> shows that residential investment as measured in usual economic practice net of land values will in general be substantially smaller than this flow of economic resources and, as we will show, will decrease relative to the savings flow the greater the value of parameters "c" and "v" and of variable "i". We know that with the growth in the share of speculative housing production in the system as a whole, the aggregate values of "c" and "i" will indeed increase. Therefore, even with constant land costs (and thus a constant "v") the "efficiency" of household savings in terms of real housing product will tend to decrease. Let us demonstrate this thesis.

All cases of residential development can be conceived analytically as composed by a combination in various proportions of four "pure" types of the division of labour between the roles of landowner, developer-producer, and final owner of the product (see in this connection the theoretical discussion in chapter 1). Consider first the case with full division of labour and generalised commodity relations. The speculative developer, in such a case, sells the whole of the built property to households (and businesses, though as we argued their role is limited in the housing sphere in Greece), thus  $i = 1$ . In addition, the cost of land is paid out to a separate class of landowners who allocate it to consumption or non-housing assets. Thus we have  $SH_o = 0$ ,  $SH = SH_h$  and  $c = v-1/v$ .<sup>27</sup> From these conditions and equations (2') - (5') we easily derive that with regard to this part of the system (or in a "pure" system of this type) residential investment will be a fraction of savings depending on the value of land:

$$I_h = SH/v \quad (\text{by definition } v > 1)$$

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26. The formulation presented in equations (1') - (5') has been developed as an analogy to a model advanced by Nicholas Kaldor for business investment in general, incorporating explicitly a market in shares. See his "Marginal Productivity and Macroeconomic Theories of Distribution". It should be added that in terms of the causal mechanism, the analogy is not sustained. Kaldor, as all members of the "Post-Keynesian" school, takes capitalist investment as the independent variable; savings are determined endogenously. The mechanism in the case of housing works the other way around, of course.

27. If  $v = 1$ , the value of  $c$  will at maximum equal the share of the fully-priced product appropriated by landowners. This, given the definition of  $v$ , is  $v-1/v$ .



More relevant to the social relations prevailing in "early capitalist" speculative building, is an arrangement where the landowner takes part in finance and development by exchanging his land for part of the developed property. In terms of a "pure" case again, he will "invest" the *whole* of the development value of land in the housing capital generated in the process and we will have  $c = 0$ . In consequence, regardless of the amount of funds invested by the landowner in addition to this, i.e. irrespective of the value of " $i$ ",  $I_h$  will equal  $SH$ .<sup>28</sup> We see immediately that this pattern results in a substantially higher volume of housing construction for given levels of savings directed to this purpose, compared with the former case of a pure capitalist division of labour (in Greek speculative building, " $v$ " has been roughly 1.35 - 1.40, hence  $I_h$  in a pure case of the second type would have been 28% - 33% higher than  $I_h$  in the former case). As a matter of fact, speculative apartment building in postwar Greece has followed in its largest part this latter "cooperative" form of speculative production, a pattern that goes a long way in explaining the swift manner of speculative sector expansion as well as the high levels of aggregate residential capital formation relative to incomes and savings.

In both of the above cases we have a system of commodity production. If there is no division between the builder-developer and the final owner (who in most cases is also the user), i.e. in "owner-building", we can envisage two opposite types depending on the role of land. These are determined by the *time* land has been appropriated relative to the time of building. When the relevant time-lag is long enough, the owner-builder assumes effectively the role of the landowner, too. We have then a case where  $i = 0$ ,  $c = 0$ ,  $SH = SH_0$  and  $SH_h = 0$ . But then, of course, the division between landowners and households demanding housing property breaks down and  $SH_0$  represents the savings of households. In such a pure case of owner-building with owned land, i.e. a total lack of commodity exchange relations and the attendant division of labour (disregarding the sphere of construction), we will have  $I_h = SH$ . Thus the *aggregate* effect is similar to the more "primitive" case of speculative housing production. In terms of the *distribution* of the housing product between landowners and households, the effect is, of course, radically different.

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28. When  $c = 0$  housing investment  $I_h$  will always equal  $SH$  irrespective of the value of  $i$ . This is obvious since in the case that  $0 < i < 1$  and thus  $I_h = SH_h/i$ , savings invested by owner-developers are  $SH_0 = (1-i)I_h$ . Therefore,  $SH = (1-i)I_h + i \cdot I_h = I_h$ .

At the other extreme, we have a case of complete division of labour (and division of the product) between the owner of land and the owner-builder. The latter buys land at *full cost* at the moment of development, and the landowner utilises the proceeds in consumption and non-housing assets (relative at least to this housing sector). We therefore have a case where  $i = 0$  and  $c = v-1/v$  and the net effect of savings directed to housing is reduced in proportion to land costs, i.e.  $I_h = SH/v$  and  $SH = SH_h$  similar to the aggregate pattern of the pure capitalist division of labour.

Greek precapitalist owner-building has been on the whole situated somewhere between these two extreme cases of  $I_h = SH$  and  $I_h = SH/v$ . Although a great part of land has been, from a long-run perspective, owned by popular households or bought at substantially earlier dates than the date of residential development, a certain amount of resources has always been transferred to a distinct class of landowners (peasants owning agricultural land in the periphery of cities and petty speculators). On the whole, however, perhaps the largest part of land gains due to urbanisation has been "internalised" in the form of asset formation within the precapitalist owner-building sector. Additions to existing structures which form a very large part of Greek precapitalist building are, of course, a pure case of a complete "internalisation" of the development value of land (a pure case of  $i = 0$  and  $c = 0$ ). In this respect, and disregarding distributional aspects, there is a certain symmetry between the precapitalist mode and the "primitive" speculative mode prevailing in Greek urban housing production. "Internalisation" of land values has been extensive in apartment building also and, as a result, the expansion of the speculative sector has most probably not brought any drastic fall in the aggregate  $I_h/dW_h^*$  ratio.

Nevertheless, the trend of change has been towards the expansion of the role of commodity exchange relations and an increased division of labour between landowners, builders and final owners. This has been effected by the expansion of speculative building in itself as well as the imposition of controls on petty owner-building and the restrictions of access to peripheral urban land (see chapter 4). With the capitalist transformation of the housing system, therefore, there has been a gradual shift away from the "pure" owner-builder case ( $i = 0$ ,  $c = 0$ ) to the other three cases we examined, which either in the distributional or in the

aggregate sense diminish the volume of real housing product relative to the level of household funds in demand for residential wealth.

#### 8. The rate of the depreciation of residential capital

With given residential investment  $I_h$  in current prices, the "valuation ratio" ( $v$ ), and the increase in the price of a composite unit of construction output representative of the material character of the housing stock, we can determine the value of total residential capital or housing wealth incrementally in relation to previous year's stock. We must also take into account, however, the effects of depreciation and capital loss. In formal terms we have the following identity:

$$W_{h,t} = W_{h,t-1} \cdot (1-d) \cdot (dp)_{h,t} + v \cdot I_{h,t}$$

where  $(dp)_h$  is the change in the appropriate construction price index and " $d$ " a composite depreciation rate. This formulation implies, of course, that we define the value of buildings by their replacement cost, that the "valuation ratio" due to the value of land is constant, and that the value of undeveloped land is not included in housing wealth (neither the excess of the development value of a given plot over the value determined by the product of " $v$ " and the replacement value of existing structures).

The important element in the previous relationship is the depreciation rate; whereas changes in replacement costs are basically "exogenous" to the housing system, depreciation is influenced by dynamic interrelationships within the latter. The annual rate of losses in residential wealth is, of course, mainly determined by the physical decay of buildings and the incidence of obsolescence which in turn depend on the age of stock and the quality of construction. It also depends, however, on factors that go beyond simple technical matters. For one, it is influenced by the pattern of social preferences with regard to modern as against non-modern housing. Moreover, the structure of urban development specific to a housing system during a given period influences " $d$ " by impinging on the demolition rate. Decisions for demolition and rebuilding are less a matter of physical obsolescence and more a matter of the distribution of opportunities for "higher and better" development. The massive wave of piecemeal speculative redevelopment of central areas in Greek cities in the postwar period has caused the extensive demolition of a large number of otherwise viable structures. Thus a high rate of housebuilding relative to the volume of

the housing stock as a whole, and most especially, high shares of speculative developments, will raise the rate of capital loss by increasing the rate of demolition and lowering the obsolescence age of dwellings. The latter will take place to the degree that the "objective" obsolescence age of old stock determined by demolition - say when 70% or 80% of a given "vintage" has been demolished - influences, in turn, subjective evaluations about the life of buildings.<sup>29</sup>

More important "endogenous" fluctuations in the aggregate depreciation rate will result from the influence of changes in housing rents (the latter, as we will see immediately below, are also determined to a large extent "endogenously"). In the more obvious sense this will be effected through the decisions of owners of rented stock regarding the level of maintenance expenditures that are economic for given levels of gross rental income. The rate of vacancies is also relevant to these economic calculations. It is widely believed that the deterioration of structures is not a simple linear function of decreases in maintenance expenditures but accelerates when the latter reaches low levels. Thus, with falling rents and increasing vacancies, the net effect will be an increase in the rate of depreciation (including abandonment). Falling rents, however, will also cause an increase in the growth rate of real housing consumption per household and through the mechanism of housing allocation will effect an increase in the aggregate rate of abandonment. This can be easily demonstrated with the help of the model of housing allocation advanced in chapter 4. It should be noted that the concept of the "depreciation rate" adopted there differs from the one used here in that the former did not include capital losses in the form of demolition and abandonment of stock. The volume of abandoned stock, which is incorporated in the present concept of aggregate depreciation, was found in that analysis to depend on rate " $g$ ", the growth rate of real housing consumption per household, as well as on a series of other, "exogenous" factors (including "depreciation" in the narrow sense). Therefore, depending on the elasticity of " $g$ " with respect to fluctuations in rents relative to the general price index (and more particularly to that of housing construction costs), the aggregate depreciation rate (especially the part commonly called the "replacement rate") will be influenced by fluctuations in the relative index of rents.

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29. For this argument on the "objective" determination of the obsolescence age of housing by the rates of growth and demolition, see Needleman, The Economics of Housing, pp. 40-41.

We can summarise the previous points by treating the aggregate depreciation rate as composed of two components. A *permanent* component ( $d_p$ ) determined by the structural characteristics of the housing system in question and the age composition and physical attributes of the housing stock, and a *transitory* component ( $d_n$ ) determined by the gross rate of growth of residential capital in real terms ( $I_{h,t}/W_{h,t-2}$ ), and by fluctuations in the price index of rents relative to general inflation and the price index of construction costs. Assuming that the latter is more important in this particular relationship, and neglecting time lags, we write:

$$d_t = d_p + d_{n,t} \quad d_{n,t} = f(I_{h,t-1}/W_{h,t-2}, P_{r,t-1}/P_{h,t-1})$$

#### 9. The equilibrium between housing supply and housing consumption demand: the role of housing rents and vacancies

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It can be easily observed that according to the hypotheses advanced thus far, residential capital ( $W_h$ ) and aggregate housing consumption ( $C_h$ ) are determined at any given time by independent mechanisms: the first in the context of wealth accumulation and the dynamics of housing production, and the latter as a function of total household consumption. We therefore have a built-in tendency for *disequilibrium* between the supply of housing stock and housing consumption demand. What are the mechanisms that restore equilibrium in the system as a whole? Current theories of the economics of housing assume perfect competition and generalised market relations in both the housing market and the market of production factors and thus suggest two complementary equilibrium mechanisms. The first operates through housing rents and the rate of vacancies. Undersupply will be reflected in low vacancy rates, high rents and high house prices after a certain time lag, whereas the tendency of speculative building to overshoot demand will result in high vacancy rates and a fall in house prices and rents. These will lead, respectively, to a rise or a fall in residential investment thus restoring equilibrium. The whole process will take the form of the so-called "housing cycle".<sup>30</sup> In the production sphere

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30. See, Needleman, The Economics of Housing, pp. 154-56. For an elegant model of the interdependence of rents, vacancies and housing investment in the process of the "housing cycle" see, J.S. Dusenberry, Business Cycles and Economic Growth (New York, 1968), chapter 7.

a similar equilibrium mechanism should be expected to operate under competitive conditions: excessive construction activity will produce scarcities in productive factors and price rises, thus resulting in a reduction of profit margins and a check of further expansion.

We have noted, however, that in the conditions of a "dual" housing system with a "primitive" speculative sector and a limited capitalist-rational rentier component, the dynamic interrelationships between the accumulation of residential wealth and the rental returns and capital costs of property are very weak if significant at all. Construction costs may influence residential investment but the reverse, i.e. the systematic influence of building activity on factor costs, is not true. This situation may change only in the extreme case when we have an exhaustion of the productive capacity of the economy as a whole, full employment, and a general inflation crisis. Thus, the feedback mechanisms necessary for equilibrium are not normally based on the interrelation between housing investment, rental returns and production costs, save in the case of really great changes in the latter that would act as broad *limits* for further household wealth accumulation.

Similarly, the rate of vacancies, though certainly significant in the long run in the previously mentioned sense of setting broad limits, appears in the short and medium run to be very flexible and might reach surprisingly high levels under conditions of fast growth in the housing stock. Even in the developed housing market of the U.S. in the 1950's the interconnection between vacancies in the various local sub-markets was weak and the time-lags for the realisation of their effects very long. As Maisel has pointed in his important study of the housing cycle, "macro-disequilibria may last for long periods before any adjustment by alteration in the number of starts".<sup>31</sup> In addition to this inherent imperfection of the housing market as a whole, it has been observed that when rising incomes are associated with a long-term shift towards a preference for owner-occupation, we should expect higher vacancy rates and a slower

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31. S.J. Maisel, "A Theory of Fluctuations in Residential Construction Starts", American Economic Review, June, (1963): 359-83. The strategic importance of vacancies in the formation of building fluctuations has been argued in the classic study of A.K. Cairncross, Home and Foreign Investment 1870-1913 (Cambridge, 1953), chapter 2.

response of house-rents in the rental market of apartment buildings.<sup>32</sup> Though the share of owner-occupation has shown a falling trend in postwar Greece, this was more the effect of objective constraints rather than a reflection of any weakening in the emphasis placed on the achievement of owner-occupation as household resources rise in the long run and within the life-cycle of households. Thus, the above point is highly relevant, adding to the lack of short-term feedbacks operating in investment.

If the short- and medium-term behaviour of residential investment ( $I_h$ ) does not supply the mechanism for the equilibrium of residential capital supply ( $W_h$ ) and housing consumption demand ( $C_h$ ) how is the latter maintained? Our hypothesis is that the necessary adjustments take place on the side of housing consumption and, secondarily, in the housing stock as a whole through changes in the depreciation rate. Over-investment or under-investment relative to consumption demand will result in changes in rents and vacancies. We have already argued that the latter will affect the "transitory" component of depreciation, notably in a direction compensating for over- or under-supply. Higher rents and lower vacancies (under-supply) will lower the depreciation rate, and thus increase the net growth rate of the stock as a whole for a given gross investment. The opposite process will take place in the case of over-investment.

A similar though more effective mechanism will operate in relation to housing consumption. We have assumed (in equation 4) that the latter is a simple power function of total household consumption. We may add now that the price level of housing rents relative to the general price level is also a relevant determinant (since rents and vacancies are interrelated the latter need not be included explicitly in the housing consumption function). An increase in rents and a lowering of the vacancy rate due to underinvestment will effect a decrease in real housing consumption, thus reducing the disequilibrium in the  $C_h/W_h$  ratio within the acceptable limits of gross rental returns. The opposite case (over-investment) will include higher consumption both in terms of space and expenditure and thus help towards the occupation of the oversupplied housing stock. The effectiveness of this mechanism will depend on the elasticity of housing consumption with respect to the relative level of rents. It should be added that this process need not be confined to the

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32. See, Maisel, "A Theory of Fluctuations"; Needleman, The Economics of Housing, p. 157.

rental market. Owner-occupiers will also react. This does not require any strong assumptions about a high rate of mobility among owner-occupier households (which is usually - and most especially in Greece - limited). A response to changing rents and vacancies requires simply that owners of housing wealth occupy ("consume") more or less of the stock they own. Admittedly, only a limited part of property holders own more than one housing unit. This substratum, however, is sufficiently elastic in their behaviour *vis-à-vis* rents and vacancies, and amplifies substantially the inherently elastic behaviour of renters.

#### 10. Formal structure of the model

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The formal structure of the theoretical model developed in the previous sections can be presented as follows (we neglect complexities in the time-lag structure):

$$(1) \quad C_t = q \cdot W_t^b \cdot (dp)_t^{b'}$$

where  $C$  is national private consumption,  $W$  total household sector wealth (this is mainly composed by housing wealth and liquid assets and in operational terms may be measured by their sum);  $(dp)_t$  is the rate of change in the general price index (the *GDP* deflator).

$$(2) \quad Y_{d,t} = Y_{d,t_0} \cdot (1+g)^t$$

where  $Y_d$  is disposable income,  $g$  its growth rate and  $Y_{d,t_0}$  its value at some arbitrary starting point  $t_0$ .

$$(3) \quad C_t + W_t = Y_{d,t} + S_{a,t} + W_{s,t-1} + W_{h,t-1} \cdot (1-d_t) \cdot (dp)_{h,t}$$

where  $S_a$  is capital inflow to the household sector from abroad,  $W_h$  is housing wealth,  $W_s$  is household sector liquid assets,  $(dp)_{h,t}$  is the rate of change of housing construction costs and  $d_t$  the depreciation rate of residential capital. This formulation implies that the model is expressed in current prices. It also implies that we may effectively disregard certain non-housing and non-liquid assets and thus write:

$$(4) \quad W_t = W_{s,t} + W_{h,t}$$



We also have:

$$(5) \quad W_{h,t}^* = k \cdot W_t^Y$$

where  $W_{h,t}^*$  is desired residential wealth. More generally, we may write:

$$(5') \quad W_{h,t}^* = k \cdot W_t^Y \cdot (p_{h,t}/p_t)^{\gamma'} \cdot (p_{r,t}/p_t)^{\gamma''}$$

where  $p_t$ ,  $p_{h,t}$  and  $p_{r,t}$  are the general price index and those for housing construction and rents respectively. We assume, however, that their effect in (5') will be relatively minor:  $\gamma'$  will be very small and negative and  $\gamma''$  very small and positive. We also have as an accounting identity:

$$(6) \quad dW_{h,t}^* = W_{h,t}^* - W_{h,t-1} \cdot (1-d_t) \cdot (dp)_{h,t}$$

where  $dW_{h,t}^*$  is the desired change in housing wealth. With respect to depreciation, we have assumed that:

$$(7) \quad d_t = d_p + d_{n,t}$$

where  $d_p$  is the "permanent" component of the aggregate depreciation rate (the constant rate of residential capital devaluation) and  $d_{n,t}$  the "transitory" component. We have also advanced the hypothesis that:

$$(8) \quad d_{n,t} = f(I_{h,t-1}/W_{h,t-2}, p_{r,t-1}/p_{h,t-1})$$

Given  $dW_{h,t}^*$ , the equilibrium level of actual residential investment (net of land costs)  $I_{h,t}$  is a simple proportional function of the volume of funds representing  $dW_{h,t}^*$

$$I_{h,t} = a \cdot dW_{h,t}^*$$

where "a" is a parameter ranging from +1 to  $1/\nu$ , depending on the aggregate pattern of the "social relations of production", namely the composition of residential production with respect to the four extreme analytical types distinguished in section 8 above according to the role of landowners in residential development and the distribution of land gains. Thus parameter "a" will not be in general a constant but will change in value as the overall character of housing production changes. Under conditions of an expanding role of the speculative-capitalist sector, "a" will shift downwards from values near +1 to values approximating  $1/\nu$  ("ν" is the

"valuation ratio" expressing the mark-up on  $I_h$  due to land costs; if land values are positive " $v$ " is always greater than +1).

In the short run,  $I_{h,t}$  will diverge from its equilibrium value due to the effect of fluctuations in the flow of housing credit on speculative building (we assume a constant pattern in the social distribution of credit *vis-à-vis* the differentiation of households according to capacity for housing wealth accumulation). Thus we will have

$$(9') \quad I_{h,t} = \alpha' \cdot dW_{h,t}^* \cdot (F_{h,t})^2$$

where  $F_{h,t}$  is the flow of funds for housing loans.

Actual residential wealth at time ( $t$ ) will be the sum of this investment adjusted by the "valuation ratio" and residential wealth in the previous period adjusted for the effects of depreciation and the change in replacement costs.

$$(10) \quad W_{h,t} = W_{h,t-1} \cdot (1-d_t) \cdot (dp)_{h,t} + I_{h,t} \cdot v$$

It should be noted that equations (6), (9) and (10) imply that, even in the long run, there is a systematic difference between  $W_{h,t}^*$  and  $W_{h,t}$  unless  $\alpha = 1/v$ . This results from the assumption that the investment of part of the land gains realised by landowners in housing wealth does not form part of housing wealth *demand* but is a conjunctural induced effect of the volume of residential development depending on the structure of finance (i.e. the "relations of housing production").

Housing consumption  $C_{h,t}$  will be a function of household consumption expenditure as a whole and the price level of housing rents  $p_{r,t}$  relative to the level of the general price index  $p_t$ .

$$(11) \quad C_{h,t} = \cdot C_t^\delta \cdot (p_{r,t}/p_t)^{\delta'}$$

The elasticity of  $C_h$  with regard to the price of rents when the first is measured in constant prices is expected to be negative. However, our model is expressed in current prices, and thus the elasticity  $\delta'$  in equation (11) need not be negative. It can be easily seen from equation (11) that if the elasticity of  $C_h$  (in real terms) with regard to rents is  $n_r$ , then  $n_r = \delta' - 1$  and therefore, unless  $n_r$  is greater or equal to -1,  $\delta'$  will be positive.

To finish the formal expression of our model, we have argued that the general index of prices  $p_t$  and the index of construction prices  $p_{h,t}$  are exogenously given. Thus,  $p_{h,t}$  will not be significantly affected by fluctuations in the level of residential investment. In contrast, we have assumed that the level of housing rents *will* be affected by the latter as it relates to changes in housing consumption ( $dC_h$ ) as well as follow the changes in the general price level ( $dp$ ). Thus we have:

$$(12) \quad (dp)_{r,t} = f \left[ (dp)_t, \frac{(dC_{h,t}/p_{r,t})}{I_{h,t}/p_{h,t}} \right]$$

In the system of equations (1) to (12) there are twelve unknowns:

$$C_t, Y_{d,t}, W_t, W_{h,t}^*, dW_{h,t}^*, C_{h,t}, W_{h,t}, I_{h,t}, W_{s,t}, d_t, d_{n,t}, (dp)_{r,t}.$$

All other elements are, or can be derived from, parameters, exogenous variables and initial values. Thus the system is mathematically determinate. Its solution, however, for any year must be arrived at *incrementally*, by proceeding from initial values. A general formal solution would require the knowledge of growth functions for the exogenous variables as well as initial values consistent with an equilibrium path. These rather formal issues will not be pursued here. Our concern is more limited, namely the supply of a comprehensive, if general, theoretical substructure for the understanding of the process of residential capital formation as a whole under conditions similar to those of postwar Greece. It remains to measure empirically the value of the parameters in the model as well as check the consistency of the econometric relationships implied against the available evidence.

#### 11. The empirical superstructure of the model

Any empirical analysis along the lines suggested by our theoretical model will by necessity be inconclusive due to the limitations of available data. These are most pronounced in the case of household wealth as a whole and housing wealth in particular. In addition, the various parameters involved in the formation of residential investment can not be directly estimated; their role can only be discerned with the help of their indirect effects and certain broad qualitative assumptions. A more general limitation results from the necessary use of aggregate macroeconomic data which are the product of the behaviour of a non-homogeneous housing system comprised by radically different modes of housing

production. Aggregate national data, moreover, reflect the composite outcome of local fluctuations that may differ significantly between regions and along the urban-rural continuum. These complexities will most probably be restricted to the short run, save for those differences in dynamic behaviour resulting from the systematic discontinuities in the mode of housing production, and their effects will be mitigated by the fact that the household character of the economics of housing investment to a large extent cuts across different modes and sectors. Nevertheless, we should expect a certain smoothing-out that will make aggregate patterns less indicative of the actual dynamic interrelationships as these function in particular regions and "sub-markets". These imperfections are compounded by the notoriously bad quality of housing investment statistics in Greece which are based on building permits data, crude price indices and are, in addition, hampered by the non-monetary character of a substantial part of the housing economy.<sup>33</sup> The long-term structural orientation of our model reduces to a large extent the distorting effect of these imperfections. By necessity, however, certain aspects will not be examined at all (most importantly the role of depreciation and of "relations of production" in the investment function) and throughout the following analysis we must keep in mind these limitations of the material as important qualifications.

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33. The National Accounts Service of the Ministry of Coordination estimates the value of gross investment in dwellings by a rather crude method. The volume of residential building permits is taken as the measure of *actual* construction. This is raised by a certain percentage in order to incorporate illegal building estimated roughly on the basis of official impressions. The building volume then is multiplied by two aggregate indices of the value of construction per cubic meter - one for Athens and one for the rest of the country. The latter are supplied by the Ministry of Public Works and the National Statistical Service. It is significant that only after 1971 was a systematic price index for residential construction constructed and this concerned material inputs only. The index, furthermore, is based on a model of a "representative" building; given the variety of building types and modes of housing production and the different patterns of fluctuations observed for these, it must be obvious that this highly aggregated approach produces crude estimates. (Our information about the methodology employed by the National Accounts Service is based on an inspection of the methodology manuals issued by the Service for internal use and interviews with staff).

In the formulation of our model we have defined household sector wealth as composed, for all practical purposes, by housing assets  $W_h$  and liquid assets  $W_g$ . The latter is operationalised here as the sum of currency in circulation, and sight, savings and time deposits by individuals and private enterprises in banks (excepting the Bank of Greece) and special financial institutions (see series in General Appendix A.9). An obvious problem with such a measure of household sector liquid assets is the inclusion of private enterprise deposits. We can only assume that the latter may serve as an index of the volume of non-liquid assets other than housing and land, held by households, namely securities and the equivalent of rentier wealth in the case of non-incorporated enterprises.

The measurement of residential wealth presents even greater problems. It is customary to measure real wealth by capitalising rental income. All too often this method is conceived as a *definition*, a representation of the actual thing, whereas it is only an hypothesis, valid under certain conditions in the real estate market. The value of residential capital, as all values in a market society, is determined, of course, in exchange. Disregarding local and temporal fluctuations in market values, the exchange value of new housing corresponds to its current "production price" (including the cost of land and indirect taxes). In that part of the existing stock where properties are saleable and competitive with new structures (i.e. where dwellings can be feasibly compared with new stock as alternatives regardless of their condition), values are determined by current replacement costs and the prevailing mark-up on construction costs due to the land factor. Development values of land where a "higher and better" development is feasible are an additional element that must be taken into account in this latter case. Thus in a housing system dominated by a rapidly expanding market of new structures, even under generalised market conditions, the relationship between the market value of housing and the "values" given by the capitalisation of rents with the ruling rate of interest is an empirical question depending on the conformity of investors' behaviour with rentier-capitalist rationality. We have repeatedly stressed that the prevalence of such rationality under the conditions of an early capitalist, "dual" housing system is questionable to say the least. As a result, the exact relationship between the value of housing wealth and gross rental yields can not be determined beforehand but is, within very broad limits, an "endogenous" variable. We do not have

sufficient information for this relationship - save for a few rough estimates for various periods - and, therefore, the customary capitalisation method is unfeasible for empirical reasons, too. Nevertheless, given the limitations of data and our interest in long-term patterns, we will use in the following analysis an estimate of  $W_h$  based on the capitalisation of gross rents (paid and imputed) with an average rate for the whole period of 6.5%. This is slightly greater than the average interest rate on bank deposits for the period under study.<sup>34</sup> We believe that a more realistic average rate would have been 5.0%; this, however, would have given extremely large amounts of  $W_h$  relative to disposable income and liquid assets, thus obscuring the process of asset allocation within the household sector.

We will limit the time-span of the analysis to the 1955-1976 period. The choice of 1955 was dictated by two considerations. First, 1955 has been a major turning-point in Greek financial and monetary affairs: it was the beginning of a long period of relative monetary stability as well as the beginning of a series of important changes in credit and monetary policies. As a result, household attitudes towards bank deposits changed considerably in comparison to the lack of confidence prevalent in the previous years when gold hoarding has been an important form of asset accumulation.<sup>35</sup> Second, whereas up to 1954 Government investment in housing has formed a significant part of the total, thus influencing aggregate relations between housing demand and investment, from 1955 onwards private building can be safely regarded as the near-exclusive form of residential capital formation.

The extension of the study period to 1976 was based on a different rationale. Though this study has been in general restricted to the years up to 1974, in terms of econometric analysis this dividing point creates some problems. Housing investment reached unprecedented heights in 1972-73 while it fell to extremely low levels in 1974. By 1976, however, it had reached "normal" levels again in the light of the postwar growth trend. Thus for the study of growth patterns the inclusion of 1975-1976 seemed

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34. The arithmetic mean of the annual weighted average return on bank deposits of all types has been 6.22 for 1955-1975. See, Papadakis, Money and Economic Activity, p. 263.

35. See, Zolotas, Monetary Equilibrium, pp. 39-42 and chapter 2, and D.J. Halikias, Money and Credit in a Developing Economy: The Greek Case (New York, 1978); chapter 2.

advisable. In addition, the 1970-1976 fluctuations in building were associated with major fluctuations in prices, incomes and savings, thus affording a better chance for the statistical analysis of dynamic interrelationships, especially in view of the fact that up to 1971 short-term fluctuations in these variables at the macroeconomic level have been minimal.

Let us now turn to the empirical analysis of the relationships suggested by our model. The fundamental determinant relationships in the system are, of course, those between consumption and wealth, the allocation of the latter in residential and non-residential forms, and that between housing consumption and total household consumption (the variables refer throughout this analysis to the corresponding aggregate macroeconomic magnitudes according to the definitions given previously). We have assumed that these relationships follow, in general, power functions for reasons of simplicity as well as in conformity with the fact of changing marginal propensities easily verified from a simple inspection of the trends (see chapter 5). Thus we have used throughout the analysis double-log regressions. The relevant time-series of the data are supplied in the General Appendix, Tables A.7-A.11. All variables are measured in current prices. We have:

$$(i) \quad C_t = 1.0534 W_t^{0.938} \quad (R = 0.997) \quad (1954-76)$$

$$(ii) \quad C_{h,t} = 0.5405 C_t^{0.861} \quad (R = 0.997) \quad (1954-76)$$

Since we measure housing wealth  $W_h$  by a capitalisation of gross rents ( $C_h$ ) with a 6.5% rate we have  $W_h = C_h/0.065$ . This in conjunction with (i) and (ii) implies that

$$(iii) \quad W_{h,t} = 8.6953 W_t^{0.8076} \quad (1954-76)$$

A more direct expression of the pattern of household wealth allocation can be derived from the relationship between residential investment  $I_h$  and the increase in liquid assets ( $dW_s$ )

$$(iv) \quad I_{h,t} = 17.8813 (dW_s)_t^{0.6997} \quad (R = 0.963) \quad (1955-76)$$

("R" is throughout the correlation coefficient).<sup>36</sup>

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36. Tests of significance and the associated statistics have been neglected as irrelevant. The time-span considered in the regressions is

We have advanced the hypothesis that the rate of inflation affects negatively the savings ratio. This issue is peripheral to the present analysis but must be considered as a check against the influence of more relevant variables, mainly the volume of housing credit. With regard to the latter we advanced the tentative hypothesis that its effect on savings will be similarly negative, though such an influence will most probably be of a long-run character. Both factors will tend to raise the exponent in relation (i). At first sight this appears to be indeed the case with the changes in the consumption-wealth function in the later part of the period when, of course, both the volume of housing credit and inflation rates have increased. We have:

$$(i') \quad C_t = 0.3197 W_t^{1.028} \quad (R = 0.941) \quad (1966-76)$$

A closer inspection, however, shows that these influences on the propensity to consume relative to the accumulation of wealth are insignificant. For one, the effect of the inflation rate is extremely limited though in the assumed direction. We have:

$$(v) \quad C_t = 1.2477 W_t^{0.9213} (dp)_t^{0.0304} \quad (R=0.9978) \quad (1954-76)$$

(the partial correlation coefficient between  $C$  and  $d_p$  is 0.5434, significant at the 1% level).

Moreover, the small increase in the propensity to consume suggested by (i') can be easily accounted without any reference to the role of inflation or housing credit. Most of the change resulted from the drop in the savings ratio in 1975-76 (see Table 5.2 in chapter 5). The decrease in savings, however, can be explained by the stagnation in real incomes per capita during 1974-76 and the need of households to maintain the consumption expectations created in previous years of fast economic growth.

conceived as exhausting the relevant "population" of observations. Tests of significance would have been meaningful in the case we understood the data used as a sample from a wider "population", be it other countries or other periods in the same country as in the case of a predictive model. The explanatory power of the relations checked here derives from their logical consistency, the assumptions of our model, and the degree to which our theoretical "predictions" are corroborated by an acceptable goodness of fit with the patterns observed in the period under study. Nevertheless, as an additional measure of the statistical strength of some relationships where a parameter or the correlation coefficient is small, we use a test of significance based on the t-statistic. Since we are only interested in "goodness of fit", the tests used are the ones appropriate for correlations and not for regressions.



The structure of wealth allocation, in contrast to the savings-consumption mechanism, does not show any significant change during the study period. This is due to the fact that the elasticity of housing consumption (hence of capital values based on rents) with regard to total consumption showed a decrease and therefore compensated for the change in relation (i). We have:

$$(ii') \quad c_{h,t} = 1.3293 c_t^{0.789} \quad (R = 0.996) \quad (1966-76)$$

hence in conjunction with (i') and the capitalisation formula,

$$(iii') \quad w_{h,t} = 8.3166 w_t^{0.811} \quad (1966-76)$$

The relationships examined so far express the structure of the allocation of resources within the household sector. From the point of the housing system as such these are essentially exogenous givens. By the same token, they do not constitute in themselves specific hypotheses about the character and functioning of the housing system *vis-à-vis* residential capital formation: they are more important in a comparative perspective and in this regard, the values of the parameters measured in the above relationships should be viewed in the light of the discussion in this and the previous chapter concerning the institutional and socio-structural particularities making for high (or low) levels of housing investment in a given country (in this connection the very high exponents in relations (i) and (iii) are suggestive). In terms of a check of the validity of our theoretical model, the more specific hypotheses about the short- and medium-term determinants of residential investment, i.e. the ones concerning the role of costs, rents and the equilibrium mechanism of the system are more relevant.

Equation (9') in our model assumes that investment in housing is a power function of the demand for new residential assets and the volume of housing credit. Since the former variable can not be directly measured we will examine a housing investment function derived from the whole set of formal relations (1) to (9') describing asset allocation by households and the behaviour of housing producers. Let us disregard the role of depreciation and residential capital gains; their influence will be minimal in short-run fluctuations (we also lack adequate data). It can be easily seen from equations (1) to (5) that the demand for new residential wealth can be directly expressed either in terms of total household

"savings"  $S = Y_d - C + S_a$  (where  $S_a$  is capital inflow to the household sector from abroad), or in terms of the increase in liquid assets ( $dW_s$ ). The first alternative is logically more powerful since it constitutes a relationship of *determination*, whereas the second expresses only the pattern of asset allocation between  $dW_h$  and  $dW_s$ ; both of the latter are simultaneously determined by a third factor, namely  $S$ .

A double-log regression of  $I_h$  on  $S$  and  $F_h$  (the sum of savings out of income and capital inflow and the volume of housing credit) shows extremely good results.

$$(vi) \quad I_{h,t} = 20.97275 S_t^{0.5104} F_{h,t}^{0.1783} \quad (R = 0.9928) \quad (1958-76)$$

(The partial correlation coefficient of  $I_h$  with  $F_h$  is 0.731213, significant at the 1% level. The regression was restricted to 1958-76 because of lack of reliable data for  $S$  for 1955-57. For the relevant time-series see General Appendix A.7, A.8, A.9).

In equation (5') of the model we have advanced the hypothesis that the demand for housing wealth will be influenced negatively by construction costs and positively by housing rents (both relative to general inflation) but only to a minor extent. We have further assumed that these variables will not affect the behaviour of housing producers *qua* producers, i.e. as distinct from investors in housing wealth (namely in the case of speculative developers). Lastly, we claimed that the rate of inflation will not have any significant effect on the pattern of asset allocation.

The high goodness of fit with actual trends shown in the case of equation (vi) substantiates these hypotheses to a very large extent. However, a detailed examination of short-run fluctuations indicates a more complex pattern. We have run regressions of the deviations of residential investment from the trends specified by (vi) on fluctuations in the relative levels of rents and construction costs. If  $I_{h,t}/I_{h,t}^*$  is the ratio of actual housing investment to the level determined by function (vi), and

$$(p_r/p)_t = \left[ p_{r,t-1}/p_{t-1} + p_{r,t-2}/p_{t-2} \right] / 2 \quad \text{and}$$

$$(p_h/p)_t = \left[ p_{h,t-1}/p_{t-1} + p_{h,t-2}/p_{t-2} \right] / 2$$

where  $p_r$  is the price index of housing rents,  $p_h$  is the price index of construction costs, and  $p$  is the price index of the Gross Domestic Product (general price inflation), then we have:

$$(vii) \quad I_{h,t}/I_{h,t}^* = 318866.1452 (p_r/p)_t^{-0.5226} (p_h/p)_t^{-1.2505} \quad (1958-76)$$

(R = 0.5828, significant at the 1% level).

In regression (vii) we have excepted years 1967 and 1974 in view of the fact that deviations from normal building levels for these years were mainly due to exceptional political circumstances. Two points are immediately suggested by (vii).

First, that rents in relation to the general price index show a substantial *negative* influence on housing investment contrary to our hypothesis that they should show a limited but positive influence. Such a contradiction, however, is theoretically meaningless: real rents can not possibly have a strong negative influence on housing investment. The observed relationship, therefore, must be spurious. A closer look reveals that the relationship is the effect of the *opposite* causal influence: that of investment fluctuations on rents. We have argued that rents are negatively related to the oversupply of new housing. This is corroborated by the empirical evidence (see below). The downturn of the building cycle will therefore be always preceded by a relative oversupply (the peak of the cycle) and thus by deflated rents. The opposite applies in the rising phase of the cycle which is preceded by a relative slump. Since our investment regressions do not incorporate the mechanism of the short-term building cycle, part of the fluctuation in building is spuriously "explained" by rents. This argument accounts sufficiently for the negative elasticity found in (vii). By implication, we also have a minimal positive influence on investment. It should be added that the distortion produced by our neglect of the building cycle does not involve construction costs: as we argued, these should not be expected to react significantly to building fluctuations; the evidence examined immediately below corroborates this argument.

The second point concerns the role of relative construction costs. This has obviously a much more substantial influence than we allowed for in our theoretical assumptions, though we did assume a negative elasticity of  $I_h$  with regard to costs which is corroborated by (vii). Disregarding rents and including the general rate of inflation we get results that

amplify the role of costs. We have:

$$(viii) \quad I_{h,t}/I_{h,t}^* = 3106.4148 \cdot (p_h/p)_t^{-0.7512} (dp)_t^{0.0251} \quad (1958-76)$$

(R = 0.4617, significant at the 5% level. Years 1967 and 1974 were excepted).

$$(dp)_t = (p_t - p_{t-1}) \cdot 100/p$$

where "p" is the average GDP deflator for years  $t-1$  and  $t-2$ ).

Regressions (vii) and (viii) show that the speculative behaviour (in the common use of the term) in house property demand, which would have caused a positive elasticity *vis-à-vis* construction prices, is much more insignificant than we have assumed. This dictates a certain revision of our concept of the behaviour of households as well as our model of the operation of the speculative building mode. We will return to this issue later. With regard to the role of inflation, relationship (viii) shows that it has insignificant effects on the level of residential capital accumulation. This conforms to our theoretical expectation, but is still quite impressive a result in view of the widespread belief among Greek monetary authorities that inflation, by reducing the value of liquid assets, has a strong effect on the propensity to invest in housing.

We may summarise our findings on the housing investment function. The volume of housing credit exerts a definite positive influence, though the elasticity of residential investment with respect to this variable is rather small - less than +0.2. This effect of credit on the expansion of housebuilding is most certainly caused by the much higher short-term elasticity of speculative building and household demand to credit supply.<sup>37</sup> We can thus safely say that the effects of credit expansion on the long-term propensity of households to accumulate housing relative to the growth of resources are limited (though perhaps greater than we have assumed in section 6). This is contingent, of course, on the specific pattern of

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37. The value of mortgage loans to households in Greece is in general less than half the construction cost of the dwelling that is purchased or built. Since the share of new dwelling construction financed by loans was on the average for the 1958-76 period in the order of 15% at least, the short-term elasticity of the value of dwelling starts to new credit must have normally been in the range of +0.3. This elasticity would have certainly been increased by the severity of the speculative building cycle. Thus, the estimation of a constant elasticity of  $I_h$  with respect to  $F_h$  for the 1958-76 period in the order of +0.18, suggests that the medium- and long-run effect of housing credit on residential investment is small.

credit distribution observed in postwar Greece. As we pointed already, credit expansion after 1968 mostly benefited social groups which already had substantial capacity to accumulate housing wealth. This, incidentally, explains the fact that despite credit expansion during 1968-1973, rates of owner-occupation during the same period have remained stable or fell throughout the social spectrum.

Given the fundamental influence of household savings and the flow of credit on housing investment we must conclude that the latter responds little to the factors assumed as significant by models of rentier-capitalist behaviour under conditions of a perfect property market, namely, rents, the inflation rate, and interest rates. The fact that the negative influence of construction costs is, contrary to what we expected on grounds of theory, quite substantial, corroborates this general point. It implies that the speculative component in the process of asset choice by households is rather weak relative to the constraints on housing wealth acquisition imposed by increasing costs, and thus does not compensate the latter as we have assumed. It may be pointed that a similar effect may result from a negative reaction of speculative *builders* to increasing costs. This contradicts, to a certain extent, what we have assumed about the behaviour of the latter, specifically their overriding dependence on the flow of household funds with a consequent relative disregard for price-cost relationships. But this issue must await the examination of investment behaviour in the speculative sector.

It remains to examine empirically the rest of the relationships advanced in our model. These are an essential part of the process of residential capital formation as a whole in that they help maintain the medium- and long-term equilibrium between housing consumption demand and the supply of stock in view of the built-in tendency for disequilibrium resulting from the independence of the  $C_h = f(C)$  and  $W_h = f(W)$  functions. More specifically, we have argued that the effect of excessive over- or under-investment relative to the growth trend will have a minimal effect on construction costs. Equilibrium is therefore most probably maintained through the effect of investment disequilibria on rents and the depreciation rate and the effects of rents on housing consumption demand.

If the effects of fluctuations in residential investment on construction costs were substantial, they would have supplied an additional effective mechanism for checking the inherent tendency of the speculative economy

for oversupply. We had argued that the competitive and fragmented character of the construction "industry" in an early capitalist economy undergoing fast development and modernisation will make for high elasticities in the supply of construction and fast application of innovations, and thus for small price increases in response to relatively excessive demand for structures. We argued, moreover, that similarly favourable conditions will most probably prevail in the wider market of relevant productive factors, namely labour and materials. In concrete cases, however, the specific relationship between excessive demand and prices is an empirical question contingent on the "tightness" of the economy. Conditions in Greece during the 1960's and 1970's have been somewhat ambivalent in this respect. On the one hand, there were very limited surpluses of labour if any: since the mid-1960's the economy operated near the full-employment level. On the other hand, however, there was widespread underutilisation of plant capacity in industry permitting the fast expansion of production in the urban sector, a process that was helped, up to the early 1970's, by the control of agricultural product prices. The net effect was fast growth with limited price rises for the period up to 1973, though it seems that excessive demand has been the main determinant of these price increases (a case of "demand-pull" inflation).<sup>38</sup>

The last point indicates that major fluctuations in building, demanding by their very nature large volumes of resources, may have had appreciable effects on prices. Empirical analysis shows, however, that this effect was most probably generalised without any special "pull" exerted on construction prices over and above that shown in general inflation. Relative construction costs show nil response to the deviations of building ( $I_h$ ) from the long-term trend line ( $I_h^*$ ). We have:

$$(ix) \quad p_{h,t}/p_t = 86.93898 (I_h \cdot 100/I_h^*)_{t-1} + 0.02614$$

$$(R = 0.07995, 1955-76 \text{ except } 1967, 1974)$$

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38. See, G.I. Economou, Empirical Analysis of the Factors Determining Wages, Salaries and Prices in Greek Industry (Athens, 1975, in Greek): 188-92. For postwar trends in the utilisation of capacity in Greek industry, see, O.E.C.D., Economic Surveys: Greece (Geneva, 1979), the Appendix.

The trend values  $I_h^*$  in regression (ix) have been estimated from the following growth function:

$$I_{h,t} = 3241.9030 (1.13284)^t \quad (R = 0.988) \quad (1955-76)$$

Since, *relative* construction cost is the relevant price variable in terms of the determinants of residential wealth formation, our hypothesis that there is no effective feedback mechanism on the production side regulating the volume of residential investment seems essentially correct. It may be argued that such a regularizing mechanism is effected through the response of *land* costs to fluctuations in building. As a matter of fact, there is some indirect evidence that land costs do respond, at least in the upward direction, to excessive fluctuations in the volume housing starts (see Appendix 6.1). This, combined with the substantial negative elasticity of the demand for housing assets *vis-à-vis* costs indicated previously, suggests that to some extent, and at least in the case of excessively fast expansion, there are certain checks on building booms. Nevertheless, these mechanisms, especially in view of the imperfect relationship between costs and rents, can in no way regulate the fundamental tendency of the system for a disequilibrium between housing consumption and the supply of stock. We have advanced the hypothesis that the relevant interaction is that between levels of building, rents and depreciation, and housing consumption demand.

We have assumed that the oversupply or undersupply of stock relative to consumption demand will result in lower or higher rents respectively, which in turn will affect the consumption of space and the depreciation rate in the direction of equilibrium. Vacancies will play a role similar to rents. Empirical analysis indicates that these influences operate indeed in the direction assumed. With regard to the response of housing consumption to rents (relative to general inflation) we have:

$$(x) \quad C_{h,t} = 0.01458 C^{0.90448} (p_r/p)_t^{0.67787} \quad (R = 0.9992) \quad (1954-76)$$

Magnitudes in (x) are expressed in current prices (relative rents are an average of levels for  $t-1$  and  $t-2$ ). Therefore, the positive price elasticity should not be surprising. A 10% increase in  $p_r/p$  will result in a 6.77% rise of  $C_h$  in money terms relative to  $C$  and therefore the net

effect in real terms will be a 3.0% *fall*. An elasticity in the order of -3.0% is corroborated by similar findings with constant price models.<sup>39</sup>

Turning now to the determinants of rents, we have proposed with expression (12) of our model that these are a function of the inflation rate and disequilibria in the relationship between changes in the housing stock and changes in real housing consumption demand. We may operationalise the latter in a simple way by assuming that these result from substantial deviations of the volume of building from normal trends. Using the growth function for  $I_h$  shown in the previous page and averaging the inflation rates in years  $t-1$  and  $t-2$ , we have the following linear regression:

$$(xi) \quad (dp)_{r,t} = -0.7316 + 0.8465 \left[ \frac{(dp)_{t-1} + (dp)_{t-2}}{2} \right] + 0.0914 dI_{h,t-1}^*$$

(R = 0.8166)                      (1955-76)

$$dI_h^* = (I_h - I_h^*) \cdot 100 / I_h^* \quad \text{where } I_h^* \text{ are the trend values.}$$

Whereas the inflation rate in relation (xi) is obviously a major determinant of the change in rents (as predicted), the effect of  $dI_h^*$  is minimal and the sign of the relationship is the opposite from that expected on grounds of theory. This is in itself somewhat surprising but can be easily explained away as resulting from the aggregate character of relation (xiv). Aggregate movements in rents and building are the composite outcome of largely independent regional and sectoral patterns. Severe fluctuations in housebuilding are a trait of the urban speculative sector. It is in this sector that we observe the greatest concentration of rental housing and the operation of a structured rental market. Rents in urban areas (including imputed rents) are mainly determined by the movements observed in this segment of the housing system. The inter-

39. See, D. Emmanuel, Categories of Households, p. 15 where the results of a double-log regression of  $C_h$  on  $R$  and  $(p_r/p)_{t-1}$  are presented.  $R$  ("resources") is the sum of household sector wealth as defined here and the Gross Domestic Product. All variables are in constant prices. We have found:

$$\log C_{h,t} = 0.5123 + 0.7542 \log R_t - 0.3163 \log (p_r/p)_{t-1}$$

$$(R = 0.9982)$$



relationship between rents and disequilibria in the supply of stock should thus be examined in the context of the speculative market. We may add, however, that the "anomalous" finding in relation (xi) has a certain significance. It testifies to the validity of our contention that the fragmented, "dual" housing system in Greece deviates sharply in its aggregate behaviour from the market model of housing production and distribution.

We have run a linear regression of the rate of change of the relative price of rents in urban areas  $(d \frac{p_r}{p})$  (the index of housing rents normalised by the consumption price index as these are measured by the N.S.S.G. for urban areas) on the percent deviations from the trend observed for speculative building. The latter has been measured by the volume of permits for buildings of four storeys or more and we used a weighted average of the deviations in  $t-1$  and  $t-2$ . Deviations were measured against the following trend ( $B_{sp}$  signifies the actual volume of speculative building,  $B_{sp}^*$ , trend values).

$$B_{sp}_t^* = 6097.0 (1.081)^t \quad (R = 0.7127) \quad (1961-76)$$

(see the time-series in General Appendix A.1).

We have found:

$$(xii) \quad (d \frac{p_r}{p})_t = 0.9945 - 0.0956 \quad dB_{sp}_t^* \quad (R = -0.7288) \quad (1963-76)$$

$$\text{where} \quad dB_{sp}_t^* = (B_{sp}_{t-1,t-2} - B_{sp}^*_{t-1,t-2}) \cdot 100/B_{sp}^*_{t-1,t-2}$$

The sign and strength of relationship (xii) is consistent with our theoretical predictions. It also accounts, given the substantial fluctuations produced by the speculative short-term cycle, for the negative association of rents with the building fluctuations that *follow* (observed as an "anomaly" in the analysis of investment). Over-supply of stock leads to a fall in relative rents with an average elasticity of -0.1. The latter, however, is small and, though consistent with a fragmented rental market dominated by a household economy of petty owners, implies that even quite excessive disequilibria will not be checked sufficiently by changes in rents. The discrepancy will be compounded by the weak effect of rents on housing consumption demand which is relatively inelastic to the former (we have an elasticity in the order of -0.3). Thus, to sum up these last points, we have found that relationships between building fluctuations,

rents and housing consumption follow the predicted pattern but, in terms of strength, are not sufficient for maintaining equilibrium. The conclusion that must be drawn is that the system of residential capital formation we have been describing shows an inherent tendency towards crises of over- or under-supply relative to housing consumption demand. These tendencies may be checked to a certain extent by the operation of vacancies and the depreciation rate, as assumed in theory. We do not have the empirical material to examine their role in this respect. We should add, however, that these empirical findings are as good as the data on which they were based. We do not see any specific reasons for qualifying our conclusions in any major way but the imperfections of Greek housing statistics noted in the beginning of our analysis give a tentative character to most of our estimates.

## 12. Residential capital formation in the speculative sector

The theoretical model of capital formation in housing we have advanced in the previous sections does not incorporate a systematic disaggregation of the system into its two main sectors. This is a serious defect but was unavoidable in view of the limitations in the data. We have tried, however, to distinguish, when necessary, the particular form of the relationships that should be expected to apply in each sector, and more specifically, in the speculative sector as opposed to the housing economy as a whole. Given the results of the analysis, what are the conclusions that can be drawn with regard to capital formation in the speculative sector?

As a general point we would say that most of the points established in the analysis apply in the case of the speculative sector, too. Thus both the formal model and the empirical functions to a large extent answer the question of the determinants of speculative building in the short run as well as in the long run. The reasons are the following.

First, the short-run fluctuations of aggregate residential investment are largely a product of the movements in speculative building. Non-speculative building shows a much smoother time-series (see Figures 4.1 and 4.2 in chapter 4). The various parameters of short-term determinations, therefore, must largely reflect the behaviour of the speculative sector. By implication, we should expect the elasticities operating in the latter to be higher (more intensive) than the ones estimated with the macroeconomic data. In fact, we could say that the analysis taught us more about speculative building than precapitalist building.

Second, we have argued that there is a fundamental continuity in the patterns of household behaviour *vis-à-vis* consumption, savings and wealth along the social class and housing sector spectrum. The speculative sector incorporates, of course, a significant component that approaches the pure model of rentier-speculator behaviour. This is, however, more important in short-run fluctuations rather than in long-term patterns.

Third, we have pointed to the importance of differences in the "relations of housing production" (most especially in relation to land) with regard to the ratio of actual housing investment to the savings flow expressing household demand for real wealth. As it happens, the institution of "antiparochi" in speculative building (the payment of the cost of land with a share in the building) makes for a substantial similarity with owner-building as far as the parameters relating savings to actual construction are concerned. As a consequence the gross effects of differences between the two sectors in this aspect will be small. There are radical differences between the two housing modes, of course, in the *distribution* of the product between users and landowners. This aspect, however, has not been considered systematically anyway.

Lastly, the interrelationship of building with the rental market has been mainly studied with data concerning the speculative sector. This aspect, as we argued, has a crucial significance for the equilibrium of the system as a whole. The rental market, however, is obviously more important for the operation of the speculative sector. Thus, this major specificity of the latter has been sufficiently studied in the process of the analysis.

In conclusion, the preceding analysis may also be considered as an (approximate) study of the structure and determinants of speculative residential capital formation, though it must certainly be complemented with the model advanced in chapter 4 with its explicit emphasis on sectoral change. The long-term expansion of the speculative system in *relative* terms can not be understood with the help of the model advanced in this chapter by itself. In the light of the previous points, few things can be added to this model with regard to particularities of the behaviour of speculative building. On theoretical grounds we should expect the influence of housing credit to be stronger in this sector; we should also expect the elasticity of investment with regard to rents, inflation, and

construction costs to be more positive in comparison to the ones for the system as a whole, given the stronger rentierist and "speculative" tendencies involved (in the common sense application of the term). Let us examine some evidence pertaining to these hypotheses before concluding.

We have run regressions of the volume of speculative building and its fluctuations (" $B_{sp}$ ", defined in the previous section) on savings, housing credit, relative rents, relative construction costs, and the rate of inflation. These are similar with the ones run for gross private housing investment as a whole. We have:

$$(xiii) \quad B_{sp,t} = 523.01332 \cdot S_t^{0.0572} F_{h,t}^{0.3189} \quad (1961-76)$$

(R = 0.8094, correlation significant at the 1% level)

$$(xiv) \quad (B_{sp}/B'_{sp}^*)_t = 739891,4028 (p_r/p)_t^{-0.2811} (p_h/p)_t^{-2.6536} \quad (1961-76)$$

(R = 0.3661, correlation *not* significant at the 5% level.

Years 1967 and 1974 have been excepted).

$$(xv) \quad (B_{sp}/B'_{sp}^*)_t = 182356913.0 (p_h/p)_t^{-4.1846} (dp)_t^{0.1601} \quad (1961-76)$$

(R = 0.5357, correlation significant at the 5% level.

Years 1967 and 1974 have been excepted).

$B'_{sp}^*$  in regressions (xiv) and (xv) denotes the trend values given by the basic determination function (xiii). The ratio  $B_{sp}/B'_{sp}^*$  thus denotes the fluctuations around this trend.  $B'_{sp}^*$  should not be confused with the value of  $B_{sp}^*$  used in equation (xii) which is derived from a simple growth trend function.

Regression (xiii) compared with (vi) which refers to residential investment as a whole shows that the influence of housing credit on speculative building is, as predicted, much stronger - nearly double. It also shows that the determinant role of savings is substantially weaker. This should come as no surprise given the violent fluctuations that speculative building normally undergoes compared with the steady growth pattern of both savings and non-speculative housing. The extremely weak role of savings in (xiii), however, is certainly impressive. It stresses, by implication, the great dependence of speculative building on institutional credit as well as the role of "exogenous" (mainly political) factors in its growth.

The influence of rents relative to the general price level is negative as shown in (xiv). This finding is consistent with our previous observations (see regression vii) and, as we pointed out, must be dismissed as a spurious effect of the dynamic of the building cycle. The negative elasticity in (xov), however, is much smaller than the one observed for the system as a whole. This obviously corroborates our hypothesis about a more positive reaction to rents in the speculative sector. A similar point can be made about the role of the inflation rate. In regression (xv), as well as in the more aggregate regression (viii), its effect is positive. Whereas, however, in the case of the system as a whole its effect is insignificant, its role in the speculative sector is, as predicted, much more important. This is again a manifestation of the stronger rentierist-speculative tendencies of the socioeconomic groups involved in this sector.

In contrast to the verification of our hypotheses in the case of rents and inflation, the effect of relative construction costs as shown in (xiv) and (xv) contradicts our predictions. It is obviously much greater than the one observed in (vii) and (viii) for housing investment as a whole. This may be partly accounted for by the fact that, as we pointed out earlier, demand elasticities even when uniform throughout the system, are *amplified* in the case of the speculative sector by its tendency for violent fluctuations in building. Still, there is a strong case for rejecting our hypothesis that property demand within the speculative sector will show more "speculative" behaviour *vis-à-vis* rises in the price of housing compared with the rest of the system. Alternatively, we should reconsider our assumptions about the behaviour of speculative builders. We have assumed that these are largely indifferent towards construction cost changes given a constant property demand since they are mainly concerned with an adequate flow of funds. This is most probably an oversimplification. It should be remembered that whereas owner-builders can get a permission for a building start without any immediate pressures for fast building, speculative developers do not have this flexibility since they enter into contractual arrangements with landowners that specify the rate of construction. Thus, an adverse development in costs will always frighten away a number of marginal developers who would otherwise have started a venture on very tight margins and on the prospect of a steady trend in demand. Rising costs will affect the demand side as well as the profit

margins side. This argument, if valid, shows that the evidence on the role of costs does not necessitate a revision of our assumptions about the stronger rentierist-speculative tendencies in the speculative sector. It certainly necessitates, however, a revision of our theses about the behaviour of speculative producers *vis-à-vis* costs and profits.

#### Concluding remarks: Some limitations of the model

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The analysis in this chapter has been essentially an elaboration of the theory of the formation of aggregate residential investment advanced in chapter 5. This stressed the role of wealth accumulation behaviour in the household sector in relation to the postwar growth in incomes. It also stressed the role of the inflow of capital from abroad, of the favourable trends in housing costs, and of "institutional" factors such as the property distribution and access to land. The present analysis, read in conjunction with Appendix 6.1, provides a formalisation and empirical measurement of these influences. We have examined, in addition, the role of certain secondary economic variables and the working of the housing system as a whole. Going back to the issue of housing "over-investment" in Greece, the present more detailed analysis points to a number of factors that contributed to high rates of building in general, and speculative building in particular. These were: the positive effect of credit expansion in the late 1960's that has checked the tendency of housing investment to fall relative to savings; the lack of negative feedback on the cost of factors of housing production (up to the beginning of the 1970's, at least); the limited role of influences pertaining to a "pure" real estate market dominated by rentierist-capitalist rationality which would have made for violent movements in asset-choice behaviour and would thus facilitate the occurrence of market crashes; a mechanism of equilibrium that offers extensive margins against the formation of crises of housing overproduction; lastly, a pattern of production relations in urban development that minimise the drain of household resources away from housing to a distinct class of landowners and thus sustains a high "multiplier effect" on real residential investment for a given volume of housing demand.

In addition to these substantive issues, however, our analysis had a broader purpose, namely, to contribute to the development of the "economics" of early capitalist, "dual" housing systems. In view of the

obvious bias of modern urban economics in favour of the paradigm of perfect market and modern rentierist-capitalist relations, the effort to theorise the patterns observed in alternative situations with respect to productive relations and the institutional-historical context acquires an importance in itself.

On the basis of our theoretical arguments and the strength of the empirical corroboration of the predicted relationships, we would argue that the model proposed here offers a framework of generality as well as explanatory power. It is only fair to add, however, that there are great inadequacies in the explicit specification of the economic conditions of housing production and the behaviour of households and builders (when distinct) *vis-à-vis* these conditions and the wider context of prices. Thus some relationships were determined to a great extent on purely empirical grounds. Moreover, the model has an important limitation in that it helps explain the formation of aggregate residential investment but can not afford explicit treatment of the capitalist transformation of the housing system. This was, of course, recognised from the start and the suggestion was made that the present model should be viewed as complementary to the model of sectoral composition advanced in chapter 4. Both of these shortcomings boil down to the question of the structure of housing production and distribution and thus are closely interrelated. Having said this, we can only point out the main ways in which such an analysis may be improved in future work.

First, there must certainly be an explicit and systematic incorporation of land as a factor in housing production and land as a form of wealth. The latter necessitates that we consider the allocation of household wealth among *three* types of assets: residential, non-residential and undeveloped land. Both from the point of wealth formation and that of production, it is necessary that we consider the historical pattern of land-asset ownership and the growth and distribution of capital gains in land as these are determined by development rights and actual development potentials in relation to the socio-geographical structure of urban growth and housing demand.

An obvious second priority consists of the disaggregation of the model in order to express the stratification of the system along fundamentally divergent modes of housing production which are in turn correlated with different social classes and urban areas. Had adequate data been available,

we should break down the system into two sectors preferably at the level of ownership of stock and land with a division along class lines. We could then correlate modes of housing production and characteristics of areas with these sectors. As a first step, we would study the differences in the form and parameters of the functions of the model of residential capital formation between the two sectors at a more systematic level than the one achieved here. As a second step, we could construct a balance-sheet showing the distribution of housing consumption by social class, property ownership and the flow of funds for new housing assets between the sectors. This presents formidable problems in case we have adopted an analytical definition of sectors and suggests that a methodological strategy employing a *spatial* delineation of sectors may be more practical (in which case standard methods of regional economic accounting can be used). We can examine then the degree to which consumption or wealth resources flow from one sector to the other. Thus the question of changes in the sectoral structure of the system or, conversely, the influence of the latter on aggregate investment trends can be studied explicitly. This could also shed light on the vexing problem of the extent of "integration" of the system at different stages, and the role of "integration" in the increase of the dominance of speculative-capitalist relations, the main problem that occupied us in chapter 4 as well as in most of this study.



## Conclusions

1.

During the first decade of the postwar period and the early 1960's the Greek urban housing system manifested the characteristics of a "dual" system of housing production and distribution. Alongside speculative apartment building catering for the middle-class market, there was an extensive precapitalist housing sector based on petty owner-building associated with the working class and other low-income strata. By the first half of the 1970's, however, this system had undergone major changes. Petty owner-building was reduced to a much smaller share of the volume of housebuilding in urban areas. The speculative mode in its main form - i.e. relatively large apartment buildings - as well as in its more intermediate forms of smaller three-storey and four-storey buildings, became predominant. This change was not restricted to the larger Greek cities. Speculative and petty-speculative building had also expanded fastly in the smaller urban centres.

Our study of these changes has been restricted to the 1950-74 period. As it happens, the years after 1974 have seen a continuation of the trend of speculative sector expansion at even faster rates. This should come as no surprise despite the more democratic character of the post-1974 regime. The political constraints on precapitalist housing, namely the restrictions on illegal building and on popular access to land, continued at similar intensity. Economic constraints, however, have become much stronger than in pre-1974 years: trends in incomes and costs have worsened drastically. These have obviously affected most the chances for housing of low-income strata. Using the measurement assumptions adopted in chapter 2, we estimate that the share of precapitalist building in Athens has dropped from 39% in 1970-72 to 32% in 1976-78. In the smaller urban centres (excepting Athens and Thessaloniki) speculative expansion has been much faster: the share of precapitalist building has dropped from 69% in 1970-72 to 52%

in 1976-78.<sup>1</sup> The latter is apparently the effect of the relatively more recent emergence of the wave of speculative expansion in these cities.

We could say then, that the capitalist transformation of the housing system has been pervasive, though an important element of "dualism" still persisted. The spread of capitalist relations of production and distribution was based, of course, on a rather primitive type of capitalist economic structure. This has been described here by the concept of the "speculative" mode as a form of commodity production in the housing sphere distinct from "modern capitalist" modes of housing production (see chapter 1). Nevertheless, despite certain affinities with precapitalist patterns of petty commodity production, the 1970's system represented the outcome of a massive and thorough transformation of the Greek housing system. This transformation as well as the growth of speculative building in absolute terms can not be understood as the "natural" product of the economic development and socioeconomic modernisation that took place during the postwar period. Undoubtedly, the massive urbanisation and economic growth of the period provided an indispensable "material" basis for this transformation. We have found, moreover, that the configuration of the parameters and contextual economic developments pertaining to the accumulation of residential wealth within the household sector have been on the whole very favourable to a fast expansion of housebuilding (see chapters 5 and 6). These, in conjunction with the inherent capacity of the speculative mode for fast expansion, go a long way in explaining the postwar wave of speculative activity. These "socioeconomic" factors, however, tell only a part of the story of the postwar transformation of the housing system. In each step of our analysis we found it necessary to stress the determinant influence of imposed institutional and political factors favourable to the increased dominance of the speculative sector. This issue has occupied us explicitly in the analysis of the sectoral composition of housebuilding in chapter 4, but we found occasion to make analogous observations in the more aggregate analyses of chapters 5 and 6 most especially with regard to monetary policies in the 1960's. Moreover,

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1. Estimated from the series of building permits in N.S.S.G., *Statistical Yearbook of Greece*, 1979. See, also, General Appendix, table A.I. "Precapitalist" building is buildings of one and two storeys and additions to existing buildings. For the relevant assumptions, see chapter 2. Thessaloniki has not been examined since the 1978 earthquake has greatly affected the building activity there.

we have made sufficiently clear in chapter 3 that there has been a strongly favourable political component among the "socioeconomic" foundations of the precapitalist housing sector as these were formed historically. Even neglecting the various public policies and legal-administrative controls that were introduced during the 1960's with obvious negative effects on precapitalist housing, the very fact that the political circumstances which served in the past as important boosters of this sector were not repeated, while on the contrary the institutions that had resulted from these past political relations were being steadily eroded, testifies to the crucial role of "politics" in the narrow sense of the term in the transformation of the housing system.

## 2.

It should be stressed that our emphasis on the "political" factor should not be confused with certain widespread modes of explanation of Greek urban affairs. The latter are saturated with easy "political" explanations where everything is ultimately the result of public policies (or lack of such).<sup>2</sup> It has been repeatedly pointed out in this study that in confronting the issue of changes in housing, such explanations, though immediately suggestive must be carefully scrutinised. We have been at pains to establish with some precision the extent to which "non-political" factors or, more generally, factors that are "endogenous" to the operation of the housing "market" may account, in conjunction with the process of economic development, for the changes observed. We have also examined the extent

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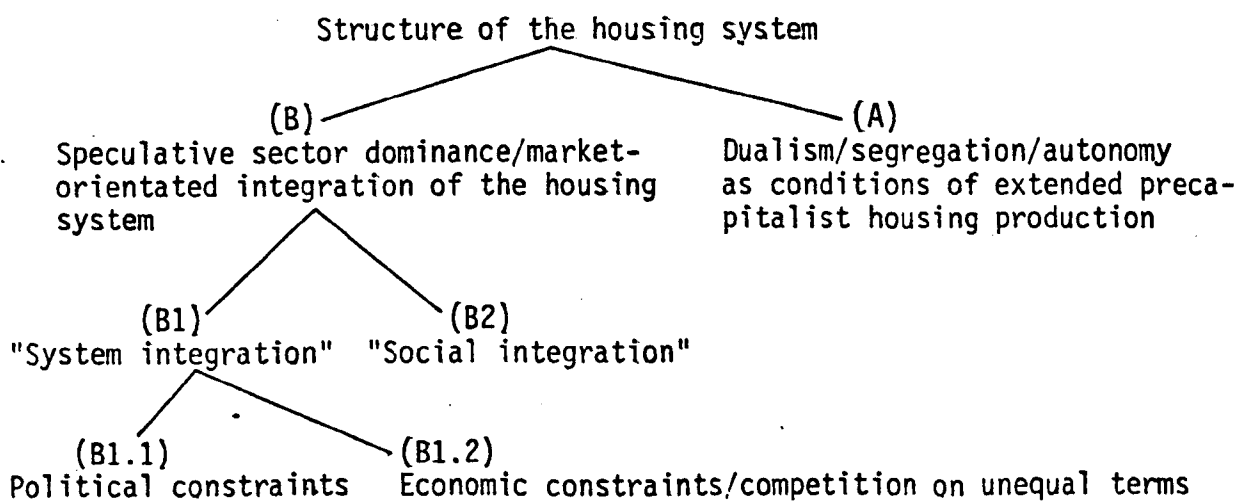
2. It is ironic that most of these "political analyses" of the role of the State in relation to changes in the housing system, have aimed at showing that the main issue during the 1960's and early 1970's has been the aggressive expansion of a highly modern capitalist sector based on large firms, planned urban development and financial capital. There have indeed been some institutional measures aiming at this effect (notably compulsory law 1003/1971 on "Action planning" based on similar French legislation). There was also some expression of interest for such activities by a number of elite organisations (the National Mortgage Bank, the Federation of Greek Industrialists, and the Ministry of Public Works). These, however, concerned mainly special-purpose projects and had no significant involvement in the residential economy. It suffices to say that by 1980 not one single dwelling unit has been produced by this "sector". From the point of the period we study, therefore, a complete disregard of this issue seemed self-evident.

to which these changes were the result of voluntary shifts in social values or, alternatively, the result of forced adaptation to constraints and therefore point to latent or manifest - covert or overt - social conflicts. The presence of such conflicts is strongly suggested by our analysis of change as well as by the close interconnection between social classes and housing production modes. We have a *prima facie* case therefore that both "politics" in the narrow sense of State interventions and "politics" in the broad sense of conflicts between major groups and ideologies and the corresponding power relationships were involved in the transformation of the housing system in a determinate way.

This latter issue has not been pursued here. The essential components for a study of housing politics in the postwar period, however, have been made sufficiently clear. Let us expand somewhat more on the implications of the analysis in chapters 3 and 4. We have established that to a certain extent the change of the sectoral structure of the housing system in Athens - most especially in the 1950's and early 1960's - has been the result of the "natural" process of housing demand growth and allocation. Changes in the 1960's, however, can only be understood as the product of "exogenous" negative pressures on the precapitalist sector in combination with a strong encouragement of speculative building. The housing system as a whole shows during the same period a limited extent of objectively evidenced "integration", i.e. incorporation of lower-income demand into a hierarchically ordered system of housing situations that favours the expansion of the speculative sector. The extent of "integration" that is implied by the trends in building, moreover, has most probably been the result of adaptation to imposed political and economic constraints rather than the result of drastic changes in values and preferences. The objective capacity of precapitalist housing to operate outside an integrated system was based on economic and political autonomy *vis-à-vis* capitalist relations and the State and on the process of socioeconomic segregation in the distribution of housing resources facilitated by a historically established alternative system of access to land. The diminished capacity for growth in the precapitalist sector and the increasing integration of the system resulted from the erosion of these conditions rather than from voluntary assimilation and "modernisation".

Speculative dominance and greater integration then, were based on "system integration" rather than "social integration". We borrow here the distinction introduced by David Lockwood as a composite description of two fundamental aspects of all social systems: "system integration" refers to the functional interdependence of the different parts or levels of a social system whereas "social integration" refers to the existence of widespread consensus over values and norms.<sup>3</sup> Lockwood, aiming at a critique of the functionalist consensus paradigm in sociology, argues that whereas the existence of the second type of integration entails the first it is not necessarily the other way around. Interdependence in ways that promote the reproduction of the system as a whole and the influence of its dominant sectors may very well be based on structured conflict and behaviour that is determined by power relationships. Lockwood's argument is highly abstract and does not go into the analysis of the components of power in concrete situations. In the most general sense, however, we may distinguish a "political" and an "economic" component. In our case, in describing the nature of speculative sector dominance over the urban system we can definitely say that the political took precedence in historical terms. Political measures, in addition to imposing constraints on precapitalist housing production, created general conditions in the competition over land-use and resource-use that positively favoured speculative expansion. The fact that wider economic trends in technology and the cost of labour have placed petty owner-building in a relatively disadvantaged position was perhaps important but secondary.

We can present the argument with the help of the following diagram:




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3. David Lockwood, "Social Integration and System Integration", in G.K. Zollschan and W. Hirsh (eds) Explorations in Social Change (London, 1964): 244-56.

The emergence of speculative sector dominance can be described formally in the following manner:

$$(A) \quad (B1.1) \longrightarrow (B1.1 + B1.2) \longrightarrow (?) (B1 + B2)$$

The question mark signifies the hypothesis that in the context of this sequence of events there is a high probability but not a certainty for a gradual adaptation of the majority of the urban population towards the acceptance of the values and norms of a housing system dominated by speculative production and market allocation. It can be said that there are some aspects of the social structure of Greek society that facilitate the social acceptance of this transformation. These are the inflated role of petty-bourgeois strata, their social influence within the popular non-capitalist sector, and their positive connection with the interests of urban landed property and speculative building as well as with the dominant system of class relations and social power. But this essentially concerns the wider question of the socioeconomic and ideological basis of the State actions that promoted the capitalist transformation of the housing system which can not be examined here.

We can go one step further, however, and pose the question of the wider social significance of what apparently was a real *antagonism* between broad housing sectors according to our account. Was the sometimes manifest but more often incipient conflict between alternative housing systems infused into the wider process of class relations, ideology and class conflict? Was it *perceived* as a major antagonism along class lines? Did it find expression in class-institutions and in public manifestations of "structured conflict" as our account suggests?

These are difficult questions even in contexts where a tradition of sociological surveys, historical studies and an active literate popular culture supplies the necessary material - not to mention the prerequisite of a lack of repression of class-conscious practices. Nevertheless, we can definitely say that the conflict between alternative housing sectors as described here *has not* in any significant way acquired the status of a recognised major issue in class conflict and class institutions in the way, say, the antagonism between public housing and private-sector housing has been an established issue dividing class institutions

(notably parties and unions) in Britain. Were the facts different in any significant way, we would be undoubtedly in possession of ample evidence, systematic or anecdotal.

A case can be made, however, that the situation we examine was characterised by an altogether different kind of social conflict: the conflict between "tradition" and "modernity" endemic to a developing society. In a simplistic sense this was indeed true: the speculative mode was associated with "modern" social strata, "modern" economic relations and "modern" administrative norms. But such an interpretation does not tell us much. It is either a mere imposition of an extraneous "model" of historical evolution or, in a more real sense, a reflection of the *ideology* that is associated (mostly as a legitimation mechanism) with the economic and political practices that promote the expansion of speculative capitalism in housing (as well as in society in general). It informs us incompletely about the real nature of social relations and conflicting values, especially from the point of the non-speculative sector. Can we say that the latter was an organic part of a "traditional" community culture - be it in the form of "village" or "peasant-type" social patterns or in the form of a distinct "working-class" culture formed and reproduced in particular urban neighbourhoods? This is true again to a certain extent but only in the way of an historical correlation. It would be misleading to assume that the dynamic of the antagonism between alternative urban systems derived simply from a *resistance* against changes in traditional ways of living. Popular strata in Athens, after all, were highly mobile and individuated in their majority. They had either actively rejected village life by migrating to the city or, in most cases of those born in Athens, had abandoned the characteristic poor working-class communities formed before the war. For such strata, economic improvement and the world of the nuclear family determined the sphere of their preoccupations and aspirations. In this they differed sharply from the sociological stereotype of the community-orientated worker or peasant bound by limited aspirations and the stable patterns of a traditional culture.

We can say with certainty that the material values associated with modernisation in living conditions and economic development were widely accepted by Greek popular households in cities during the postwar period. Though no systematic studies concerned with this issue are available,

local surveys and the wider postwar social pattern suggest that instead of the life patterns and values of "closed" "defensive" working-class or peasant-like culture, individualistic and "instrumental" orientations prevailed among popular strata. This did not result in a "classless" social structure: on the contrary, given the realities of a class-divided urban political economy, it resulted in class-specific practices and household behaviour.<sup>4</sup> This should be evident in the case of housing practices: we showed at length that there were good practical reasons for popular strata to be inclined towards "precapitalist" housing - no necessity arose to draw into the picture any "cultural" influence of traditional ways *qua* tradition (in the sense that tradition implies a resistance to alter established habits and ideas).

"Tradition" in a certain sense, however, *was* an important element namely in the form of *traditional rights* over land and petty property and ways of adaptation to the facts of capitalist society and a hostile State. Such rights have been gained or been granted and have been defended in history, and in that sense constitute an active "tradition". We noted for instance in chapter 3 that the definition of a large part of pre-capitalist building as "illegal" simply results from the clash between traditional small-holder rights over the use of one's land with the (imposed) norms of a modern "urban-industrial" (in our case capitalist)

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4. The distinction between a mainly "economic-instrumental" model of aspirations and subjective ordering of social groups by working-class households and one that emphasises normative and relational aspects has been developed in the well-known study of affluent and mobile workers by J. Goldthorpe et al., The Affluent Worker in the Class Structure (London, 1969). Goldthorpe et al. contrasted this form of working-class consciousness and values - the product of the postwar years of economic development and mobility - with the pattern observed by students of older and stagnant working-class communities. A similar contrast was observed in the increased emphasis placed on life within the nuclear family and the improvement of the standard of living instead of the traditional importance of the community and the extended family. Goldthorpe et al. found, however, that these changes did not result in a homogenisation of life patterns and behaviour across classes.

In an older study of a working-class area of recent migrants to Athens it was found that these theoretical concepts and observations also applied in the Greek context to a great extent. (L. Leontidou and D. Emmanuel Life Patterns).



system and its associated legal-administrative norms and property relations.<sup>5</sup> The concepts of tradition and modernity thus acquire a definite class connotation: "modern" institutions and controls are associated with the capitalist sector, the middle class, and a State that promoted laws and policies suited to the norms and interests of this part of society. The clash between tradition and modernity then was in essence a class antagonism, and in this respect we may return to our initial question about the possible class character of the conflicts over the transformation of the housing system and give an affirmative answer.

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5. In the aforementioned 1971 study of an illegal housing area in Athens it was suggested as a tentative hypothesis that illegal building could be interpreted within the framework of the famous model of "deviance" advanced by Robert Merton ("Social Structure and Anomie", American Sociological Review, 3, 1938: pp. 672-82). Merton distinguished five modes of adaptation to the "social order", when the latter is defined by the predominant "culture goals" and "institutionalised means" of achieving these goals. Of these, three are relevant here: "conformity" when both goals and means are accepted, "innovation" when goals are accepted but the norms determining means are not accepted, and "rebellion" when both are rejected and are replaced by alternative ones. In our initial interpretation we assumed that illegal building belongs to the category of "innovation": an owned house is a generally accepted goal; lower-income strata do not have the economic means to follow the institutionalised path for the achievement of this goal and the prevailing institutional norms are loose in the case of this group. As a result we have "deviance" of the type of Merton's "innovation". (see Life Patterns, pp. 100-101). We can say now that such an interpretation must be rejected. To a large extent its misconceptions were the natural result of the lack of historical and broader perspective in the older study. If a characterisation in terms of Merton's typology should be given, the more appropriate one would be "rebellion", i.e. the conflict between a dominant and an alternative definition of goals and norms over means. Still, the concept of rebellion is inadequate for it gives logical (and historical) precedence to the dominant system whereas this is not necessarily the case. A better theoretical account can be gained with the help of Raymond Williams' distinction of cultures that stand as alternatives to the dominant one into "emergent" and "residual" (Marxism and Literature, Oxford, 1977, chapter 8). He defines a "residual" cultural element as one "that has been effectively formed in the past, but it is still active in the cultural process, not only and often not at all as an element of the past, but as an effective element of the present" (Marxism and Literature, p. 122). Thus in terms of our interpretation of the period, we had a conflict between the existing dominant culture and elements of an emerging bourgeois "modern" culture on the one side, and a "residual" ("traditional") popular culture on the other (with possibly significant elements of "emergent" alternative and oppositional patterns as well as elements of "innovation-deviance" in Merton's sense). This interpretation, of course, is valid only for the later part of the postwar period: what appeared "residual-traditional" then in the popular culture over land and housing was not so

We must immediately add, however, that the concept of *class* we use in this context must differ radically from the one we are accustomed to, derived from the history of class struggles in nineteenth-century Europe. For one, class antagonisms during the period we study were not direct but were mediated by the "impersonal" forces of administrative processes and the market; at crucial points they involved specific policy decisions by the State. Their morphology did not resemble the familiar modern one of parties, organised capitalists and unions, but a division between a "formal", official, middle-class sector and a diffuse formation of "people" or popular "masses". Class was thus present in a "statistical" aggregate sense, defined by the distinct life-patterns of households, housing situations and places in the economic division of labour but not in the more active sense of a formed class-consciousness and crystallised institutions and movements.<sup>6</sup>

### 3.

The question of the role of social classes, politics and the State has been also encountered in the analysis of the determinants of the high levels of speculative building relative to the Greek economy as a whole. It is widely believed that the level of residential capital formation in postwar Greece has been exceptionally high and that this has been a result of the character and orientations of the Greek capitalist class and the policies of the State with regard to the "strategy" of economic development to be pursued. Such arguments have been mainly inspired by certain influential theories of the persistence of underdevelopment in Third World countries and the role of luxury housebuilding and land speculation in such socioeconomic formations. Though their main object has been the explanation of the high postwar level of housing investment as a whole, they advance, by implication, a particular model of the determination of speculative building.

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in earlier periods. Lila Leontidou Emmanuel has argued that between the wars these elements have been a dynamic *emergent* culture as an active response to the conditions of early capitalist urbanisation (Working Class and Land Allocation, *passim*).

6. Our concepts on the class character of the conflict between "tradition" and "modernity" and of situations of class struggle without the formation of class in the modern sense derived from the post-nineteenth-century history of Western advanced societies are borrowed from E.P. Thompson, "Eighteenth-century English Society: Class Struggle Without Class?" Social History (3,2,1978): 133-165.

We have argued in chapter 5 that such approaches have important theoretical contradictions. To the extent, moreover, that they are relevant, they apply only under special conditions. Such conditions were not present in Greece save for a few years immediately after the war. For the greatest part of the postwar period neither any direct involvement of the State in the process of capital formation nor the behaviour of the capitalist class determined the levels of housing investment in any important extent. The level of the latter has often been considered high by comparison with the limited level of industrial investment. We have shown that there is no causal relationship between the two phenomena and more specifically, that there is no direct or indirect negative influence of residential investment on the level of industrial investment. We showed, in fact, that after the mid-1950's there is a positive association between the two.

There are sufficient grounds then for rejecting an approach to the process of residential capital formation from the viewpoint of the process of capital accumulation, i.e. "business" investment, and the behaviour of the State and the capitalist class with regard to the latter. We have advanced instead an alternative model stressing the pattern of wealth accumulation within the household sector of the economy. The growth of speculative housing results as a simple corollary of this process, given the size and behaviour of the middle-class market, and the changes in sectoral structure pointed out in chapter 4.

In the context of this approach, the "peculiarities" of Greece *vis-à-vis* the high rates of housing investment become easily understandable. We have pointed out in chapter 5 that the most important determinants of these high rates in addition to the basic fact of the "middle-income" status of the country, were the role of the high savings rate of households which is reinforced by the relatively non-skewed income distribution, the diffused access to land ownership, the high inflow of household savings from abroad, and the favourable trend in costs. We have also argued, however, that most of these aspects should be expected to be present in the case of a small country that has managed to develop fastly along a "pure" capitalist path during the postwar period. The same elements that make for high residential investment, namely a relatively non-skewed distribution of incomes and wealth, a high inflow of capital from abroad, and a favourable trend in costs, are also necessary parts of fast consumption-orientated capitalist

development. The really exceptional characteristic of postwar Greece in a comparative perspective, therefore, has been the successful realisation of such a development pattern rather than the high level of residential investment in itself.

We may reexamine in the light of these conclusions the questions posed in the introduction to this study with regard to the adequacy of some common statistical-comparative "models" relating the level of residential investment to economic development, urbanisation and modernisation. It was then pointed out (see also chapter 5) that a much more systematic consideration of socioeconomic and institutional structure as well as the local political economy of housing is essential. Otherwise we are left with statistical regularities of dubious theoretical as well as empirical strength. The list of major determinants pointed above for the Greek case suggests the necessity of a much more comprehensive comparative approach. Our critique, furthermore, of the theories of "structural underdevelopment" offered as explanations of the Greek pattern of capital accumulation (including housing), pointed that these, though of limited relevance, may apply under special conditions. This also suggests the need for a richer comparative theoretical framework.

Of equal significance is the argument that the distinction between different types of political economy with respect to the "model" of capitalist development and the configuration of major determinants of housing investment is better approached in a theoretically systematic manner. Our rejection of the notion of the peculiarity of the Greek case as a fortuitous combination of factors and the interconnection of the necessary and sufficient characteristics of a "middle-income" fastly developing capitalist country into a coherent whole have shown the fruitfulness of such an approach. This point in conjunction with the previous one suggests that both of the more widespread simplistic "comparative" paradigms in this subject, the evolutionist-unilinear and its opposite stressing in an *ad hoc* manner "culturally-specific" patterns, should be considered as extremely inadequate.

The inadequacy of the evolutionist assumptions of statistical-comparative models is most obvious in the issue of the interaction between the expansion of housebuilding in "middle-income" countries and the capitalist transformation of the housing system. We have questioned in the introduction the validity of the common assumption that building expansion is

a corollary of the growth of market relations and the "modern" building sector. I take it that the argument is essentially a "technological" one: the market system, a modern division of labour and modern-capitalist building enterprises are more productive and growth-dynamic. This is probably so, but the point is secondary for housing capital accumulation *as a whole* in an early capitalist city. Were the Greek housing and land systems dominated in the early 1950's by a speculative/capitalist mode with its attendant social relations, aggregate housing investment would have been *lower*. The high rates of accumulation in the postwar period were based on the highly diffused pattern of access to land and housing property. This was inter-linked, of course, with the existence of the "dual" system of housing production and land allocation which means a *limited* speculative/capitalist sector. The fast expansion of the latter, moreover, was based to a large extent on the incipient capitalism and dynamism of small landowners and petty speculators previously outside its sphere, a growing middle-class market with heavy financial assistance and, of course, the pressures towards the stagnation of precapitalist housing and the increased integration of the system. These facts imply that it is not the growth of the speculative mode that produced the postwar wave of building but the other way around. The inherent dynamism of a competitive speculative economy has added impetus to the process. Thus, to return to a point made in the introduction, it is necessary to approach the study of the postwar wave of building in middle-income countries in connection with the process of capitalist transformation of the housing system. But it is the nature of the process of transformation and the structure of the early capitalist housing system as a whole that matter and not the productive character and capacity of the speculative/capitalist mode in itself.

#### 4.

In the last chapter of this study we have further advanced the alternative approach to residential capital formation introduced in chapter 5. This has taken the form of a more detailed model of household behaviour towards consumption and accumulation and a consideration of the economic dynamic of the housing system as a whole. We have been able, thus, to estimate more precisely the role of the long-run behavioural parameters of housing wealth accumulation as well as the role of short- and medium-term determinants of investment.

The purpose of the model developed in chapter 6, however, was much broader. We have noted in the introduction and the first chapter of this study the limitations of some widespread comparative models based on an

evolutionist framework. We have commented already on the implications of such models for the growth and transformation of housebuilding. Similar approaches, however, have been applied to the analysis of the socioeconomic and spatial structure of "developing" cities. These have been considered as intermediate stages in a continuum ranging from the "pre-industrial" city (the European or the Third World variant) to the city found in advanced capitalist societies. Their movement along the continuum is basically a corollary of economic development and modernisation. To the extent that the worldwide expansion of market relations and the industrial-capitalist system introduce pressures for a fundamental uniformity, these approaches contain an important element of truth. They are extremely poor instruments, however, for the study of change in concrete situations lacking the concepts for an understanding of the mechanism of change as well as for a systematic differentiation of significant variations in the pattern of development. This is especially evident in the case of the economy of housing and land. More importantly, they essentially imply that the expansion of market relations and modern capitalist structures is a "natural" corollary of economic development and modernisation. This assumption has been sufficiently undermined in the present study.

The theory of the "Third World" city has been advanced as an alternative to these approaches. Despite its valuable contributions, however, towards a more complex and sophisticated approach to early capitalist cities, it is essentially a logical variant of the evolutionist-diffusionist model of capitalist development. It simply stresses the fact that the latter is often *arrested*, especially at the level of structures. We have thus an argument for the *persistence* of "dualism" and socioeconomic polarisation especially in cities growing at fast rates without adequate industrialisation. With regard to urban housing this approach is equally poor conceptually, compared to evolutionist-diffusionist models. The structure of housing and cities is conceived as a mere reflection of the fundamental socioeconomic polarisation of the system and the arrested development of the capitalist sector. Were the latter to expand sufficiently, the housing system would "naturally" move towards market relations and the dominance of modern-capitalist production. In this the two approaches agree. They disagree on the possibility of such a change. Where the first sees a smooth process of gradual diffusion and assimilation, the second stresses the reproduction of a *static* pattern. These general hypotheses are derived from fundamental

assumptions (partly ideological) with regard to capitalist development in general. The economics and sociology of housing and land in early capitalist cities, their character and significant variations are scarcely considered.

Given the inadequacies of these models the student of the housing system of a "developing" city is forced to turn to the urban economics and sociology developed in advanced western societies. Needless to say, however, these require drastic revisions and a systematic questioning of their assumptions, mainly with regard to the dominance of market relations and rentier-speculative rationality, and the modes of housing production and distribution. In chapter 6 we have tried to develop a model of the housing system more suited to the character of an early capitalist city, with an extensive household economy, a "dual" structure and a primitive speculative-capitalist sector in production and finance. This relatively "macroeconomic" model, in conjunction with the theory of housing modes and sectors in chapter 1, the sectoral model in chapter 4, and the theories on housing costs and ground rents in Appendix 6.1 represents an effort to establish a base towards the development of the sociology and economics of early capitalist "dual" housing systems. This task is even more essential in Greece where there is a complete lack of systematic studies of housing and urban development.





## Appendices to Chapters

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## Appendix 2.1.

### The spatial distribution of population, building types and socioeconomic categories in Greater Athens

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This appendix supplies the data that were used in the analysis of the spatial structure of Greater Athens in chapter 2. It contains tables on the spatial distribution of occupational categories by place of residence in 1971, of buildings of different types in 1970, (according to the number of storeys) and of population in the three postwar census years (1951-1971). The areal units used are the municipalities and communes of Greater Athens. These are shown on map 2.1.1. The latter shows in addition the boundaries of the major urban zones used by the 1965 Master Plan which are referred to in the analysis of chapter 3 and Appendix 6.1.

Figure 2.1.1. Greater Athens area: Municipalities, Communes, and Master Plan Zones

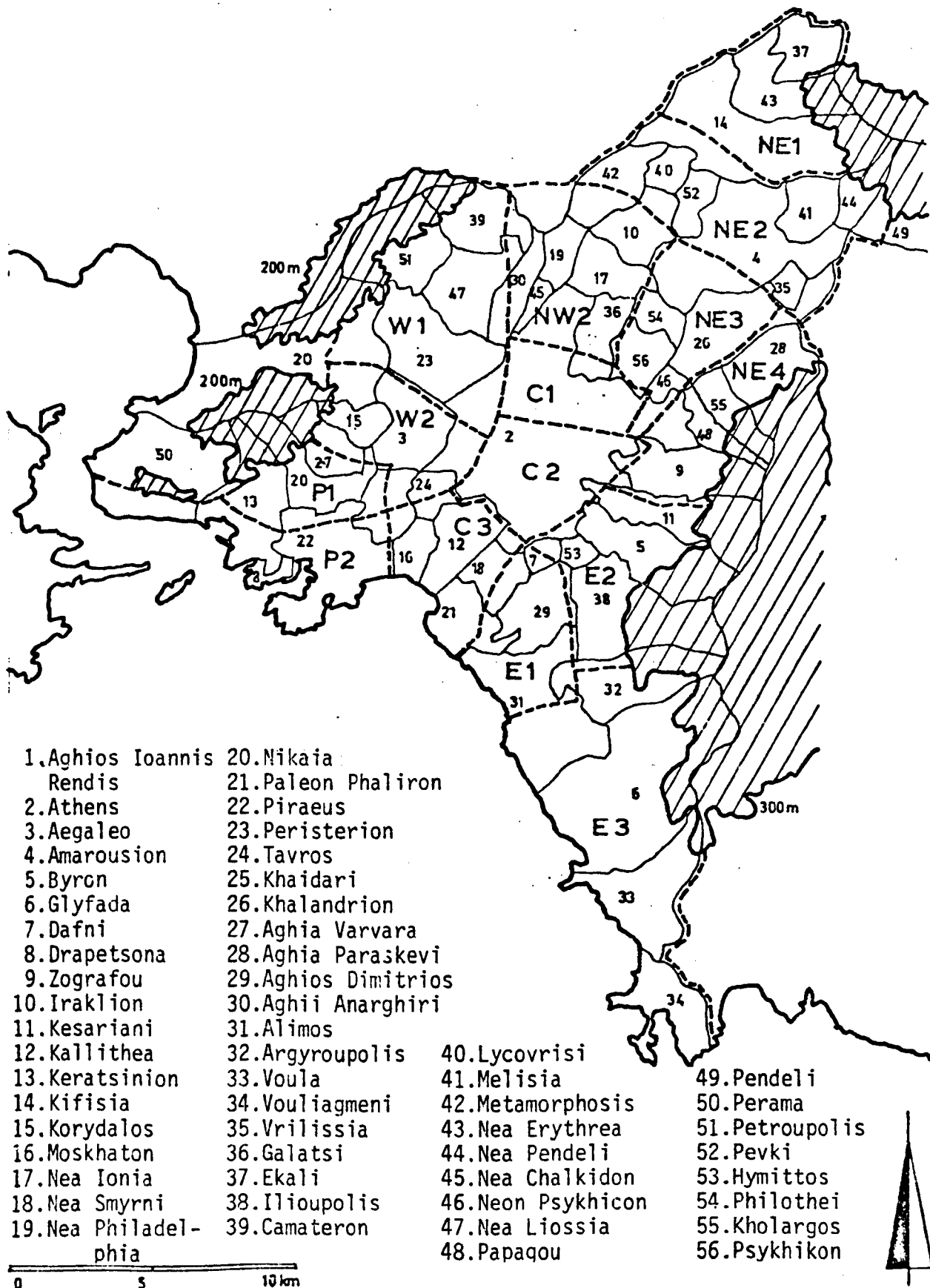


Table 2.1.1. Economically active population by occupational category and place of residence in the Municipalities and Communes of Greater Athens, 1971 Census

Municipalities - Communes	(1)	(2)	(3)	(4)	(5)
1. Aghios Ioannis Rendis	176	556	552	4,112	6,176
2. Athens	57,004	70,064	41,256	98,136	318,984
3. Aegaleo	1,092	2,676	2,476	18,476	28,476
4. Amarousion	900	1,116	848	4,172	8,516
5. Byron	1,496	2,932	2,212	7,380	16,076
6. Glyfada	580	852	856	3,192	7,500
7. Dafni	696	1,324	1,260	4,648	9,088
8. Drapetsona	188	356	416	3,120	4,596
9. Zographou	2,932	4,600	2,172	6,488	19,332
10. Iraklion	528	1,152	772	4,988	8,248
11. Kesariani	808	1,444	1,192	4,348	9,192
12. Kallithea	3,612	6,108	3,236	12,628	29,524
13. Keratsinion	1,096	1,516	1,948	13,440	20,216
14. Kifisia	1,136	752	760	2,232	6,404
15. Korydalos	884	1,440	1,676	8,580	14,336
16. Moskhaton	472	1,048	764	4,136	7,376
17. Nea Ionia	744	1,628	2,012	12,032	18,668
18. Nea Smyrni	2,168	2,836	2,008	5,284	14,068
19. Nea Philadelphia	472	1,044	844	3,376	6,552
20. Nikaia	1,236	2,200	2,840	17,880	27,164
21. Paleon Phaliron	1,776	3,264	1,588	4,004	11,604
22. Piraeus	6,480	8,512	6,944	30,632	60,460
23. Peristerion	1,352	3,408	3,756	26,872	41,240
24. Tavros	172	376	616	3,984	5,824
25. Khaidari	788	864	852	5,740	9,768
26. Khalandrion	1,388	2,168	1,444	4,560	11,212
27. Aghia Varvara	292	536	644	5,604	8,472
28. Aghia Paraskevi	540	928	528	2,620	5,524
29. Aghios Dimitrios	528	1,432	1,380	8,892	14,100
30. Aghii Anarghiri	396	1,048	896	5,524	9,064

Municipalities - Communes	(1)	(2)	(3)	(4)	(5)
31. Alimos	952	1,140	1,000	3,200	7,924
32. Argyroupolis	216	572	436	2,540	4,344
33. Voula	528	172	140	468	1,840
34. Vouliagmeni	48	20	36	112	340
35. Vrilissia	164	176	128	456	1,140
36. Galatsi	472	1,280	976	5,536	9,452
37. Ekali	96	44	52	40	392
38. Ilioupolis	1,136	2,548	1,900	8,688	16,556
39. Kamateron	88	216	304	2,640	3,780
40. Lycovrisi	56	76	76	804	1,212
41. Melissa	276	120	96	612	1,428
42. Metamorphosis	148	440	384	4,340	6,120
43. Nea Erythrea	196	232	292	1,212	2,368
44. Nea Pendeli	32	24	36	268	420
45. Nea Chalkidon	328	568	360	1,344	2,968
46. Neon Psykhikon	532	484	416	808	2,760
47. Nea Liosia	560	1,568	1,540	12,596	18,680
48. Papagou	616	420	148	216	1,748
49. Pendeli	100	56	36	236	520
50. Perama	224	260	416	3,892	5,512
51. Petroupolis	224	672	524	3,744	5,984
52. Pevki	148	212	152	840	1,556
53. Hymittos	480	900	536	2,112	4,596
54. Philothei	456	196	192	104	1,208
55. Kholargos	764	1,068	568	1,544	4,620
56. Psykhikon	1,184	412	436	260	3,064

Source: 1971 Census, 25% sample. Unpublished data supplied by the N.S.S.G.

(1): Professions, Managers, Higher Administrative

(2): Clerical workers

(3): Tradesmen and Sales Workers

(4): Workers in Industry and Transport

(5): Total Economically Active

The table does not include workers in services, and the few active in agriculture, fishing and forestry and unclassifiable. Their sum (i.e. mainly Service workers) can be derived as a residual from the total active.

Table 2.1.2: Buildings in Greater Athens by number of storeys, Municipalities and Communes, 1970

Municipalities - Communes	(a)	(b)	(c)	(d)	(e)
1. Aghios Ioannis Rendis	2,089	569	264	4	2,926
2. Athens	30,747	20,710	11,753	9,760	72,970
3. Aegaleo	10,598	3,950	733	3	15,284
4. Amarousion	6,049	1,387	183	4	7,623
5. Byron	4,734	2,591	764	76	8,165
6. Glyfada	6,653	1,314	276	17	6,653
7. Dafni	2,888	1,580	446	15	4,929
8. Drapetsona	2,212	637	155	10	3,014
9. Zographou	2,399	1,509	893	239	5,040
10. Iraklion	4,104	1,179	185	2	5,470
11. Kesariani	1,991	973	394	86	3,444
12. Kallithea	4,621	3,291	1,345	252	9,509
13. Keratsinion	9,900	3,887	539	2	14,328
14. Kifisia	4,456	1,409	270	8	6,143
15. Korydalos	6,288	2,396	476	-	9,160
16. Moskhaton	2,520	1,532	302	11	4,365
17. Nea Ionia	7,852	3,714	567	1	12,134
18. Nea Smyrni	3,288	2,377	834	89	6,588
19. Nea Philadelphia	1,421	1,180	267	-	2,868
20. Nikaia	12,724	4,497	870	1	18,092
21. Paleon Phaliron	3,206	1,688	717	94	5,705
22. Piraeus	17,615	10,830	2,828	636	31,909
23. Peristerion	20,020	5,096	707	14	25,837
24. Tavros	1,502	548	205	12	2,267
25. Khaidari	4,925	1,507	201	-	6,633
26. Khalandrion	6,843	1,961	327	7	9,138
27. Aghia Varvara	3,309	1,070	195	2	4,576
28. Aghia Paraskevi	3,871	843	127	-	4,841
29. Aghios Dimitrios	6,833	1,775	269	3	8,880
30. Aghii Anarghiri	4,267	1,255	194	-	5,716

Municipalities - Communes	(a)	(b)	(c)	(d)	(e)
31. Alimos	3,966	1,467	419	28	5,880
32. Argyroupolis	2,603	766	109	-	3,478
33. Voula	1,608	477	104	4	2,193
34. Vouliagmeni	536	138	115	2	791
35. Vrilisia	1,333	189	27	-	1,549
36. Galatsi	3,072	1,120	358	11	4,561
37. Ekali	292	334	2	-	628
38. Ilioupolis	6,340	3,349	687	12	10,388
39. Kamateron	3,256	193	11	-	3,460
40. Lycovrisi	1,057	72	7	-	1,136
41. Melisia	1,256	192	19	1	1,467
42. Metamorphosis	3,451	443	103	-	3,997
43. Nea Erythrea	1,961	516	66	-	2,543
44. Nea Pendeli	967	1,122	6	-	1,095
45. Nea Chalkidon	817	604	152	1	1,574
46. Neon Psykhikon	1,122	655	165	-	1,942
47. Nea Liosia	11,538	1,883	199	1	13,621
48. Papagou	1,263	708	75	-	2,046
49. Pendeli	750	179	10	-	939
50. Perama	4,344	651	53	-	5,048
51. Petroupolis	3,975	772	54	-	4,801
52. Pevki	1,345	231	43	2	1,621
53. Hymittos	1,673	980	221	-	2,874
54. Philothei	418	492	124	-	1,034
55. Kholargos	1,826	741	136	13	2,716
56. Psykhikon	626	839	457	-	1,922
Greater Athens	261,320	105,368	31,008	11,423	409,119

Source: N.S.S.G., Statistical Yearbook of Greece, 1976

- (a) Buildings of 1 storey
- (b) " of 2 storeys
- (c) " of 3-5 "
- (d) " of 6 storeys and over
- (e) All buildings



Table 2.1.3: Population in Greater Athens by Municipalities and Communes,  
1951-1971

Municipalities - Communes	1951	1961	1971
1. Aghios Ioannis Rendis	5,375	11,204	17,560
2. Athens	555,484	627,564	867,023
3. Aegaleo	29,464	57,840	79,961
4. Amarousion	13,913	20,135	27,112
5. Byron	31,588	39,079	47,335
6. Glyfada	8,256	12,361	23,449
7. Dafni	17,342	23,747	26,608
8. Drapetsona	17,568	14,103	14,586
9. Zographou	16,208	27,185	56,722
10. Iraklion	5,360	12,228	24,302
11. Kesariani	22,093	23,733	26,915
12. Kallithea	46,986	54,720	82,438
13. Keratsinion	40,179	61,673	67,672
14. Kifisia	13,124	14,193	20,082
15. Korydalos	15,125	30,859	47,335
16. Moskhaton	12,905	18,536	22,138
17. Nea Ionia	33,821	48,149	54,906
18. Nea Smyrni	22,074	32,856	42,512
19. Nea Philadelphia	10,187	15,564	19,639
20. Nikaia	72,176	83,266	86,269
21. Paleon Phaliron	12,894	22,157	35,066
22. Piraeus	192,626	189,728	187,458
23. Peristerion	35,733	79,335	118,413
24. Tavros	15,013	15,363	15,795
25. Khaidari	13,773	24,002	38,121
26. Khalandrion	15,092	25,774	35,944
27. Aghia Varvara	3,481	13,726	26,409
28. Aghia Paraskevi	6,977	12,122	18,345
29. Aghios Dimitrios	4,621	21,365	40,968
30. Aghii Anarghiri	8,416	18,448	26,094

Municipalities - Communes	1951	1961	1971
31. Alimos	5,703	13,014	26,957
32. Argyroupolis	425	4,021	13,956
33. Voula	2,106	3,864	5,575
34. Vouliagmeni	1,674	1,621	1,469
35. Vrilisia	1,224	2,352	3,841
36. Galatsi	9,600	13,743	27,240
37. Ekali	817	1,057	1,292
38. Ilioupolis	8,052	27,638	49,215
39. Kamateron	783	3,304	11,382
40. Lycovrisi	599	1,502	3,213
41. Melissa	2,525	3,348	5,374
42. Metamorphosis	2,807	7,952	16,880
43. Nea Erythrea	4,225	6,134	7,583
44. Nea Pendeli	811	1,181	1,453
45. Nea Chalkidon	3,504	6,695	8,768
46. Neon Psykhikon	3,305	7,560	9,139
47. Nea Liosia	5,460	31,810	56,217
48. Papagou	-*	6,000	8,083
49. Pendeli	1,289	1,794	1,871
50. Perama	4,900	14,694	18,258
51. Petroupolis	1,612	8,520	18,631
52. Pevki	2,323	3,763	4,906
53. Hymittos	8,968	12,193	13,717
54. Philothei	1,538	3,088	4,087
55. Kholargos	2,775	7,637	14,904
56. Phykhikon	3,707	7,209	9,053
Greater Athens	1,378,586	1,852,709	2,540,241

Source: N.S.S.G., Statistical Yearbook of Greece, 1976

\* The commune Papagou was included in 1951 in the municipality of Kholargos

### Appendix 3.1.

#### The structure of land and housing ownership in Greek cities: A case study of an area in the inner zone of Athens

##### 1.

The purpose of this appendix is to illustrate with the help of some empirical material the extremely small sizes and large extent of fragmentation of land property holdings in Greek cities. More specifically, we will examine the structure of ownership found in areas undergoing speculative redevelopment, the effects of this process on land properties, and the distribution of properties within apartment buildings. Our information will be based on a case study of a fairly typical area in the inner zone of Athens. This obviously limits the significance of the observations but to a limited extent only. Land and housing ownership patterns in Greece do not vary much between different neighbourhoods and different cities. Such variation, moreover, is mainly due to the predictable effects of the positive correlation between socioeconomic status and size of property unit. The area we will describe has a mixed social structure but with respect to the apartment sector had a fairly typical middle-class/lower middle-class character.

The observations made in this appendix support the arguments on the diffusion and small size of land and housing property in chapter 3 but are also relevant to points in chapters 2 and 5. The need to go into a case study for such supporting material stems from the complete lack of any published information on these significant aspects. Although the compilation of a land cadaster has begun since the end of the 1960's, it is still incomplete and, as far as I know, no utilisation of the available material in the study of urban landownership patterns has been published. Though the information recorded in the cadaster is very limited in scope, utilisation of its material on a comprehensive scale would have supplied us with urgently needed knowledge in an area of extreme interest for Greek urban economics. The following analysis is based on cadaster data. For obvious practical reasons the area studied is small - roughly fifty blocks. An inspection of the patterns of the subdivision of land into building plots in a far wider area covering the Athens central business district and an extensive surrounding zone,

however, showed that with the exception perhaps of the historical core and areas with a high concentration of institutional owners of land, this area is fairly representative of most sections of the inner part of the city. In addition, it has the advantage of being a case where we have a mix of older residential stock with recently developed sections of apartment buildings, facilitating thus an examination of the effects of the postwar pattern of speculative redevelopment of central areas. It is for this latter reason that this particular area has been studied in terms of social and physical characteristics in an earlier study: a further factor that weighted in favour of its selection as the object of the present case study.<sup>1</sup>

## 2.

The neighbourhood we will examine is situated immediately at the N.W. of the Athens C.B.D. It is generally known as "Aghios Pavlos". It forms a part of the older section of the city since it is within the limits of the 1880 City Plan. It has been initially developed during the 1880's with one-storey and two-storey houses and, to a lesser extent, with the more substantial three-storey neoclassical houses of the early part of this century. Its population in 1951 (for an area of 49 city blocks) was 8.800 persons. In 1961 its population fell to 7.700 as the area stagnated in terms of residential demand, caught between the twin forces of a declining old housing stock and the expansion of non-residential uses in the "zone of transition" surrounding the CBD. The fast postwar redevelopment of central areas, however, and the gradual expansion of apartment building outwards and to the west of the solid middle-class quarters north and east of the centre, has reversed these trends and increased the population in 1971 to 9.156. Redevelopment continued fastly in the 1970's. The rapid changes effected can be easily seen in the changes in the distribution of the plots among different types of buildings and uses.

Table 3.1.1 illustrates clearly the great extent of demolition of the older stock by redevelopment for apartment buildings or multi-storey buildings for non-residential uses (offices, hotels and trade). The worst affected were, of course, the older single-storey houses. Quite a few, however, of

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1. See D. Emmanuel, The Ecology of the Inner Urban Zone of Athens, Unpublished Diploma Thesis, Technical University of Athens, School of Architecture, 1972.

the two-storey and three-storey buildings (usually bourgeois mansions that have undergone partial subdivision for low-income renters) have been also demolished.

Table 3.1.1: "Aghios Pavlos": Distribution of building plots by type of use

	1961	1972
Older* 2-3 Storey buildings	250	175
Older Single-storey "	100	70
New* 2-3 storey "	250	75
New Single-storey "	30	5
Multi-Family "	40	125
Exclusively Non-residential Uses	25	175
	695	625

Source: Emmanuel, The Ecology of the Inner Urban Zone; \*Older buildings are roughly those built before the 1930's. All other buildings have been considered "new". This distinction is mainly based on structural characteristics.

### 3.

As is usual in Greek cities, the layout of the area is a grid of streets which form a number of small blocks subdivided into individual land plots. The 49 blocks were divided into 563 building plots. With a few exceptions determined by the street pattern, the sizes of blocks and plots do not vary significantly; they are in general very small. We measured the sizes found in the residential core of the area (22 blocks, 281 plots): for a total area of 97,7 stremmas (9,77 Ha), the building plots amounted to 63,55 stremmas or 65% of the area. The rest of the area was covered by pavements, streets and a square. The average size of blocks and plots was 2,888 square meters and 226 square meters respectively, giving an average of 12,7 smallish plots per block. The plots of apartment buildings were somewhat larger but still of a very small size: 316 square meters - hardly four medium-sized apartments. We can say, therefore, that although a measure of land-consolidation takes place in the process of speculative redevelopment, it is not significant: the development process has been evidently accommodated to the inherited pattern of urban landownership.

The sizes of plots observed in the area are fairly representative of the conditions prevailing in the city as a whole. Although we do not have

any published studies on this issue, it seems that the matter has been given some consideration in the context of studies for the Athens Master Plan. It has been reported that the sizes of buildings plots in Greater Athens vary between 112,5 m<sup>2</sup> and 2,000 m<sup>2</sup>: only a few cases of plots smaller or larger than these limits can be found. The most common sizes are between 150 and 300 m<sup>2</sup>.<sup>2</sup>

## 4.

Older buildings and ones of small size (including their land) are generally held by single owners or jointly by members of a family (mainly in cases of inheritance). The structure of ownership is more complex in the case of apartment buildings. In the case of old and small buildings and in the very rare instance when a whole multi-storey building (usually a commercial property) is held by a single owner, the land cadaster records one "unit of ownership" which includes the land. In apartment buildings, on the other hand, it records as separate units all the structurally distinct parts of floorspace: apartments, shops and offices. These are referred to, following Greek legal terminology, as "parts of horizontal property". Each, depending on its size, has a share of the ground plot. However, since co-ownership of individual apartments is quite frequent, ownership of a part of a unit is *also* recorded as an "ownership unit". This is certainly complicated and confusing but reflects the real conditions of the multiple ownership of structures and land in the case of apartment buildings. The number of separate ownership units in a building expresses in essence the number of *shares* into which the property is divided. *Actual* owners may be less in number since one person may own more than one unit.

In the 40 apartment buildings studied in our area we had an average of 23,3 units of ownership per building and 16,6 owners. This amounts to an average of 1.4 units (separate apartments or shops or co-ownership in one), per property owner. It is fairly clear that control of property in speculatively produced buildings is highly diffused among a broad class of small owners. The pattern of distribution of property units among the owners of a single unit and the relatively larger owners can be seen in the following table.

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2. Ministry of Public Works, Master Plan Service, The Master Plan of Athens, 1975 (unpublished report, in Greek), p. 33.

Table 3.1.2: Distribution of "property units" among classes of owners in apartment buildings, "Aghios Pavlos" Area, 1971 (40 buildings).

	Owners with 1 unit,	2	3	4	5 & more	Totals
Owners	571	38	13	16	23	665
%	85.8	5.7	2.0	2.4	3.4	100.0
Property units	571	76	39	64	184	934
%	61.1	8.1	4.1	6.8	19.7	100.0

Source: Original data derived from the list of properties and owners in the Cadaster Service, Ministry of Public Works.

Property owners of more than four units (among which there could be quite a few shares in the co-ownership of apartments) control less than 20% of property in these buildings. This certainly shows the limited degree of large landlordism in the apartment sector. Furthermore, it is more than probable that this class of more substantial owners comes from the previous owners of the building plot. In the common practice of exchange arrangements ("antiparochi") between speculative builder and landowner, the latter is given, in place of money capital, a certain share of the property to be built (usually more than 30%). It is obvious, then, that substantial *investors* in residential property in the market sector are missing. This point may require some qualification in the light of the fact that this particular area could not be considered as one of high demand or one of prestige residential and commercial property to which larger rentiers would be attracted. Differences in this respect, however, should not be expected to be significant outside the central business district and perhaps a few truly "elite" residential sections in central Athens.

Regardless of the distribution of property in structures, the pattern in table 3.1.2. is perhaps more significant with respect to the structure of *land* ownership. It points to the fact that ownership of urban land is further fragmented through the widespread process of speculative redevelopment: in the case of the apartment buildings we examined, each distinct owner hardly controlled 19 square meters of urban land on the average!

## Appendix 4.1.

### Population, incomes, rent-class structure and housing stock depreciation in Greater Athens 1950-1971

#### 1. Population, households, incomes and housing expenditures

The population of Greater Athens grew with high rates throughout the postwar period. During the same time the average size of households decreased substantially. As a result, the rate of growth in the number of households and thus in the demand for dwellings was even higher: we had an annual rate of 3.76% in the 1950's and a rate of 4.1% in the 1960's.

Table 4.1.1: Population and households in Greater Athens 1951-1971

Census Year	Population (P)	Households (N)	Average size of households	Annual growth rate of (P)	Annual growth rate of (N)
1951	1,378,586	361,100	3.817		
1961	1,852,709	522,587	3.545	3.0%	3.76%
1971	2,540,241	781,140	3.252	3.2%	4.1%

Source: 1959 Statistical Yearbook N.S.S.G.; 1961 Census Vol.2; 1971 Census Vol. 7.

These rates of growth did not operate in any uniform manner during each decade. Whereas, however, we lack the data to reconstruct the exact time-pattern of growth, there is sufficient evidence that points to a significant rise in the rate of urban growth in the second half of the 1950's (mainly due to an increase of internal migration) which continued at even higher rates up to the mid-1960's, and a slowing down in the second half of the 1960's. We know from the 1961 Census that during the 1950's about 269,000 persons moved from the rest of the country to Athens: of these, 116,000 settled in the city during 1951-55 and 153,000 during 1956-60.<sup>1</sup> The first figure amounts to 8.4% of the 1951 population, while the second to 9.6% of the population estimated for 1955 (assuming that the 3.0% decennial rate applied uniformly throughout the period). This certainly implies a higher

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1. D.G. Tsaousis, The Morphology of Modern Greek Society (Athens, 1971), p. 221 (in Greek).



internal migration inflow in the second half of the 1950's. On the strength of available evidence we have no reason to assume that important fluctuations in the rate of fertility, mortality and the movement to and from abroad compensated for this inflow of population. The rate of urban growth as a whole was thus similarly high in the second half of the 1950's. With regard to the 1960's, we know from the 1971 census that 1,915,680 persons living in Athens in 1971 and born before 1966 have been living in the city in 1965. To estimate the total of the 1965 population we must add the number of persons that lived in Athens in 1965 and *were not* present in 1971 due to death, immigration or a move to other parts of the country. Table 4.1.2 presents the relevant information.

Table 4.1.2: Greater Athens: Residents in 1965 and losses of population due to deaths, immigration and internal migration during 1966-70

1. Household members born before 1966 and resident in Athens in 1971 <i>and</i> 1965		1,915,680
2. Number of deaths 1966-1970	approx.	81,000
3. Permanent immigrants		63,346
4. Migration from Athens to the rest of the country		65,240
		2,133,000
Estimated population for 1965		

Source: (1) and (4): 1971 Census, Vol. 1. (2) and (3): Statistical Yearbooks, 1967-73.

Given the evidence in table 4.1.2, the average annual rate of population growth for 1961-65 (4-year period) is 3.6% and that for 1965-71 3.0%. Of course, a number of deaths and movements away from the city may have taken place among post-1965 migrants. This amount, however, is certainly compensated by the effect of *temporary* immigration (intended stay abroad less than a year) which during 1966-70 amounted to 30,000 persons a year. A large part of this category for 1969 and 1970 must have been abroad during the 1971 census. The estimated population growth rates combined with the trends of growth in the average size of households, give the following rates of growth in the number of households: 1961-1965: 4.5% and 1965-1971: 3.9%.

Let us now examine the rates of growth in incomes and housing expenditures in Athens. Gross National Income (GNI) per capita (in constant 1958 prices) increased during the 1960's by an annual rate of 6.58% (from 12,151 drs or \$ 405 in 1961, to 22,991 drs or \$ 766 in 1971). The rate of increase was slower during the previous decade: GNI per capita (in 1958 prices) was 7,558 drs in 1951 which implies an average annual growth rate for 1951-1961 of 4.86%.<sup>2</sup> As we pointed out in chapter 4, however, the concept of current income is not adequate for the analysis of consumption. The relevant determinants are "normal" income and, more generally, the structurally determined resources available to a household. Let us assume in accordance with modern theories of household behaviour that consumption and saving are proportional functions of "normal" income. Total consumption, then, may be considered as a surrogate variable for "normal" income and the socioeconomic position of a household and, thus, take the place of the independent variable in the study of consumption of particular goods such as housing. Alternatively, we may take total consumption expenditure *in itself* as the relevant independent variable for the cross-sectional and time-series determination of housing consumption (rent expenditures, including imputed rent). Table 4.1.3 presents the trends in the latter as well as in total consumption at the macro-economic level.

Row (4) in table 4.1.3 shows the share of housing consumption in total consumption expenditure. The very slow decrease in this share indicates an elasticity smaller than +1 but only marginally so. Thus our assumption in chapter 4 of a proportional relationship between "income" (operationalised by total consumption expenditure) and housing consumption (i.e. rent-expenditure) does not deviate significantly from reality with regard to time-series data at least. In fact, the elasticity of housing consumption in the first half of the 1950's and towards the beginning of the 1970's was equal to and higher than +1 respectively.<sup>3</sup>

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2. National Accounts 1958-1972, p. 20 and National Accounts 1948-1970.

3. Let us denote National Private Consumption by "C" and Housing Consumption by "CH". Using National Accounts data (constant 1958 prices) we have found that  $CH(1961-71) = 0.63 C^{0.909}$  (i.e. elasticity for 0.909) and  $CH(1961-71) = 0.059 C^{1.049}$  (i.e. an elasticity of 1.049), which clearly imply a significant rise in elasticities in the early 1970's. (D. Emmanuel, Categories of Households, pp. 45-46).

Table 4.1.3: Trends in national private consumption expenditure (NPC) and housing consumption (HC), Total Greece, 1951-1971

	Constant 1958 prices					Annual rates of growth			
	1951	1955	1961	1965	1971	51-55	55-61	61-65	65-71
1. National private consumption (NPC)	53,072	64,083	84,095	109,623	163,662				
2. Housing consumption (HC)	6,223	7,440	9,566	11,614	16,897				
3. Population (P) (in thousands)	7,646.4	7,965.5	8,398.0	8,550.3	8,851.9				
4. HC/NPC	0.117	0.116	0.113	0.106	0.103				
5. NPC/P	6,942	8,045	10,013	12,820	18,488	3.75%	3.71%	6.37%	6.30%
6. HC/P	814	934	1,139	1,358	1,909	3.49%	3.36%	4.49%	5.84%

Source: National Accounts 1948-1970 and 1958-1972, Statistical Yearbook for 1973, and our estimates. Rows 1 and 2 in mill. drs. Rows 5 and 6 in drs. Row 2, "Housing Consumption", is the category "Ownership of Dwellings" in the National Accounts.

The trends in rent expenditures presented in table 4.1.3. refer to the country as a whole and are, moreover, based on per capita magnitudes. The construction of similar series for the case of households in Athens presents great difficulties. We know from the data in table 4.1.1 that households in Athens decreased in size by an average annual rate of 0.7 - 0.8%. The per capita rates should be therefore lowered accordingly. We do not know, however, to what extent trends in incomes and consumption in Athens conformed to the national pattern. This is obviously a question of trends in inter-regional income and consumption differentials for which the available evidence in Greece is very poor. We can argue that the high postwar flow of internal migration from rural areas and small urban centres towards Athens led to a reduction in differences between average incomes in Athens and the country as a whole. Rates of income growth in the capital should thus have been lower than national ones. The high rate of immigration abroad, moreover, concerned mostly rural areas and this should produce similar statistical effects. Lastly, we would expect the reduction of income differentials thus produced to slow down during the second half of the 1960's since - as we showed previously - the rate of internal migration to Athens decreased.

The sparse information we have on regional income differentials seem to support these points. Estimates of regional product per capita show that the ratio of values for Athens to those for the country as a whole declined from 165:100 in 1958 to 163:100 in 1962 and 152:100 in 1965.<sup>4</sup> Actual income in a region, of course, differs from the regional product. The relationship between the two is similar to that between "National Income" and "Domestic Product" in national accounts in that it involves payments and receipts between a region and the rest of the world. In the case of regions, however, the regional distribution of subsidies and indirect taxation is also important. Regional "Income" is in general higher than regional "Domestic Product": their ratio in 1958 was 117:100 for Athens and 113:100 for the country as a whole.<sup>5</sup> Assuming a constancy in this ratio for the period we study we may arrive at a rough estimate of trends in regional differentials in income per capita from 1958 to 1970. We know that the relationship between incomes in the latter year was 157:100.<sup>6</sup> The resulting trend in the ratio of incomes per capita in Athens to that of the country as a whole is as follows:

1958	1962	1965	1970
170:100	168:100	157:100	157:100

This pattern confirms our initial hypothesis. As a result, we can say with certainty that the rate of income growth in Athens during the first part of the 1960's was lower than the national one. We will assume that a similar point applies to total consumption expenditures.

The previous discussion suffices for the derivation of some rough estimates of the time-pattern in the rates of growth of households and rent expenditures per household ( $C_h$ ) in Athens for the purposes of the housing market analysis in chapter 4. These are presented in the following table. For the rates of  $C_h$  we took into account the evidence of trends in income elasticities in conjunction with the fact that incomes in Athens are higher than the national average.

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4. C.Papageorghiou, Regional Employment in Greece, Vol.1 (Athens,1973)p.45.

5. Papageorghiou, Regional Employment, p. 121

6. Doxiadis Associates, Regional Plan and Program for the Capital, vol. 1 (Athens, 1976, in Greek) p. 88.

Table 4.1.4: Average annual rates of growth in the number of households and rent expenditure per household, Athens 1951-71

Period	Number of households	Rent expenditure per household (including imputed rent)
1951-1961	3.7%	3.0 - 3.3%
1961-1965	5.1%	3.5%
1965-1971	3.5%	6.0%

Source: Our estimates, see text.

## 2. Depreciation of the housing stock

The depreciation of housing results from the operation of two factors. The first is the physical deterioration of the structure with time - especially the decay of woodwork, water and sewage piping and other installations and appliances. The second is social in nature expressing the shift in the standards of acceptable housing conditions and the effects of modernisation in the material culture of a society. It is apparent that a serious estimate of the rate of depreciation of the housing stock involves the consideration of a multitude of factors that vary with the history and the social context of the city in question and require detailed expert recording of house values and physical characteristics over extended periods. Such studies are rarely undertaken even in countries with a long tradition of housing research<sup>7</sup> and, needless to say, are non-existent in Greece where even intelligent estimates of the rate of depreciation are not available - a fact that reflects the embryonic development of the real estate business and related professions (e.g. valuers). The official reports on housing in Greece are concerned at most with rough estimates of the annual *replacement* rate - the percentage of housing units abandoned, demolished or changing use yearly. The replacement rate, however, is an entirely different matter: considering only the abandoned

7. See C. Clark & G.T. Jones, The Demand for Housing, Centre of Environmental Studies, University Working Paper (London, 1971, mimeo), p. 51. Clark & Jones report only one such study: University of California, Institute of Business and Economic Research, The Dynamics of Central City Land Values, San Francisco and Oakland 1950-60, Real Estate Research Programme, Report No. 18.

units, we know from the analysis in chapter 4 that their number is determined by quite a few variables besides the depreciation rate " $d$ " - income growth ( $g$ ), population growth ( $n$ ), the pattern of income distribution ( $k$ ) and the extent of "integration" of the housing market. For instance, if we assume an "integrated" housing system in the terminology of chapter 4, and further assume  $k = 0.2$ ,  $g = 0.04$ , a depreciation rate  $d = 0.01$  and zero population growth, by using expression (4) in chapter 4 in order to estimate the necessary new units due to abandonment, we get a replacement rate of 3% - three times higher than the depreciation rate. Given the fact that the Greek housing system displays strong elements of "segregation" in the mechanism of demand allocation which implies lower rates of stock utilisation and therefore higher abandonment rates, the officially estimated replacement rates seem rather low: 1.05% of stock for the 1950's and 0.7% for the 1960's.<sup>8</sup> These appear even more unrealistic if we take into account the high incidence of demolitions of sound structures due to the piecemeal speculative redevelopment of central areas in large urban centres (see Appendix 3.1). Speculative redevelopment is less influenced by the remaining economic life of a given building than by the opportunity to realise a more intensive and better use of the plot. Thus structures that would have not otherwise been abandoned are torn down. This factor suggests that if the official estimates of the replacement rate were realistic the depreciation rate should have been lower than 0.002 or 0.003% a year.

Such rates of depreciation seem highly improbable, especially if we take into account the socioeconomic context determining housing valuation in the postwar period. The low valuation of old housing stock and the emphasis on modern and newly built houses are well-known social facts. The large numbers of vacant houses in Greek urban areas which approach more than one-tenth of the housing stock testify to this. Such vacancy rates could hardly be accounted solely by the existence of second homes and the normal friction of the housing market.<sup>9</sup> Still our information is very

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8. U.N., E.C.E., National Monograph, p. 216

9. In 1971, 13% of regular dwellings in urban areas were vacant (National Monograph, p. 213). It can be argued, however, that this high rate of vacancies does not signify any excessive rate of depreciation but is a normal product of the Greek system of housing production and distribution, namely the effect of the high level of fragmentation in the housing market and an inherent tendency for oversupply (see chapter 6).

incomplete and the choice of a realistic average depreciation rate must be in the nature of an intelligent guess. Estimates for Britain and the U.S. propose a twenty to thirty-year period during which the house does not depreciate and, subsequently, a straight-line depreciation by 1.33% to 2.0% per annum.<sup>10</sup> This seems rather conservative for Greek urban conditions though in estimating the average rate we must take into account the fact that the housing stock in Greek cities is in general of more recent origin. In our opinion, a realistic average rate should lie between 0.5% and 1.0% *compound*. For the analysis in chapter 4 we have chosen the higher value applied uniformly throughout the period and for all classes of stock. These latter assumptions are hardly realistic, of course; they have been adopted as a matter of convenience and with the thought that since small fluctuations in the depreciation rate have marginal effects on the sectoral structure of housebuilding, our analysis will not be affected significantly.

### 3. The pattern of income distribution and social differentials in housing consumption

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In our model of the housing system we have introduced some simple assumptions about the shape of the "income" distribution ("normal" income), its relation to the social pattern of housing expenditures and the change of these distribution through time. More specifically we have assumed:

- a. A pyramidal income distribution that can be described graphically by a triangle determined at any given time by three parameters: the total number of households  $N$ , the maximum income level  $Y_{max}$ , and the relation between the *minimum* income level  $Y_{min}$  and the former,  $k = Y_{min}/Y_{max}$ . Income levels refer to the average income of a number of categories or class-situations which can be thought of as groups with "structurally determined" income and into which we divide the population. In our case, these are usually occupational categories. The income distribution pattern is then described as follows:

$dN/Y = a - bY$  where  $dN$  is number of households in income-class  $Y$  and

$$a = 2N/Y_{max} \cdot (1-k)^2, \quad b = 2N/Y_{max}^2 \cdot (1-k)^2$$

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10. Clark & Jones, Demand for Housing, p. 51.

- b. A proportional relationship between incomes and housing (rent) expenditures i.e.  $C_h = r.Y$  and thus a similarly pyramidal distribution of the rent-classes of households which will also be those of the housing stock in conditions of equilibrium between demand and the supply of housing.
- c. Uniformly applied rates of growth in incomes and numbers of households.

Using this schematic formulation as a yardstick we will examine the actual trends and patterns in Athens in order to, first, assess the relative realism of such a simple model and then estimate the relevant parameters, namely "k" and "p". The latter is the ratio  $Y_e/Y_{max}$  where  $Y_e$  denotes the income (or rent) level determining the social boundary of the potential speculative market (see chapter 4). Our empirical material will be drawn exclusively from that available for the 1958-1974 period since we lack data for the earlier part of the postwar period but also because the 1960's present the greatest theoretical interest for the problems we study.

Table 4.1.5. shows the pattern of social stratification in Athens in 1961 and 1971, i.e. the distribution of households by the occupational category of the head of household, and the averages of total consumption expenditure and housing expenditure for each social category. The latter two had been taken from the household surveys of 1957-58 and 1974 for urban areas, since we lack similar material for Athens, on the assumption that the differentials in expenditure levels are more or less similar in Athens. It is immediately evident that our hypothesis of a uniformly applied rate of demographic growth conforms closely to the facts. The occupational composition of households in Athens has remained stable to a surprising degree save for a relative growth in the category of "non-gainfully employed". The stability in structure can be observed more easily if we disregard the latter category and group households into three main occupational strata, as in table 4.1.6.

We may note in passing that though in the earlier part of the period there were certain differences between Athens and urban areas as a whole in the pattern of occupational stratification, by the beginning of the 1970's the patterns were identical.



Table 4.1.5. Occupational Stratification of households, Athens 1961, 1971 and consumption and housing expenditure levels by occupational class, Urban Areas, 1957-58, 1974

Occupation of household head	1961		1971		1957-58 (Urban Areas)			1974 (Urban Areas)				
	No	%	No	%	C*	C <sub>h</sub>	C <sub>h</sub> /C	Index	C*	C <sub>h</sub>	C <sub>h</sub> /C	Index
A. Higher Administrative & Managerial	44,500	8.9	11,920	9.0	1,845.0 (36)	274.3	0.148	2.66	24,030 (86)	3425	0.142	2.13
B. Professions, Technical & related	58,260		58,260		1,759.4 (118)	360.1	0.174	2.54	20,572 (306)	2736	0.132	1.82
C. Clerical	93,100		75,720		1,113.9 (187)	150.0	0.134	1.60	14,754 (384)	1973	0.133	1.31
D. Tradesmen & Sales workers	19.4		64,700	18.0	1,061.4 (346)	154.9	0.146	1.53	14,362 (419)	1818	0.126	1.27
E. Craftsmen & Workers in industry, transport etc.	170,900	34.2	253,940	32.5	801.4 (739)	95.9	0.119	1.15	11,905 (1440)	1467	0.123	1.05
F. Personal services	44,100**	8.0	54,300	7.0	693.4 (186)	81.7	0.117	1.00	11,278 (322)	1579	0.140	1.00
G. Farmers and related	5,600	1.1	4,120	0.5	820.7 (139)	86.8	0.105	1.18	9,702 (103)	1099	0.113	0.86
H. Non-Gainfully Occupied, etc.	142,200	28.4	258,100	33.0	807.0 (369)	135.4	0.167	1.16	10,370 (1299)	1674	0.161	0.92
Total	500,400	100.0	781,060	100.0	935.2 (2120)	130.1	0.139	1.35	12,684 (4359)	1734	0.136	1.12

Source: 1961, 1971 Censuses; 1957-58 Household Survey; 1974 Household Survey (Vol. 7). C and C<sub>h</sub> in drachmas, weekly rates for 1957-58, monthly rates for 1974. (\*) The definition of Total Consumption (C) in 1957-58 is slightly different from that of 1974. To achieve uniformity we subtracted the sums under statistical codes 1920, 1128, 1970. (\*\*) Category F in 1961 includes the Armed Forces which are about 9% of Services. The figures in parentheses in the columns for C refer to the number of households in the sample.

Table 4.1.6: Shares of main occupational strata - Athens and urban areas

Occupational categories	1961	1971	1957-58	1974
	Athens		Urban areas	
A-B	12.6%	13.5%	9.5%	13.2%
C-D	27.5%	27.1%	33.0%	27.1%
E-F	59.9%	59.4%	57.3%	59.6%

Source: Table 4.1.5.

We can not say the same, however, for our simple assumptions about expenditure behaviour. First, the ratio  $c_h/C$ , at least in 1957-58, increases as we go up the income hierarchy. This implies that instead of a simple proportional relationship  $c_h = rC$  we have  $c_h = kC^z$  where  $z$  (the cross-sectional elasticity of  $c_h$  with respect to  $C$ ) is greater than +1. Second, table 4.1.5 indicates that this interclass pattern has not remained stable: the differentials in the  $c_h/C$  ratio have decreased substantially, a fact that implies significant differences between the time-series elasticities (as opposed to cross-sectional ones) observed for the various categories. The time-series elasticity for working-class groups has been higher than +1 whereas that for middle and upper ones lower than +1. Lastly, this difference in consumption behaviour through time was not the sole reason for the observed closing of the gap between rent-expenditure levels: differentials in total consumption expenditure have also been decreased. The following table shows these trends more clearly.

Table 4.1.7: Social differentiation of  $C$  and  $c_h$  per household, 1957/58 and 1974

Occupational categories	Total consumption expenditures ( $C$ )				Housing expenditures ( $c_h$ )			
	1957-58		1974		1957-58		1974	
A-B	1779.4	(2.28)	21330.6	(1.81)	298.6	(3.21)	2887.1	(1.94)
C-D	1079.8	(1.38)	14549.4	(1.23)	153.2	(1.64)	1892.1	(1.27)
E-F	779.7	(1.00)	11790.0	(1.00)	93.0	(1.00)	1487.4	(1.00)

Source: Table 4.1.5. For 1957-58, weekly rates in drs; for 1974 monthly rates.

We do not know with certainty whether this improvement has been the product of a corresponding improvement in the personal income distribution.

There is some evidence that this is indeed so.<sup>11</sup> After all, the approach to conditions of full employment coupled with emigration must have contributed substantially to the income of working-class households since the latter usually have a larger number of gainfully employed members than average and receive most of income transfers from abroad (remittances etc.). Thus the personal income distribution may have improved even if the *functional* one (i.e, between wages and profits) did not. Since we lack adequate data about personal incomes and the saving propensity of the various social classes, we can not arrive at any definite conclusions on this issue. Nevertheless, the fact is that the combined influence of the reduction in consumption level differentials and the difference in housing consumption elasticities led to significant changes in the pattern of social stratification by rent-classes. In terms of the model advanced in chapter 4 this implies an increase in parameter  $k = Y_{min}/Y_{max}$  and, *ceteris paribus*, an increased share of the higher rent-class market and therefore of the speculative housing sector. Since we showed, however, that the effect of "k" on sectoral structure is marginal (see the sensitivity analysis in chapter 4) we will disregard these changes - however important in themselves they may be - and assume for convenience a stable pattern in the rent-class distribution throughout the period. Let us then estimate the relevant descriptive parameters.

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11. M. Negreponi-Delivani reports that between 1961 and 1971 the distribution of personal income improved slightly since the Gini coefficient of concentration decreased. The trend was reversed during 1971-76. The figures she gives are the following:

	1961	1966	1971	1976
Gini coefficient before tax,	--	0.378	0.363	0.377
Gini coefficient after indirect and direct taxation and transfers	0.317	0.314	0.302	0.316

See, her "On the Tax Burden, Tax Evasion and the Goals and Achievements of Fiscal Policy", *Economicos Tachydromos*, 1296, 8/3/1979, p. 15 (in Greek), and *Analysis of the Greek Economy* (Athens, 1979): 156-161 (in Greek). For the estimates of income concentration before tax she used data on family income reported to the taxation authorities. This is a notoriously unreliable source, however, and one furthermore that covers only a minority of the population. For the after-tax measures she does not give any specifics about sources or method.

Lianos and Prodromidis using similar data have found that the Gini coefficient for before-tax reported income has indeed decreased between 1966 and 1971; in contrast to the previous report, however, they have found a pronounced *worsening* in the distribution between 1960 and 1971 (*Aspects of Income Distribution in Greece*, Athens, 1974, p. 58).

As we pointed earlier, in order to arrive at a description of the pattern of income distribution among households that is theoretically valid for the analysis of consumption, we must use categories that are the socioeconomic determinants of "normal" income. A detailed breakdown of households according to the occupation of the main breadwinner, ownership of wealth or means of production, skill and educational qualifications would have covered most of the important determinants of the "life-chances" of a household and would have provided a solid basis for a stratification analysis from our point of view. Unfortunately the relevant material is not available. The breakdown by main occupational strata, though adequate for most purposes, is not detailed enough so as to provide a relatively continuous stratification pattern necessary for a model of the housing market. Thus we are forced into using the more detailed data on the distribution of households by current cash income given by the 1957-58 Household Survey.

This has evident drawbacks. To repeat some earlier points, the level of current cash income is influenced to an important degree by random and transitory factors, the size of the household and its stage in the life-cycle. All these cut across structurally determined economic classes (though the two latter characteristics may be easily incorporated into a systematic classification). In turn, the rent classes that correspond to a stratification by current income do not represent the normal and permanent rent-class structure since the latter should be derived from the "normal" income distribution. They reflect, moreover, the influence of household size and the life-cycle stage in a way that differs significantly from the way these variables influence current income. Whereas income increases with a larger household size (most especially in working-class households) rent expenditure shows important "economies of scale" in larger households.<sup>12</sup> Similarly, whereas household income shows a definite decline after a peak period in a household's life, housing consumption may remain at disproportionally high levels, due to the fact that most "older" households are owner-occupiers. Still, the data on current cash income are the only available for the time-period we examine; it is hoped that by means of an aggregation into larger classes some of these drawbacks will have less of an effect on the validity of our analysis.

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12. See Clark and Jones, The Demand for Housing and D. Emmanuel, Categories of Households, Table A.5.

Since we are mostly interested in developments during the 1960's, the data on the rent-class distribution should refer to the beginning of this period. As we noted earlier we have adequate data on households' consumption only for two years: 1957/58 and 1974. Since it is preferable to make estimates for a year near the midpoint of the study period, the obvious choice is 1957/58 having the additional advantage that the relevant report contains detailed income distribution whereas the one for 1974 does not. As before, we must use material on urban areas as a whole. This, as we saw in table 4.1.5, does not entail important errors: judging from the pattern of occupational stratification, the distribution by income-classes is fairly similar in Athens save for an overrepresentation of higher-income groups. In table 4.1.8 we present the income and rent-class distribution for 1957-58. The rent-class pattern that corresponds to the income distribution has been derived with the help of equation  $C_h = 0.843Y^{0.748}$  ( $R = 0.992$ ) constructed from columns 1 and 3 in the table.

Table 4.1.8: Rent-class distribution of urban households, 1957/58

Classes of current cash income	Average income of class (Y)	Number of households	Housing (Rent) expenditure (C <sub>h</sub> )	Rent-classes
	(1)	(2)	(3)	(4)
1. 1600 +	2736.8	205	347.0	210 +
2. 1100-1599	1463.5	231	194.3	160-209
3. 800-1099	1073.0	372	148.5	125-159
4. 450-799	724.8	797	107.1	81-124
5. 250-449	451.7	615	77.3	53-80
6. Up to 249	228.7	348	54.8	up to 52
Total	830.5	2568	125.8	

Source: 1957/58 Household Survey N.S.S.G., and our calculations (see text). Weekly rates in drachmas. Rents are the weighted average of the paid and imputed rent of renters and owner-occupiers respectively.

Let us take the amount of 40 drs per week as the minimum rent level in terms of the structure of the housing market at the time. Aggregating the rent classes in table 4.1.8 into three main groups we have:

Broad Rent-classes	Households
I. 210 + drs	205
II. 125-210 drs	603
III. 40-125 drs	1760
Total	2568

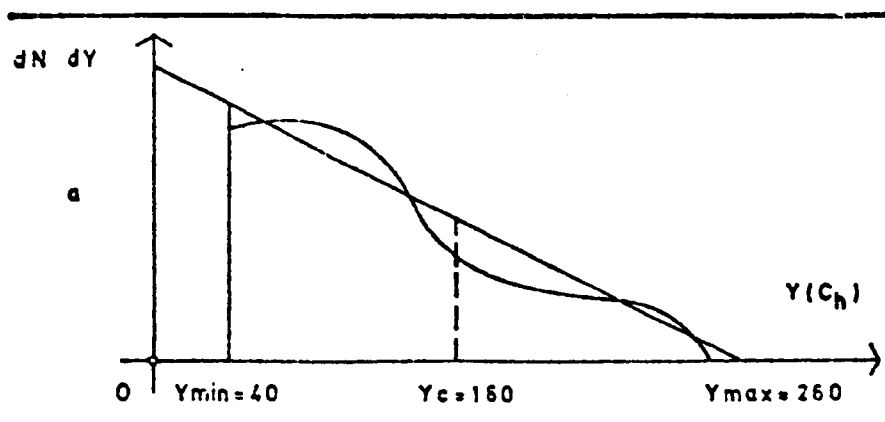
No simple straight-line function fits this distribution with exactness. After a number of trials we found that the following function gives a good approximation of the distribution pattern:

$$dN/dC_h = 1103 - 170C_h$$

$dN$  is households per rent-class,  $C_h$  the rent level, and the intercept with the y-axis is 1103. The intercept with the x-axis is the maximum rent-level ( $Y_{max}$  in the model of chapter 4) and has the value of 260; parameter "k" therefore where  $k=C_{hmin}/C_{hmax}$  (or  $Y_{min}/Y_{max}$  assuming proportionality in the rent-income relationship) is  $k = 40/260 = 0.1538$ .

The distribution model described by this linear function underestimates the number of households in low incomes and overestimates households in the middle levels. Its relationship with the actual distribution can be seen in the following figure.

Figure 4.1.1: Formalised rent-class distribution of urban households in the late 1950's: Actual and linear model



The rent level  $Y_c$  noted in figure 4.1 signifies the dividing line between middle and upper-class demand and the lower-class one and thus determines formally the share of the speculative sector. As we argued in chapter 4, this dividing point may remain fixed relative to the distribution

or it may move "downwards". It is important that we make a rough estimate of its level at the base-year (in this case the end of the 1950's). We know that during the 1950's roughly 35% of the volume of residential building in Athens was speculative apartment housing. Assuming that this activity formed the bulk of speculative sector housing stock by the end of the decade we estimate that households living in apartments in Athens in 1960 should have formed approximately 15% of the total. This figure accords well with descriptions of conditions at the time which took for granted that apartment housing was essentially a "luxury" sector catering for a restricted upper-class, professional and white-collar market.<sup>13</sup> Given this estimate and the patterns in table 4.1.8 and 4.1.5, we may say that the boundary between housing sectors at the end of the 1950's should be set roughly at a weekly rent-level of 160 drs: thus the parameter  $p = Y_c/Y_{max}$  in the model of chapter 4 should have the value of 0.60 for 1960.

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13. See for instance, C.P.E.R., Housing (1966), pp. 25-26.

## Appendix 6.1.

### Postwar trends in the cost of housing and the mechanism of land price formation

This appendix deals with the postwar trends in the three main aspects of the cost of housing: rents, construction costs, and land costs. The trends in the market price of dwellings where market relations predominate, i.e. in the case of apartments, are not studied mainly because of the lack of reliable data; such a study would have only helped us ascertain implicitly the changes in land costs and would therefore have not added much. We will not examine developments in the cost of mortgage credit. From the viewpoint of the formation of residential capital the significance of the cost of credit, as we argued in chapter 6, is secondary compared to the role of fluctuations in its volume and the pattern of its distribution. The descriptive account of trends in costs will be complemented with a discussion of the factors making for such trends. This discussion adds few things to the points made in chapter 5 and 6 and should be read in conjunction with the latter. We will expand more, however, on the subject of the formation of the cost of land since this issue is controversial in current urban theory as well as closely related to the character of the Greek housing system as a whole.

#### 1. The trend of rents and construction costs

Tables 6.1.1. and 6.1.2. present the available evidence on the trend of housing rents and the cost of investment in dwellings in current prices as well as in relation to general inflation. The series in table 6.1.1 are the deflators implicit in National Accounts and thus the price of "investment in dwellings" reflects the trend of construction costs (the cost of land is not included). It is well known that the National Accounts estimates of housing price indices in Greece are rather crude (see note 33 in chapter 6) but for an examination of general trends these indices will suffice. With respect to rents, the trends in table 6.1.1 are corroborated by the more reliable estimates shown in table 6.1.2. The latter shows the price indices of rents, "housing expenditures" (which contain, in addition to rent, expenses on fuel, electricity, water charges and current repairs), and the general consumer price index; these are measured directly from samples drawn from urban areas and thus are more relevant to our analysis.



Table 6.1.1: Trends in the price index of rents and investment in dwellings

Year	(1) Investment in dwellings price index	(2) Rents of dwellings price index	(3) GDP deflator	(4) (1)/(3) x 100	(5) (2)/(3) x 100
1950	54.0	51.2	55.8	96.7	91.7
1954	82.7	81.2	84.6	97.7	95.9
1958	100.0	100.0	100.0	100.0	100.0
1962	110.1	111.2	112.2	98.1	99.1
1966	115.9	120.6	123.9	93.5	97.3
1970	130.5	133.6	136.1	95.8	98.1
1972	141.7	137.7	146.8	96.5	93.8
1974	228.3	169.0	218.0	104.7	77.5
1976	282.7	191.7	272.2	103.8	70.4

Source: National Accounts 1948-70 and 1958-72; Statistical Yearbook 1975.  
For the full series see General Appendix, table A.10.

Table 6.1.2: Trends in the price index of rents, housing expenditures and total consumer expenditures

Year	(1) Rent expendi- ture index (1959=100)	(2) Housing expendi- ture index (June 1959=100)	(3) Consumer Index (June 1959=100)	(4) (1)/(3)	(5) (2)/(3)
1959	100.0	101.1	100.7	99.3	100.4
1962	108.9	107.1	103.8	104.9	103.1
1966	119.0	115.9	116.6	102.0	99.4
1970	132.5	124.9	125.5	105.5	99.5
1972	137.2	128.1	134.9	101.7	94.9
1974	163.9	173.4	197.7	82.9	87.7
1976	199.8*	215.0	250.2	79.8	85.9

Source: S. Drosos, "The Development of Housing Rents", in *Economicos Tachydromos*, issue of 6.5.1976 (in Greek) and various *Statistical Yearbooks*. (\*): The rents index for 1976 has been estimated from the National Accounts index for rents (column 1 in table 6.1.1). For the full series see General Appendix, table A.11.

It is evident that both construction costs and rents had moved during the period extending from the late 1950's to the early 1970's either with rates similar to those of general inflation or at a slower pace. Both show rises in relative terms during 1950-1958 though these are rather limited, especially if we take into account the fact that increases in rents during the period reflect the gradual lift of rent control. In relation to inflation, rents show a definite falling trend after 1972, whereas relative construction costs show a substantial increase. With regard to the broad picture presented by these trends it can not be disputed that, on the whole, changes in housing costs during 1950-1974 have been very favourable, a point we have repeatedly stressed in chapters 5 and 6. With respect to construction costs, the most favourable period has been 1959-1967: eight years of steady decline in relative prices. This has certainly been an important positive factor behind the fast expansion of low-income precapitalist building during the same period (see chapter 4). During the years of fast speculative expansion that followed 1968, price inflation in construction as well as in the economy as a whole was not as favourable and became positively adverse after 1973. In contrast, relative rents show a steady decline after 1967, most probably due to the speculative "overinvestment" that took place during 1968-1973 (see chapter 6).

The 1950's, when both construction costs and rents showed a rising trend (in relative terms), should be considered apart from the rest of the postwar period. Their specificity can be easily understood: productivity in the industries producing materials and in the construction sector itself started to take off fastly only after the end of the decade. With regard to rents, the scarcity of housing stock created by the years of war, the occupation and the civil war was still effective; combined with the gradual lift of rent control, this can more than account for the slightly upward trend in rents.

## 2. The favourable trend in construction costs: Productivity, mechanisation and supply of labour

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The virtual constancy of relative construction costs during the greatest part of the postwar period has been a major influence behind the postwar building wave. This favourable trend can not be treated as "natural" or unproblematic. Judging at least from the experience of advanced capitalist

countries, the price of output in the construction sector is normally expected to increase faster than prices in the economy as a whole. This derives from a lag in the growth of productivity in construction relative to other sectors, most notably industry and agriculture. Such a lag has been evident in productivity trends since the First World War.<sup>1</sup> It has also been evident among advanced countries during the postwar years.<sup>2</sup> Since Greece in the postwar period appears to differ in this respect, let us review the relevant evidence. Table 6.1.3 presents the trends in productivity.

Table 6.1.3: Average annual growth of labour productivity in construction, manufacturing and the economy as a whole, 1951-1971

Sector	Average annual rates of growth			
	1951-71	1951-61	1961-71	1958-70
Construction	3.8	2.3	5.4	5.4
Manufacturing	6.5	4.2	8.8	8.9
All sectors	6.2	4.0	8.2	5.5

Source: Derived from tables 5.1 and 5.3 in Kassimatis, The Construction Industry in Greece.

The evidence on table 6.1.3 suggests that the usual pattern of lagging construction productivity also applies to Greece. The lag is more pronounced when construction is compared to manufacturing. These estimates, however, should be treated with caution. It is notoriously difficult to measure employment in man-hours in most sectors outside organised industry, especially in a country like Greece where non-wage labour and small, "informal" units of production are widespread. Kassimatis' estimates of productivity are not based on man-hours but on average employment in persons and thus measure the output-employment ratio and not productivity in the strict sense. Moreover, for the years between successive censuses (1951, 1961, 1971) no employment figures are available save for manufacturing and thus very

1. Needleman, Economics of Housing, pp. 104-105.

2. All OECD countries except France and Spain showed during 1958-70 average annual rates of labour productivity growth in construction that were substantially lower than those for the economy as a whole; this lag in productivity growth was even more pronounced in relation to industry. See, Kassimatis, Construction Industry, p. 69 and table 5.3.

rough estimates have to be constructed. Kassimatis' series of total employment show substantial fluctuations in the late 1950's and therefore figures of output per man for that period show great variance. As a result, by choosing a different base-year we get drastically different productivity trends for the 1960's: the 1958-70 trend in table 6.1.3 shows much more favourable relationship between construction and the economy as a whole.<sup>3</sup>

Although the evidence on productivity is too imperfect for secure conclusions, it suggests that productivity growth in construction alone can not account for the favourable trends in prices. Perhaps an even more important factor has been the fast productivity growth in the industries producing building materials. Between 1958 and 1969, labour productivity in wood products increased by an average rate of 6.2%, in stone and glass by 8.5%, in basic metals by 20.7% and in metal products, electrical and engineering products, by 5.2%.<sup>4</sup> These rates show on the whole a fast improvement which is not reflected in the value added of construction but which influences, of course, the price of the gross product. It should be remembered that an important form of technological change in housebuilding is capital-labour substitution through the replacement of work on the site by industrially made components. This process, in addition to reducing the cost of labour in situations of rising construction wages, incorporates productivity increases that originate in the wider industrial environment. Building in Greece has utilised such substitution to a great extent. Productivity growth *within* the construction sector, on the other hand, has been mainly based on mechanisation. Increases in the latter have been impressive: the capital-to-labour ratio in construction (which mainly concerns machinery) has increased by 2.87 times in 1958-71, while in industry it increased by 2.35 times.<sup>5</sup>

Greece and other fastly developing countries during the postwar period had a substantial comparative advantage *vis-à-vis* advanced industrial nations. Starting from a low technological base, they could tap the large

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3. See, Kassimatis, Construction Industry, tables F1, F2, F3 in the appendix. It should be noted that the sharp fluctuations in productivity in the late 1950's are caused from changes in employment. Kassimatis' table B1 shows an unexplained drop in the labour force of the country in 1958 to its lowest level for the postwar period, as much as 20% less than the 1961 employment level.

4. Kassimatis, Construction Industry, p. 81

5. Kassimatis, Construction Industry, tables F1, F2 in the appendix.

pool of innovations in building materials and techniques developed in advanced countries and thus modernise construction at very fast rates. Capital-labour substitution by mechanisation or by the introduction of industrialised components permitted fast rises in productivity as well as in construction wages.<sup>6</sup> Such a pattern may at first look peculiar for developing countries with ample supplies of labour and high costs of capital (construction machinery in Greece is almost wholly imported). This is a natural corollary, however, of the highly competitive and fragmented organisation of the building sector and its tendency towards explosive growth, characteristics that are particularly strong in the case of speculative building. It is doubtful in the case of Greece, anyway, whether conditions of a relatively unlimited supply of labour can be taken for granted after 1960, even if extraneous standards of "proper" productivity are applied. The actual labour market was rather "tight" and wages rose fastly. Wages rose equally fast, if not faster, in construction and were in general substantially higher than those in industry; extensive capital-labour substitution, however, succeeded in lowering the share of wages in value added in the late 1950's and early 1960's and then keep it at constant levels throughout the 1960's.<sup>7</sup>

Extensive mechanisation has introduced radical changes in Greek housing construction: whereas in the 1950's extremely labour-intensive methods were used, by the end of the 1960's the use of cranes, lifts, pre-mixed concrete

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6. For a similar process recorded for the case of Mexico, see Strassman, "Construction Productivity".

7. The average hourly wage in construction in 1973 was 50 drs whereas that in industry, 35. Annual average incomes, however, differed less since construction workers are employed fewer days in a year (265 on the average to 300 in industry) and work a seven-hour day (to an eight-hour in industry). Thus we have:

Construction:	265 x 7 x 50 = 92,750 drs annual income
Industry	: 300 x 8 x 35 = 84,000 drs annual income.

(See, Kassimatis, Construction Industry, p. 88).

The share of wages in value added in Construction (at factor cost) has developed as follows: 1958: 64.8%, 1966: 51.6%, 1970: 51.5%. See, T.A. Skountzos, Interindustry Relationships in the Greek Economy (Athens, 1975, in Greek), table 3.5 and Ministry of Coordination, National Accounts Service, Input-Output Table of the Greek Economy for the Year 1970 (Athens, 1978, in Greek).

and earth moving machinery was generalised. By their nature such innovations were used almost exclusively in speculative building. Given the economic organisation of the latter we could safely assume that such capital-labour substitution was not based on a *response* to rising wages or on a price-reduction strategy. For one, the high cost of mechanised capital in Greece reduces drastically the gains from the reduction in labour costs. Moreover, interviews with a number of building entrepreneurs suggest that capital-labour substitution has been adopted as a means for reducing the need for labour in conditions of relative labour scarcity (especially in periods of a building boom) and in order to shorten the production period and thus improve the cash flow of the builder with early sales. These motives induce under conditions of fierce competition a pattern of stable relative prices and rising wages.

As we pointed already, housing prices started to rise at rates faster than general inflation after 1971-72. Analysis of price changes in building materials suggests that these are not the determinant factor behind this trend.<sup>8</sup> Rising costs, then derived from either wages, profits, services, and indirect taxation or a combination of these. It seems that the main factor has been the exhaustion of opportunities for innovations in mechanisation, building materials and components within, at least, the dominant mode of housing production, i.e. apartment housing. It is premature to say, however, to what extent this represents a permanent long-term trend.

### 3. The cost of land

The role of the cost of land in the final price of housing can be expressed in either of two ways: as a share in the full price which can be easily compared with the prevailing levels of "antiparochi" in the speculative sector at any given time (i.e. the share of the real product offered to landowners in exchange for their land) or in terms of the "valuation ratio" (introduced in chapter 6), i.e. the ratio of the full market price to the construction cost inclusive of profits. In real

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8. See, D. Emmanuel, "Housing Investment in the Context of Balanced Socioeconomic Development" in Technical Chamber of Greece, Construction in Greece, Vol. 2 (Athens, 1979, in Greek): 84-99.

situations, the manner of the calculation of land costs by the landowner relative to the value of the structure takes many forms depending on the mode of housing production; in peripheral plots aimed for owner-building, for instance, none of the above formulations is meaningful. A detailed examination of land costs in a disaggregated manner, however, is impossible given the limitations of the available material. We will thus examine some information on the share of land costs in speculative building and the trends in *land values* relative to construction costs and "building coefficients", i.e. the permitted floorspace to land ratio which, by implication, indicates the share of land in the full production price of housing. Our analysis will be restricted to Athens where sufficient information is available.

It has been estimated that the "antiparochi" share in Athens has increased from an average level of 25% in the early 1960's to 35% in the early 1970's.<sup>9</sup> We do not have any information on the trend of land costs in the 1950's. Available data on land values are also restricted to the 1960's and early 1970's. To what extent is the above estimate reliable? To what extent, moreover, does it represent the trends in the cost of land in the housing system as a whole? Fortunately we have sufficient data on land values during the same period for an answer to these questions. Having established the extent of changes in the cost of land we must also examine the more pertinent question of its effects on the growth of housing capital. Were these trends relatively favourable in relation to the demand for housing wealth as the fast growth of building in the 1960's indicates? This issue will necessarily involve us into an examination of the determinants of the cost of land. The discussion will be somewhat long but we consider it necessary given the complete lack of systematic studies of the issue in Greece and the specificities of the Greek housing system.

Let us define the share of land in the full price of housing as  $s$ , the "valuation ratio", i.e. the ratio of the full price to the non-land part, as  $v$ , the "building coefficient" as  $d$ , the value of a square meter of floorspace as  $p$ , and the full development value of land (per meter) as  $L$ . For any given time we have the following identities:

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<sup>9</sup> See, C.P.E.R., Housing (1966), p. 52 and C.P.E.R., Housing (1976) p. 227.

$$(1) \quad L = s \cdot d \cdot p / (1-s)$$

$$(2) \quad v = 1 / (1-s)$$

Given (1) and (2), changes in land values and the valuation ratio are given by:

$$(3) \quad L_t = (s_t/s_o) \cdot (d_t/d_o) \cdot (p_t/p_o) \cdot \left[ (1-s_o)/(1-s_t) \right] \cdot L_o$$

$$(4) \quad v_t = \left[ (1-s_o)/(1-s_t) \right] \cdot v_o$$

Table 6.1.4 shows the per cent change in land value in the major zones of the Athens agglomeration between 1964 and 1972 (see Figure 2.1.1 in Appendix 2.1). Are these consistent with the previous estimates about the share of land, given the formal relationships between this share and land values?

Table 6.1.4: Change in land values and implied changes in average building coefficients in the major zones of Greater Athens, 1964-1972.

	Urban zones						Average
	C	P	E	NE	W	NW	
1. Per cent change in land value	146.9	102.2	159.1	191.4	302.8	183.0	162.0
2. Implied change in building coefficient	17.5%	-3.7% (21.0%)	23.4%	38.7%	91.8%	34.7%	24.7%

Source: For row 1, see table 3.3 in chapter 3, and P.K. Mandikas, Economic Analysis of the Athens Master Plan, Vol. 4, (Athens, 1973 mimeo, in Greek), table 9. Row 2, estimated on the basis of row 1 and formula (3) in the text, with changes in  $s$ , and  $p$  in the order of 40% and 30% respectively. (\*): estimated with an increase in  $s$  of 20%. The zones are shown in figure 2.1.1, appendix 2.1.

We know that construction costs have increased by 27% during 1964-1972 whereas the characteristics and real value of the typical unit area of housing floorspace in new construction has improved little if at all. Thus the price of housing floorspace minus land costs ( $p$ ) has increased by a rate of at least 30% for the period. We also know that the "antiparochi" share has increased from a level of 25% in the early 1960's to 35% in the early 1970's. Assuming that this rate of change in the share of land has been typical, we have a 40% increase in  $s$  in the housing market as a whole.



Let us further assume for simplicity that the share  $s$  is uniform throughout the system. Given the change in  $s$  and  $p$  we can calculate the change in full development building coefficients implied by the changes in land values between 1964 and 1972. The results are shown in table 6.1.4. Land value per meter of plot area has increased in the average from a value of 1050 drachmas in 1964 to 2750 in 1972;<sup>10</sup> this implies a change in the average legally permitted building coefficient in the order of 25%.

Such a change has indeed taken place during the period we examine. Compulsory Law 395/1968 increased building coefficients throughout Greece by rates as high as 40% depending on the number of storeys permitted by previous building controls. With regard to the Greater Athens Area it was decreed that zones where previous law set a limit of three storeys, building coefficients were to be raised by 40%, whereas in areas of four and five storeys by 25% and 20% respectively. In the centre of the city and the central area of Piraeus where six or more storeys were permitted, no increases were offered. Table 6.1.4 shows the changes in the building coefficient implied by the actual changes in land values, the trends in construction costs and the average share of land in housing prices. These conform substantially to the changes prescribed by Law 395/1968 given the spatial pattern of the pre-1968 rules on permitted storeys<sup>11</sup> and thus corroborate the estimates of the trend in the share of land. There are two anomalies in the table: zone W, the western working-class suburbs, and zone P, Piraeus and its suburbs. These, however, are easily accountable. In the case of zone W we had during the period a substantial expansion of the official town plan into illegal housing areas (see figure 3.2, chapter 3),

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10. See, P.K. Mandikas, Economic Analysis of the Athens Master Plan, Vol. 4 (Athens, 1973, mimeo, in Greek), p. 45. This change in land values when deflated with the consumer price index implies an average annual increase of land values in real terms in the order of 10%. While the *share* of land in housing prices is very high in Greece, this rate of change compared with international evidence is neither high nor low. Cities in developed nations showed during the postwar period a very broad spectrum of rates of increase in land values measured in real terms: on the one hand we had low rates of less than 5% (U.S. cities, Stockholm) and, on the other, very high ones surpassing 15% (Paris, Madrid, Japanese cities). Cities in developing countries show a similarly diverse spectrum. See, H. Darin-Drabkin, Land Policy and Urban Growth (London, 1977), p. 65 and p. 77.

11. See Map 29 showing the maximum number of storeys permitted in the areas of Athens *circa* 1963-64 in the Ministry of Public Works, The Master Plan of Athens (Athens, 1965).

which obviously increased the legal building coefficient by much more than 40%. Piraeus and its suburbs, on the other hand, have been throughout the postwar period a zone of depressed housing demand characterised by loss of population in contrast to the rest of the city. It is natural, therefore, that the share of land in housing prices has not increased as much as in the rest of the city; a change in the share of land for 1964-72 in the order of 20% when the total average was 40% gives a realistic implied change in the building coefficient for this zone (shown with an asterisk in table 6.1.4).

#### 4. Determinants of the long-run increase in land costs

We have shown that there are no reasons for rejecting our initial estimates in the change of land costs. These rates of change imply that in the decade from the early 1960's to the early 1970's the price of housing must have increased by approximately 20% due to the land factor alone. It could be argued, however, that such a change was not particularly unfavourable from the point of housing demand. Real housing expenditures increased during this period by approximately 60%. We estimate that half of this change was transformed into improved floorspace standards.<sup>12</sup> This implies an increase in housing expenditures (rents) per unit of floorspace of more than 20%. Since rent expenditure may be considered as an index of the value of housing and since, moreover, we know that little improvement in the real value of housing floorspace took place in this period (most especially in apartments where construction quality remained stable), we can say that the change in rent expenditures due to income increases can very well account for the equivalent increase in the price of land. We could therefore say that the increases in land costs were not particularly unfavourable given the changes in housing consumption demand.

We must immediately add that this in no way implies that demand "caused" the increase in land prices as if the latter signified the consumption of land of higher quality and thus price. As we argue below, pricing in the land market is monopolistic, imposing increases insofar as the market will "bear" them. The latter depends on the behaviour of demand, mainly with

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12. This is based on the elasticity of rooms per capita with respect to housing expenditures suggested by the data in table 4.1.5, Appendix 4.1 and table 4.5, chapter 4.

respect to prices. But not only in this respect: the process of spatial competition makes that the increased capacity to pay for better locations as incomes grow will ultimately result in a transfer of part or the whole of the increased expenditures to landowners. Thus, though the fast increase in incomes and housing consumption demand in the 1960's helps explain the rise of land costs, it does not suffice. We must examine the mechanism of land pricing and the factors that contributed to the imposition of increased costs.

We will advance the following model of the formation of land prices (see also chapter 6). The "valuation ratio" (or, alternatively, the share of land costs in full prices) tends to remain constant under conditions of "equilibrium growth". "Equilibrium growth" refers, first, to conditions where housebuilding follows a steady growth path reflecting the growth of property demand by households. When disequilibrium prevails, i.e. when there are severe fluctuations in building in the short and medium-run, the "valuation ratio" will tend to increase, other things being equal. "Equilibrium growth" also requires the lack of any radical changes in the institutionally controlled supply of developable land and in the level and distribution of legally permitted intensities of land use (the "building coefficients").

Let us examine more closely the mechanism of land-cost formation in the housing market. We accept as a general hypothesis that landowners claim a certain share of the housing product in a way akin to monopoly pricing in industry by a mark-up on costs.<sup>13</sup> This is based on the share of land formed in the past and develops along the lines typical to pricing under monopolistic competition, i.e. as a result of the behavioural tendencies of landowners and the influence of demand elasticities ("what the market

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13. This does not presuppose a concentration of economic power in the hands of few large landowners. The urban land and housing market is a typical case of "monopolistic competition", i.e. a situation characterised by a large number of small suppliers of the same product but with a great extent of differentiation in the latter (in this case housing of various types located in different neighbourhoods). In such situations suppliers will act in concert, though without open collusion, in raising prices in a monopolistic fashion within the limits set by the aggregate supply-demand balance for the product. The classic references for monopolistic pricing and monopolistic competition are, of course, Joan Robinson's The Economics of Imperfect Competition (1933, 2nd Edn 1969) and E.H. Chamberlin's The Theory of Monopolistic Competition (1932, 7th Edn 1956).

will bear") and the price of alternatives, namely, the transfer price of land at the urban margin. As long as the value of a constant unit of housing space rises (due to improvements and inflated construction costs) and the public controls of the intensity of land use (the "building coefficients") develop favourably, landowners will tend to be satisfied with the gains resulting from a constant share in the housing product. This is conditional on relatively steady growth. Under such conditions landowners will in general avoid increases in their claims that may cause a reduction in the level of residential development activity; their main interest, after all, lies in the development of their property according to current speculative expectations. Given the diffused distribution of landownership and the general availability of plots for development, landowners will do act in concert but only in the sense of following certain common rules and not in the way of genuine oligopolists that impose scarcities in order to achieve higher prices.

The housing system, however, does not typically follow a steady growth path. We have, for one, changes in the pattern of the institutionally controlled intensity of land use. Sudden shifts in city planning policy or even an orderly change in the direction of an expansion of speculative opportunities will produce discrepancies between expected development land values and current realisable ones. This will most probably increase landowners' claims relative to the steady pattern. It is seldom realised that a reduction of permitted intensities of land use will *also* raise land costs (though it will reduce land values), perhaps more so; when development values fall due to unfavourable planning controls, landowners will try to compensate by raising their mark-up on unit costs.

In addition to the above we have the important influence of violent fluctuations in apartment demand and speculative building. A short-run upswing in the demand for properties will facilitate an increase of prices. Theoretically, the opposite should take place in a downturn of demand. Landowners, however, do not permit the orderly function of such an equilibrium mechanism. This derives from the essentially monopolistic nature of land-cost formation. Housing prices in the long run are determined by production prices with an *exogenously* given share of land in the product, rather than by any fictional supply-demand equilibrium. They are therefore in a very real

sense arbitrary.<sup>14</sup> When a short-term rise in prices takes place, developers may benefit for some time, but ultimately such rises over normal construction costs will accrue to land, thus raising the average share of land in the product. When conditions turn to worse, landowners will refuse to lose all of their gains and by virtue of their class-monopoly power, will increase the long-term level of the share of land. The overall effect is that land-cost formation follows in the aggregate the rule of a historically formed fixed share but the latter will move upwards under conditions of fast and unstable urban growth, in a ratchet-like pattern. This increasing tendency has, of course, certain limits; after a point high prices would have throttled property demand. Such an upper limit, however, is not known beforehand and, given the fragmented character of landownership in Greek urban areas, no single landowner can test the limits of the market *as a whole* by acting as a real oligopolist. The increase in land costs, therefore, would not have taken place anyway but only in the aforementioned incremental manner. By virtue of this same fragmentation, on the other hand, individual landowners may withhold land for quite long when their expectations *as a class* have been raised and, therefore, once such a rise in expectations takes place the probability for increases in land costs is very high. For the curtailment of these demands or for a permanent decrease in average land costs, a far-reaching change in conditions must take place: either a prolonged breakdown of the property market, or a major expansion in the supply of land and housing in the margin of the market at substantially lower prices.

Our theoretical account of the process of land pricing makes the positive effect exerted on land costs by the speculative boom of the 1960's and by the fast rise in incomes easily understandable. It points, however, to the possible significance of two additional major factors: institutional restrictions on the supply of land and the pressure from rising agricultural land prices. It seems that both of these factors contributed substantially to the process of rising land costs. We have already noted (see the last

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14. Needless to say, most urban economists preoccupied with short-run market relationships would not adhere to this view. The issue is, of course, of much broader significance reflecting fundamental divisions in modern economic theory, namely the conflict between models that view production relations and production prices as the important determinants of prices, and models that put emphasis on demand factors, short-term price formation in the market place, and the rewards of factors as a derived datum given the spectrum of available techniques of production.

section of chapter 4) that after 1955 severe restrictions were imposed on the expansion of the City Plan of Athens. This policy was accentuated by the ban on illegal urban development in 1967. Given the fast urban growth of the period, the ratio of the demand for floorspace to the capacity for supply (i.e. the area of the city plan minus roads etc. multiplied by the "building coefficient") increased rapidly. This negative trend was not sufficiently reversed by the liberal offer of high building coefficients in 1968 and the expansion of the city plan during 1968-1970. Conditions in 1971 were much worse than conditions in 1961.<sup>15</sup>

Trends in the price of agricultural land have apparently exerted a similarly positive pressure on the increase of urban land costs. They rose during the period we examine at rates that were much faster than those of housing and therefore must have certainly pressed the transfer price of land at the urban margin towards a higher share in the production price of housing. The price of parcels of agricultural land in transfers registered with the taxation authorities in the country as a whole increased during 1964-72 by 2.77 times whereas that of apartments increased by only 1.68 times. The divergence in price trends was less sharp in the early 1970's: the price of agricultural parcels transferred during 1972-75 rose by 1.68 times while those of apartments rose by 1.35 times.<sup>16</sup> It is well known that this sort of information is highly unreliable. The differences it points to, however, are so large that they can hardly be the product of imperfections.

##### 5. The intra-urban pattern of land costs and the role of "differential ground rents"

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Up to now we have not paid any attention to intra-urban differentials in the share of land in housing costs. Given our emphasis on time-series analysis and the assumptions of our theoretical approach, an examination

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15. I have found elsewhere that the ratio of built floorspace to legally permitted maximum capacity in Greater Athens was 0.14 in 1961 and 0.22 in 1971. The ratios were 0.20 and 0.42 respectively for the central zone of the city (the municipality of Athens). (Information from an unfinished research project in the research department of the Public Corporation of Housing and Urban Development).

16. Estimates from N.S.S.G., Public Finance Statistics volumes for 1975 and 1976 (Athens 1977, 1979). See, also, CPER, Development Plan for 1976-80: Urban Structure, (Athens, 1976, in Greek), Appendix 1.

of this issue was considered unnecessary. This may sound surprising to most urban economists. The currently dominant theory of land price formation lays heavy emphasis on the intra-urban pattern of land costs ("ground rents") from which it also derives a model for their long-run development. This is, of course, the well-known theory of "differential ground rents" based on Ricardo and Von Thünen and the concept of the negative rent gradient generated by differentials in transport costs. The model of differential rents suggests a radically different approach to the process of land cost formation compared with our own. It moreover suggests that the major determinant of a long-run rise in land costs is most probably the increase in transportation costs that accompanies urban growth. It seems necessary, then, to tackle the issues raised by this approach.

Let us examine the intra-urban pattern in the price of land in Greater Athens. The major determinant of land *values* is, of course, the "building coefficient" determining the development potential of residential plots. The relationship of land values with this factor will, *ceteris paribus*, be a simple linear one. It is more interesting therefore to examine the sources of variation in the  $L/D$  ratio where  $L$  is the land value and  $D$  the "building coefficient": this ratio provides a first approximation to land costs since it measures the price of the land input per unit area of floorspace. We expect that this ratio will vary positively with the income level of an area, for two reasons: first, due to the increase of the real value of a unit of floorspace in higher incomes and second, due to the increase in housing expenditures (rents or house prices) per unit area of constant real value that will most probably follow increased incomes. The last hypothesis assumes that land in higher-income areas will either be more valuable in itself or that it will attract higher payments as a result of the process of spatial competition and social segregation.

Another commonly considered determinant of the price of land is the spatial pattern of accessibility to centres of employment and services. With regard to this factor two alternative hypotheses can be made. The first follows from the currently dominant theory of differential ground rents: households are willing to pay more for land in direct proportion to the economy in travel time and transport costs that results from locations nearer to the centres of employment, especially the centre of the city. Land costs will thus vary negatively with distance from the centre

(hence a negative "rent gradient"). The second derives from the model of monopolistic pricing we have advanced. Variations in the mark-up on costs imposed by landowners will be the result of systematic disequilibria between the spatial distribution of the volume of housing demand relative to the supply of land. The latter is mainly determined by the institutionally permitted capacities of supply set by "building coefficients". Accessibility thus, does not enter the argument directly but only as a determinant of the spatial distribution of demand relative to the capacity of areas for the supply of stock (as in Lowry-type models). In this model, moreover, the emergence of a negative rent gradient in relation to distance from the city centre is not necessary. It all depends on the configuration of the distribution of demand (which will be influenced by more factors than simple accessibility), the institutionally patterned supply of land, and the monopolistic behaviour of landowners *vis-à-vis* these facts. The latter point suggests that there is no determinate relationship between the absolute level of transport costs and ground rents. Therefore, there is no reason to expect that the long-run rise of the transport costs associated with the urban extensive margin will necessarily lead to a rise of ground rents in inner zones. This, in contrast, is a necessary implication of the model of differential ground rents. We may assume, more specifically, that in a manner analogous to Kalecki's formulation, the mark-up on costs imposed by landowners in a certain sub-market of the city at any given time reflects the "degree of monopoly" enjoyed by landowners in this sub-market. The general "degree of monopoly" in the city as a whole is the weighted average of the latter according to their share of demand. Assuming that the "degree of monopoly" is a simple proportional function of the relationship between the demand allocated to an area and its capacity for supply, local "degrees of monopoly" will be proportional to the general though with different ratios. It follows that when the general level of mark-up on costs remains stable in conditions of equilibrium growth, local levels will also remain stable if the respective conditions relative to the city as a whole do not change.

We have run regressions of the land value/building coefficient ratio in Greater Athens in 1972 on the variables suggested by these alternative hypotheses. The relevant data were mainly taken from table 3.3 in chapter 3. We had to add information on travel times from the city centre and the



floorspace parameters of housing demand.<sup>17</sup> The data are presented in an addendum to this appendix. We have:

$$(I) \quad \ln(L/D)_i = 6.96350 + 0.30181 \cdot \ln Y_i - 0.63849 \cdot \ln T_i \quad (R=0.83916)$$

$$(II) \quad \ln(L/D)_i = 1.03444 + 1.00506 \cdot \ln Y_i + 0.52640 \cdot \ln G_i \quad (R=0.68048)$$

$L_i$  = drachmas per square meter of land (average per zone  $i$ )

$D_i$  = average building coefficient in zone  $i$

$Y_i$  = average income per capita in zone  $i$

$T_i$  = travel time with public transportation from the city centre to the centroid of zone  $i$  in minutes

$G_i$  = an index of the relative concentration of housing demand in  $i$  measured by the ratio  $P_i \cdot b_i / A_i \cdot D_i$  where  $P_i$  is population in  $i$  in 1971,  $b_i$  is average number of rooms per capita in  $i$ ,  $D_i$  the building coefficient, and  $A_i$  total building plot area in  $i$  ( $P_i$  and  $A_i$  are given in table 3.3). The index for each area has been divided by the value of the index for Greater Athens as a whole.

Since there are great differences in the sizes of the Master Plan zones for which we run the regressions, a certain weighting had to be done. We had opted for the simple solution of counting the larger zones as more than a single observation. Thus regressions (I) and (II) were run for 26 observations instead of the available 13. As a consequence, the regression coefficients have been influenced upwards and should be considered as simply indicative. Relations (I) and (II) represent in essence empirical models rather than statistical regressions proper. The number of observations that were used for each zone is shown in the addendum to this appendix.

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17. Travel times with public transport from the city centre were adapted from Ministry of Public Works, Wilbur Smith and Assoc. Athens-Attica Traffic and Transportation Study, vol 1 (Athens, 1974), Figure 2.15. Data on rooms per capita per major zone in 1971 were taken from Mandikas, Economic Analysis, vol. 4.

Models (I) and (II) show that both of the alternative theories considered previously are corroborated by the actual pattern of land costs. Income shows an important positive influence in both cases, though much greater in model II, a fact that is consistent with the theoretical emphasis of the latter on spatial competition and monopolistic pricing. Model (I) indicates that accessibility influences land pricing strongly and that there is indeed a clear-cut negative rent gradient. Equally satisfactory results, however, are achieved by model (I) without the questionable theoretical commitments demanded by the theory of differential rents which supports (I). The relatively better fit shown by model (I) can be easily accounted for by the strong positive relationship between accessibility to the city centre and concentrations of non-residential activities which raise land prices.

Given the ambivalence of the empirical findings, a choice between the two theoretical approaches must, at this stage, reside on theoretical argument. This argument we consider necessary: first, because of the stultifying influence the dominant paradigm has exerted on the study of land prices and, second, because of the necessity of clearing the ground for the elaboration of a theory of ground rents that is consistent with the wider theoretical framework for the analysis of the Greek urban political economy we have advanced in this study.

We will argue that the application of the Ricardo-von Thünen model of differential rents in an urban context has been unduly emphasised; that despite its apparent universal validity and formal beauty, it is ridden with conceptual and methodological problems; lastly, that the emphasis on the spatial equilibrium of household location and differentials in transport costs suggested by this model has diverted attention away from more important aspects of land cost formation and urban growth.

Consider the typical Ricardian-Marxian model of ground rent formation. Ground rents are composed by "absolute rent" and "differential rent". The first is based on the monopolistic power of landowners *as a class* to impose a certain price for the conversion of undeveloped land to residential use. This constitutes a claim to a share of the product that under conditions of an integrated market (i.e. uniform prices) will tend to be similar throughout the urban system. The second, "differential rent", is added to the first and is determined by the increasing cost of producing a unit of housing

services in the "margin". The latter may be either the perimeter of the city ("extensive" margin) or the addition of housing units in more central areas at higher intensities of land use ("intensive" margin). Given a relatively integrated housing market, the price of a unit of housing services will be uniform and therefore the differentials in production cost will generate differentials in ground rents (assuming a uniform profit rate) between areas of the city. Following the Ricardian model, assume an increasing marginal cost in the production of housing services as the city grows. The share of ground rents in the price of housing services (or of land costs in the price of new housing) will show an increasing tendency. Almost all modern theories of ground rent formation start with this model combined with the Von Thünen model of agricultural rents where transport costs (obviously increasing at the extensive margin) provide the basic mechanism for differential rent formation.<sup>18</sup>

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18. We should add that the Marxist theory of ground rent considers the category of "monopoly" rents as an important additional category of ground rent. This is formed in highly desirable areas where a permanent supply-demand disequilibrium offers the opportunity for monopolistic price increases over and above the rent levels determined by the "absolute" and "differential" rent mechanisms. This category has been usually applied to exceptional circumstances (areas of environmental and social value). In this sense it defies systematic analytical treatment as all very specific monopolistic situations. It requires, moreover, a rather detailed spatial disaggregation which may be congenial to realtors and landowners but is secondary in the context of broad structural and historical analysis. It could be argued that Marx's introduction of "monopoly" rents as a fully important third type derives from his peculiar and wholly unconvincing theorisation of "absolute" rents based on the theory of value and the transfers of value due to differences in the organic composition of capital. Thus, since absolute rents were not conceived as a typical case of monopolistic pricing shares (albeit at the level of the system as a whole), a third, somewhat residual, category was clearly needed. Given the rejection of the "organic composition" theory in this context and accepting absolute rent as a case of monopolistic pricing, the category of "monopoly" rent must be either generalised or restricted to the study of very specific cases in the intra-urban variation of land rents with limited theoretical value. For short expositions of the Marx-Ricardo theory of ground rent and the different types mentioned above, see Arghiri Emmanuel, Unequal Exchange, pp. 205-228 (containing also a clear-cut rejection of Marx's theory of absolute rent); A.J. Scott, "Land and Land Rent"; D. Harvey, Social Justice and the City (London, 1973): Chapter 5; M. Edel; "Marx's Theory of Rent: Urban Applications", in Conference of Socialist Economists, Political Economy of Housing Workshop, Housing and Class in Britain (London, 1976): 7.23.

The common appeal of the Ricardian analogy is often based on a very crude misconception. Ricardo's model of agricultural rents is based, of course, on the differential productivity of various types of land. This concept of differential productivity has been uncritically applied in an urban context as analogous to the extensive differentials in the density of development at different locations. It is especially important to stress that this particular reasoning rests on sheer nonsense. Ricardo thought, of course, in terms of commodity *units*; differences in productivity between locations meant different costs in the production of a unit, say a bushel of corn. The *amount* of produce per unit area does not enter into the argument; it might happen, on the contrary, that higher intensities of land utilisation are associated with higher unit costs. Similarly, higher building densities do not signify higher productivities. Higher productivities and higher rents should be understood as cases of a higher *share* of rents in unit price regardless of the productivity per unit area.<sup>19</sup>

The rent gradient then expresses the spatial distribution of the share of ground rents or land costs in a "unit of housing" assuming the latter *can* be measured in different locations. It is almost universally accepted among modern urban economists that (a) such differences in rent shares *do* exist, (b) they are determined by differentials in transport costs and (c) since the centre of the city is the major concentration of employment, differential rent declines with distance from the centre. Hence the near-universal acceptance of the Von Thünen analogy and the assumption of a negative rent gradient. The argument usually goes as follows: if we assume for simplicity uniform incomes, uniform utility functions, and locational equilibrium of households (i.e. similar utility levels at different locations), then the amount paid for housing and transport at different locations (reflecting utility) must be equal. Since transport costs increase with distance from the centre, ground rents must decline with distance. In static terms, this accounts for the emergence of differential rent and the negative rent gradient. The same mechanism is used to extend the Ricardo-Von Thünen analogy to a dynamic perspective: since the urban margin, where transport

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19. For a case of erroneous equation of high differentials in land *values* within cities and between cities with an incidence of high differential rents, see M. Edel, "Marx's Theory of Rent".

costs are highest, moves away from the centre as the city grows, differences in costs intensify and the level of differential rents in the inner zones increases.<sup>20</sup>

There have been quite a few formulations of this model and our short account can not do justice to the theoretical and formal elegance achieved in this area. The argument is certainly powerful and can be advanced in various ways not necessarily dependent upon the neo-classical paradigm of marginal utility and marginalist theories of production and distribution; hence its appeal to Neo-Ricardians and Marxists.<sup>21</sup>

It has been recently pointed out, however, that the differential rent model has some major theoretical weaknesses and rests on very special assumptions.<sup>22</sup> We may by-pass as secondary the obvious criticisms levelled against the assumptions of a monocentric city and a well-integrated land market. These assumptions are perfectly justifiable in a highly general

20. The differential rent model is usually applied in a static manner. The dynamic implication, however, follows easily given the exclusive emphasis on transport cost differentials and the Ricardian rationale. The literature on the transport cost model of differential rent as applied in the urban land market is enormous. For a recent review see H.W. Richardson, The New Urban Economics: and Alternatives (London, 1977): Chapter 3. The most well-known members of this school are W. Alonso, R. Muth, L. Wingo and E. Mills. See, respectively, Location and Land Use (Cambridge, Mass., 1964), Cities and Housing (Chicago, 1969), Transportation and Urban Land (Washington D.C., 1961) and Studies in the Structure of the Urban Economy (Baltimore, 1972).

21. For some very successful formulations, see, A. Farhi, "Urban Economic Growth and Conflicts: A Theoretical Approach", Papers of the Regional Science Association, 28 (1973): 95-124, G.R. Walter, "Urban Growth, Rent and Quasi-Rent", in I. Masser (ed.) Theory and Practice in Regional Science (London, 1976): 30-41 and J.M. Hartwick - P.G. Hartwick, "The Activity Analysis Approach to Urban Model Building", Papers of the Regional Science Association, 35 (1975): 75-85.

22. Notably by Harry W. Richardson whose New Urban Economics and Regional and Urban Economics (Penguin Books, 1978) gave maximum dissemination to the increasing dissatisfaction with this model felt within mainstream urban economics. Criticism from the "Left" goes back to the early 1970's. It has been waged, however, mainly in doctrinal terms and thus had limited effect in terms of the constructive revision of urban theory the successful elaboration of alternative models. The continuing hegemony of the Ricardo- Von Thünen model even among professed non-neoclassical economists demonstrates as much.

theory. Neither the reiteration of the importance of the categories of "absolute" and "monopoly" rent<sup>23</sup> constitute more than useful correctives: they can be very easily *added* to the usual models of differential rent with no inconsistency. The main difficulty lies elsewhere. How do we define and measure a unit of housing services? Ricardo and Von Thünen spoke, of course, of corn and vegetables - commodities that are easily defined and measured. "Housing", however, is an extremely complex commodity. How do we compare house-units of the same physical standard (rooms, construction quality) but at different densities, with or without a garden, in high-rise or low-rise buildings, etc.? In order to measure ground rents the costs of *common* units must be measured. If housing units differ in kind with distance from the city centre and households value the type and location of housing *as such* then the whole edifice of differential rent models becomes shaky. The way out for most theorists is to assume explicitly that preferences for location or housing type as such do not enter the argument: households are neutral *vis-à-vis* these aspects. Were it otherwise, i.e. in the case households valued, say, low-density housing strongly, the rent gradient could take any form whatsoever. It could very well be positive and therefore ground rents would *increase* with distance.<sup>24</sup> Such an indeterminacy would diminish drastically the effectiveness and universality of the differential rents model.

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23. Notably by David Harvey. See his influential "Use Value, Exchange Value and the Theory of Urban Land Use", in his Social Justice and the City (London, 1973), Chapter 5.

24. This has led Richard Muth to reject the notion of a utility of location as such as an important element of the model since this "renders the theory devoid of substance" (Cities and Housing, p. 41). As H.W. Richardson has retorted, "The weakness of this argument is that it assumes that the residential rent function *must* be negative. The empirical support for this is not as strong or as unanimous as is sometimes argued" (New Urban Economics, p. 105, his emphasis). Richardson goes on to point that the whole issue depends on the particular configuration of the preferences of the various classes in a city *vis-à-vis* location, house types, and neighbourhood types (New Urban Economics, pp. 105-106). This is indeed one possible theoretical solution to the impasse. Richardson, however, does not realise that the introduction of relativism and agnosticism to such an extent deals a death blow to the whole model. It is clear to us that the debate has shown that unless we are satisfied with particularistic accounts of a largely empirical nature, the quest for a theory of ground rents should abandon the von Thünen analogy save for some special issues and search for pattern at a more aggregate socio-structural and historical level.

As it happens, we have repeatedly pointed out that Greek households are not neutral towards differences in the type of housing. All social surveys in the postwar have found that urban households prefer single-family low-density housing much more than high-density apartment housing. These aspects are, of course, directly related to distance from the city centre. Moreover, transport costs in Greek cities are low relative to incomes. Only the upper class lives at very long distances from the city centre but these locations are highly valued from the housing type and environmental viewpoint and thus are associated with increases in land rents. Thus there is a *prima facie* case for a very weak operation of a negative rent gradient. By implication, the strong negative gradient observed in model (I) above loses much of its credibility and points to the operation of a different set of forces.

It has been suggested that the inclusion of matters of housing and neighbourhood type into the "utility function" of households and the particular conditions of specific cities with regard to the distribution of centres of employment can account for "anomalies" in the differential rent gradient. Certain theoretical revisions of the dominant Ricardo-Von Thünen model suggest as much: we may retain, they argue, the rationale of the model but incorporate a variety of patterns of household preferences and urban structure that produce a multiplicity of rent gradient forms.<sup>25</sup> In

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I would add that neither non-neoclassical, "production-oriented" models in the Ricardian-Von Thünen tradition (see the references in note 21) can avoid the theoretical problems of "New Urban Economics". The problem of establishing the universality of a negative rent gradient is solved in such models by total rejection of the relevance of the concept of utility or preferences. Land "produces" in these models, in direct analogy to Ricardo's agricultural commodities, *labour power*. Since the price of the latter is uniform and its production costs differ at various locations due to transport costs, a negative differential rent gradient (assuming central employment) is bound to arise. There is again the assumption that housing as a commodity in the wage bundle is a determinate physical unit with a uniform price. This is simply not true. "Preferences" are by necessity involved in the determination of the comparability of housing-units of different type and location. "Demand" elements are, alas, indispensable in disaggregated models of ground rent and doctrinaire arguments against "neo-classical" impurities as compared to "classical" purities will not do. (For such a dogmatic response, see the critical asides by A.J. Scott in his "Land and Land Rent" against Arghiri Emmanuel's powerful - and thoroughly Marxian, I would add - model of differential rents based on demand elasticities in his Unequal Exchange).

25. See, H.W. Richardson, New Urban Economics, pp. 105-106 and our comments on this issue in the previous note.

terms of this approach we should expect that a clear-cut negative rent gradient will arise in cases where extreme transport cost differentials exist in areas with broadly similar housing types, say, in the vast suburban zones of American and English cities. In Athens, and to a much greater degree in other Greek cities, residential densities and building types follow each other in rapid succession along narrow concentric zones. As a result, strong *type*-preferences may compensate for differences in transport costs and may thus produce a zero rent gradient and, more generally, conditions making for a limited significance of the differential rent mechanism. How are we then to interpret the evidence for Athens? In this perspective, we may assume a strong preference for low-rise housing *and* an even stronger preference for accessibility as well as various other preferences. All these must be reflected in varying ground rents. But this obviously puts an absurdly heavy emphasis on the sensitivity of the pricing mechanism in its response to the utility calculus of households.

I consider this "solution" of the theoretical problems of the dominant paradigm in the face of the requirements for explanation presented by concrete cases as highly artificial. We are offered an endless regression into ever more complex utility functions which may explain more complex patterns of locational equilibrium of households (and thus, uniform utility levels sustained by differential rent) whereas the root of the problem lies precisely in the concept of locational equilibrium, the responsiveness of the price mechanism and the underlying notion of perfect spatial competition. Consider the behaviour of landowners supplying a diverse spectrum of housing types to a non-homogeneous aggregate of households. We are asked to believe that landowners will take into account the various preference curves of different household categories and compete through *prices* so as to create conditions of equilibrium, i.e. a neutral behaviour of households *vis-à-vis* different locations. This is patently unrealistic: we know that landowners will opt in general for a strategy that secures a good part of the market and a fast rate of development at the highest intensity of land utilisation. Given the fact that the latter is institutionally controlled and that, in general, landowners can bid their time contrary to the requirements of static models that prescribe instantaneous utilisation of land under current conditions, it is only natural that competition will be based on the *type* of the product, rather than on price, with an aim at attracting the better parts of the market. This is, of course, a typical case of monopolistic



competition through product differentiation with a monopolistic mechanism of price formation based on a structured pattern of constant mark-ups on costs. The operation of the differential rents mechanism should be viewed in a light similar to the operation of any other technological cost-reducing or cost-increasing development in the economy. Sometimes this development will occur at the urban spatial margin and may thus generate a distinct spatial differentiation of ground rents. But this is not necessarily so; changes in housing production costs do indeed often occur at the urban margin but their effects usually concern the housing system as a whole instead of varying with distance from the city centre (changes in infrastructure costs and in the transfer price of agricultural land are a case in point).

Differential rents due to distance will, of course, emerge as an important element in case we are interested in relatively homogeneous sub-markets, in the price of housing in particular locations, and we furthermore take for granted the wider pattern of costs and price formation present at a given time. It is high time, however, that urban economics abandon theoretical models suited to the interests of realtors concerned with land values in particular locations of homogeneous sub-markets and examine the more fundamental problem of the formation of average land costs in a long-run perspective and in the system as a whole.

## Addendum: The data used for models (I) and (II)

Zone $i$	$(L/D)_i$	$Y_i$	$T_i$	$G_i$	Number of observations
1. NE1	960	7382	60	0.323	1
2. NE3	1535	5293	27	0.923	1
3. C1+C2	2616	4831	15	1.240	6
4. E3	2617	4220	60	0.612	1
5. NE4	1167	4076	40	1.154	1
6. C3	1541	4054	23	1.411	2
7. E1	1311	3733	40	0.735	1
8. NW2	942	3674	35	1.158	2
9. NE2	1155	3609	50	0.384	1
10. E2	1040	3502	40	1.081	1
11. P1+P2	943	3067	45	0.948	4
12. W1	1054	2948	40	1.126	3
13. W2	1518	2645	35	1.139	2

Source: Table 3.3 in chapter 3 and the sources referred in note 17 in this Appendix. For the symbols see the text. The zones are shown in Figure 2.1.1, Appendix 2.1.

## General Appendix

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Table A.1: Private building activity, 1961-1978

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NBUA(1-2), NBUA(3-4), NBUA(5+): New buildings in urban areas according to the number of storeys on the basis of building permits. Buildings of one and two storeys, three and four storeys and five or more storeys. Number of new buildings and volume in thousand m<sup>3</sup>.

NBGA(1-2), NBGA(3-4), NBGA(5+): New buildings in the Greater Athens Area. Categories similar to the above.

NBGT(1-2), NBGT(3-4), NBGT(5+): New buildings in the Greater Thessaloniki Area. Categories similar to the above.

NBUA(3), NBUA(4): New buildings in urban areas of three and four storeys respectively on the basis of building permits. Number of new buildings and volume in thousand m<sup>3</sup>.

VNB(UA), VNB(GA), VNB(GT): Total volume of new buildings on the basis of permits in urban areas, Greater Athens and Greater Thessaloniki respectively. Volume in thousand m<sup>3</sup>.

EB(UA), EB(GA), EB(GT): Volume of extensions of buildings on the basis of permits in urban areas, Greater Athens and Greater Thessaloniki. Volume in thousand m<sup>3</sup>.

Source: National Statistical Service of Greece (NSSG), Statistical Yearbook of Greece, various years. (\*) Extensions in Greater Athens in 1961 and 1962 have been derived implicitly.

Table A.1: Private building activity (volume in thousand m<sup>3</sup>)

Year	NBUA(1-2)		NBUA(3-4)		NBUA(5+)	
	No	Volume	No	Volume	No	Volume
1961	12,442	5,388	293	844	694	4,245
1962	11,158	4,739	401	1,104	918	5,540
1963	10,452	5,263	482	1,348	947	5,775
1964	12,104	6,682	731	2,083	1,250	7,536
1965	12,518	6,723	1,285	3,381	1,442	8,557
1966	11,839	7,518	1,703	4,834	1,322	7,700
1967	11,638	6,814	1,247	3,222	790	4,721
1968	12,588	8,134	1,442	3,695	1,297	7,227
1969	11,945	8,313	1,724	4,469	2,348	12,810
1970	12,528	8,456	1,767	4,675	2,142	11,395
1971	14,189	9,335	2,046	5,353	2,533	13,804
1972	18,054	12,280	3,110	8,766	3,915	20,924
1973	24,059	16,323	3,602	9,156	3,933	19,814
1974	9,882	9,343	1,788	4,355	1,015	4,975
1975	12,474	10,278	3,274	7,601	2,088	9,220
1976	9,807	10,005	3,654	9,523	2,979	13,996
1977	10,133	10,447	4,982	13,251	3,846	17,945
1978	11,976	12,120	6,383	16,918	4,459	21,046

Table A.1: (cont.)

Year	NBGA(1-2)		NBGA(3-4)		NBGA(5+)	
	No	Volume	No	Volume	No	Volume
1961	7,554	3,073	195	611	560	3,419
1962	6,186	2,627	221	690	676	4,078
1963	5,592	2,820	243	802	700	4,280
1964	5,833	3,266	401	1,276	839	5,223
1965	6,166	3,487	600	1,556	1,011	6,214
1966	5,560	3,507	734	2,356	968	5,561
1967	5,078	3,189	546	1,533	542	3,301
1968	4,887	3,651	640	1,700	901	5,126
1969	4,904	3,699	797	2,295	1,833	9,812
1970	4,581	3,705	774	2,344	1,595	8,388
1971	5,858	4,446	1,017	2,812	1,820	10,108
1972	6,365	5,646	1,835	5,558	2,769	14,983
1973	7,007	6,837	2,027	5,068	2,453	12,228
1974	3,753	3,395	1,013	2,445	644	3,220
1975	4,229	3,575	1,657	3,946	1,167	5,199
1976	2,995	3,201	2,026	5,353	1,766	8,233
1977	2,921	3,229	2,506	6,937	2,160	10,109
1978	3,489	3,881	3,728	9,843	2,881	12,799

Table A.1: (cont.)

Year	NBGT(1-2)		NBGT(3-4)		NBGT(5+)	
	No	Volume	No	Volume	No	Volume
1961	479	389	28	98	126	774
1962	610	328	85	215	225	1,348
1963	563	298	104	276	226	1,373
1964	745	546	124	393	378	2,139
1965	563	365	385	1,042	374	2,022
1966	547	651	584	1,520	281	1,749
1967	333	316	326	842	182	1,046
1968	386	441	415	1,045	294	1,511
1969	327	348	473	1,099	321	1,477
1970	364	413	544	1,277	344	1,855
1971	354	377	489	1,209	454	2,221
1972	407	494	488	1,189	684	3,257
1973	541	672	576	1,520	853	4,133
1974	388	571	260	831	207	972
1975	384	702	682	1,623	500	2,082
1976	235	446	556	1,432	514	2,316
1977	351	694	1,115	2,708	831	3,467
1978	180	379	501	1,232	306	1,456



Table A.1: (cont.)

Year	NBUA(3)		NBUA(4)	
	No	Volume	No	Volume
1961	164	420	129	424
1962	249	559	152	545
1963	295	618	187	730
1964	391	858	340	1,225
1965	676	1,480	609	1,901
1966	1,001	2,180	702	2,654
1967	781	1,595	466	1,627
1968	819	1,684	623	2,011
1969	860	1,898	864	2,571
1970	864	2,020	903	2,655
1971	1,088	2,281	958	3,072
1972	1,678	3,824	1,432	4,942
1973	2,106	4,388	1,496	4,768
1974	1,168	2,475	620	1,880
1975	1,911	3,551	1,363	4,050
1976	2,031	4,228	1,623	5,295
1977	2,547	5,420	2,435	7,831
1978	3,356	6,956	3,027	9,962

Table A.1: (cont.)

Year	VNB(UA)	VNB(GA)	VNB(GT)	EB UA)	EB(GA)	EB(GT)
1961	10,477	7,103	1,261		2,039*	
1962	11,383	7,395	1,891	(n.a.)	2,066*	(n.a.)
1963	12,386	7,902	1,947	4,532	3,130	386
1964	16,301	9,765	3,078	4,939	3,182	511
1965	18,661	11,257	3,429	5,493	3,816	388
1966	20,052	11,424	3,920	5,446	3,732	269
1967	14,757	8,023	2,204	5,317	3,387	449
1968	19,056	10,477	2,997	6,503	4,077	698
1969	25,592	15,806	3,284	7,192	4,627	427
1970	24,527	14,437	3,545	7,468	4,557	597
1971	28,491	17,365	3,807	7,146	4,661	347
1972	41,971	26,187	4,939	8,510	5,372	750
1973	45,293	24,131	6,325	10,586	6,845	508
1974	18,672	9,060	2,374	6,992	4,221	439
1975	27,099	12,719	4,407	8,628	5,278	366
1976	33,524	16,787	4,194	7,412	4,316	276
1977	41,645	20,276	6,869	7,874	4,468	276
1978	50,084	26,523	3,067	9,534	5,486	131

Note: (\*) Extensions in Greater Athens in 1961 and 1962 have been estimated from the volume of private dwelling building plus the volume of building for "establishments" (commercial, industrial etc.) minus the volume of entirely new structures, i.e. VNB(GA). See, N.S.S.G., Statistical Yearbook of Greece 1964. It should be noted, however, that the derived figures seem to be underestimations to a certain extent.

Table A.2: New dwellings, private authorised activity

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ND(G), ND(UA), ND(GA): New dwellings: Greece, total, urban areas, total and Greater Athens Area on the basis of building permits. Number of new dwellings and volume in thousand m<sup>3</sup>.

Source: NSSG, Statistical Yearbook of Greece, various years

Table A.2: New dwellings, private authorised activity

Year	ND(G)		ND(UA)		ND(GA)	
	No	Volume	No	Volume	No	Volume
1948	5,862	1,885			3,647	1,281
1949	7,189	2,415			4,653	1,714
1950	10,641	3,440			5,984	2,134
1951	12,119	3,815			6,703	2,298
1952	14,297	4,343			7,523	2,548
1953	17,867*	5,611*			9,100	3,100
1954	23,526	6,802			9,671	3,348
1955	26,871	7,758			13,075	4,452
1956	30,116	8,189			15,104	4,583
1957	29,737	7,710			14,043	3,995
1958	36,597	9,637			16,154	4,754
1959	35,619	9,648	(n.a.)	(n.a.)	16,187	4,965
1960	38,479	10,648			19,635	5,639
1961	45,243	12,065			23,643	6,764
1962	46,951	12,586			24,217	6,861
1963	52,360	14,538	39,936	11,656	26,799	8,031
1964	66,236	18,329	52,348	14,966	32,582	9,619
1965	79,385	21,904	63,869	18,032	40,210	11,548
1966	83,944	23,593	65,147	18,923	41,214	12,028
1967	81,939	22,415	48,794	14,477	28,803	8,482
1968	112,392	30,327	64,404	18,558	37,746	10,800
1969	130,538	35,657	85,235	24,482	57,963	16,364
1970	114,618	32,140	78,992	23,029	50,742	14,480
1971	124,924	35,667	88,839	26,085	57,927	16,572
1972	178,558	51,163	128,603	37,836	83,824	24,549
1973	188,105	53,815	132,205	39,478	75,041	22,843
1974	81,616	25,747	49,137	15,887	27,947	9,051
1975	120,869	37,765	82,301	25,837	44,505	14,080
1976	128,601	40,852	89,759	28,518	48,368	15,755
1977	158,269	51,155	110,469	35,688	56,878	19,051
1978	186,981	63,521	134,644	45,846	74,652	26,222

Note: (\*) The figures for 1948-1953 for the country as a whole based on the 1958 Yearbook and earlier ones show a certain underestimation. Their figures for 1954, 1955 and 1956 are 19,245, 24,044 and 26,122 respectively, roughly 15% lower than more recent series.

Table A.3: New dwellings 1955-1972: All sectors (public, private authorised and private unauthorised activity)

TND(G), TND(GA), TND(RC): Total new dwellings including public activity, private authorised and private unauthorised activity ("illegal building"): Greece, total, Greater Athens Area and rest of the country respectively.

Source: United Nations, Economic Commission for Europe, Housing, Building and Planning Committee, Greece: National Monograph, (Athens, 1973), p. 101.

Table A.3: New dwellings, 1955-1972: All sectors

Year	TND(G)	TND(GA)	TND(RC)
1955	60,996	18,175	42,821
1956	62,610	22,590	40,020
1957	58,527	20,772	37,755
1958	64,912	25,911	39,001
1959	57,501	25,823	31,578
1960	60,739	31,036	29,703
1961	68,094	37,681	30,413
1962	75,159	40,804	34,355
1963	76,438	30,314	36,124
1964	95,736	47,852	47,784
1965	108,372	54,763	53,609
1966	130,906	63,345	67,561
1967	117,636	42,679	74,957
1968	135,465	43,025	92,440
1969	153,159	66,403	86,756
1970	138,075	58,736	79,339
1971	146,554	64,775	81,779
1972	185,737	75,275	110,462

Table A.4: Unauthorised dwelling construction ("illegal building").

UND(G), UND(GA): Unauthorised dwelling construction ("illegal building") Greece, total, and Greater Athens Area respectively. Estimates of the Ministry of Public Works and the National Statistical Service.

UND(G)\*, UND(GA)\*: Unauthorised dwelling construction, Greece, total, and Greater Athens Area. Alternative series based on 1971 estimates of the Ministry of Public Works.

Source: UND(G), UND(GA): NSSG, Statistical Yearbook of Greece, 1958 and 1955. UND(G)\*, UND(GA)\*: Unpublished material from the study by Leontidou and Emmanuel, Life Patterns in an Illegal Housing Area, (Athens, 1972, mimeo) supplied by the Ministry of Public Works in 1971.

Note: When figures for the same year differed between yearbooks we have kept those in later ones.

Table A.4: Unauthorised dwelling construction

Year	UND(G)	UND(GA)	UND(G)*	UND(GA)*
1948	4,222	3,465		
1949	5,286	4,420		
1950	8,262	5,685	6,884	
1951	9,365	6,368	7,854	
1952	11,286	7,147	8,947	(n.a.)
1953	19,532	8,645	11,756	
1954	17,482	4,327	9,925	
1955	16,099	1,948	3,877	2,650
1956	16,071	2,178	4,429	2,914
1957	14,917	1,882	4,466	2,839
1958			5,393	3,189
1959			5,968	3,195
1960	(n.a.)	(n.a.)	7,933	4,578
1961			11,431	7,076
1962			11,761	7,350
1963			13,998	9,360
1964			17,078	10,720
1965			14,679	9,434
1966			21,486	14,623
1967			11,401	8,296
1968			5,670	3,733

Table A.5: Public sector activity in dwelling construction

PSDC(G), PSDC(GA): Construction of new dwellings effected by government activity in general, 1948-1962; Greece, total, and Greater Athens respectively.

MSSDC: New dwellings constructed by the housing programs of the Ministry of Social Services, 1960-1972; Greece, total.

WHODC: New dwellings constructed by the Workers' Housing Organisation 1955-1972; Greece, total.

Source: PSDC: NSSG, Statistical Yearbook of Greece, 1955, 1958, 1964.  
 MSSDC: Technical Chamber of Greece, Housing in Greece: Government Activity (Athens, 1975 in Greek with English translation), part II.  
 WHODC: "Workers' Housing" in Economicos Tachydromos, issue of July 11, 1974, (in Greek).

Notes: When figures for the same year differed between Yearbooks we have kept those in later ones. Contradictions between the series for 1960 and 1961 are probably due to revisions and backdating of data at later dates. It should be noted that the Workers' Housing Organisation was created in 1954.



Table A.5: Public Sector activity in dwelling construction

Year	PSDC(G)	PSDC(GA)	MSSDC	WHODC
1948	8,750	150		
1949	9,205	155		
1950	29,840	160		
1951	22,420	120		
1952	33,000	-		
1953	13,700	-		
1954	8,336	479		
1955	18,291	785	(n.a.)	
1956	18,074	1,243		1955-57: 1,233
1957	16,422	1,598		
1958	10,770	2,069		696
1959	3,897	998		1,376
1960	3,301	1,422	3,608	1,209
1961	2,047	966	3,673	929
1962	3,036	1,543	2,263	271
1963			3,555	600
1964			4,514	170
1965			4,060	132
1966			6,564	1,101
1967	(n.a.)	(n.a.)	5,802	2,434
1968			8,192	798
1969			9,107	843
1970			8,373	667
1971			7,256	410
1972			4,419	555

Table A.6: Real estate transfers (sales), 1956-1975:  
Apartments, urban building plots and agricultural  
land plots

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APT(G), APT(GA): Number of transfers (sales) of apartments reported to the tax authorities; Greece, total, and Greater Athens Area respectively.

BPT(G), BPT(GA): Number of transfers (sales) of urban building plots reported to the tax authorities; Greece, total, and Greater Athens Area respectively.

ALT(G), ALT(GA): Number of agricultural land transfers (sales) reported to the tax authorities; Greece, total, and Greater Athens Area respectively.

Source: NSSG, Statistics of Public Finance, various yearbooks and monthly bulletins.

Table A.6: Real estate transfers 1956-1975

Year	APT(G)	APT(GA)	BPT(G)	BPT(GA)	ALT(G)	ALT(GA)
1956	6,172		34,200		75,013	
1957	7,501	(n.a.)	35,239	(n.a.)	75,745	(n.a.)
1958	10,458	7,742	36,328	19,188	83,017	4,803
1959	10,271	7,440	34,255	18,322	73,651	4,720
1960	14,024	10,702	38,518	21,809	82,321	4,192
1961	14,840	11,176	37,901	22,799	80,517	3,136
1962	17,843	13,075	40,226	23,345	88,413	3,341
1963	18,922	14,356	41,136	24,741	92,222	4,198
1964	25,160	19,170	47,457	29,207	100,193	7,478
1965	26,393	19,555	49,432	28,243	126,687	10,554
1966	23,602	18,191	49,130	26,468	139,876	13,140
1967	27,901	20,469	43,876	22,887	120,987	6,281
1968	27,882	19,864	47,528	22,856	110,507	4,343
1969	35,128	25,119	52,438	29,305	118,660	3,525
1970	40,921	28,847	53,532	30,834	119,911	2,398
1971	48,740	34,088	61,211	35,456	118,627	1,377
1972	58,921	40,967	76,845	41,832	134,135	1,666
1973	65,134	42,549	85,185	50,456	139,437	45,852
1974	46,032	24,742	56,310	24,243	93,714	1,749
1975	51,605	26,613	67,727	26,845	108,349	2,330

Table A.7: Trends in fixed capital formation, 1948-1978

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GDP: Gross domestic product, million drachmas in 1970 prices.

FCF: Gross fixed capital formation, million drachmas in 1970 prices.

FCFH: Gross fixed capital formation in dwellings, (private and public), million drachmas in 1970 prices.

FCFHP: Gross fixed capital formation in dwellings by the public sector, million drachmas in 1970 prices.

FCFM: Gross fixed capital formation in manufacturing, million drachmas in 1970 prices.

Source: Ministry of Coordination, National Accounts of Greece (Athens 1976, 1979, 1980).

(\* ) Provisional data.

Table A.7: Trends in fixed capital formation, 1948-78

Year	GDP	FCF	FCFH	FCFHP	FCFM
1948	58,288	9,435	3,107	1,165	1,960
1949	69,982	10,681	3,577	1,209	1,821
1950	74,355	16,262	4,831	1,734	3,696
1951	80,511	15,095	4,333	542	3,222
1952	80,746	13,980	4,491	63	3,197
1953	91,291	14,252	6,090	500	2,039
1954	94,123	14,389	6,095	500	1,781
1955	100,533	15,944	7,045	979	1,941
1956	109,277	19,395	7,818	1,243	2,372
1957	115,858	19,120	6,911	878	2,819
1958	120,481	24,169	8,352	889	3,473
1959	125,308	25,264	7,857	538	3,081
1960	129,201	29,121	8,506	247	2,873
1961	143,772	31,476	9,132	203	3,634
1962	144,612	34,128	10,391	218	4,280
1963	159,171	35,996	11,287	182	4,390
1964	171,177	43,445	13,712	209	5,628
1965	187,009	49,003	15,482	205	7,006
1966	197,011	50,567	15,642	387	6,660
1967	206,176	49,770	13,956	341	6,053
1968	217,895	60,397	19,445	336	7,245
1969	238,201	71,653	23,212	373	8,426
1970	258,000	70,663	19,740	297	10,044
1971	278,551	80,558	23,641	698	11,198
1972	303,973	92,977	29,964	674	13,238
1973	329,269	100,093	30,756	348	14,457
1974	323,255	74,500	15,869	190	14,914
1975	339,833	74,660	20,476	294	13,132
1976	359,749	79,750	21,909	312	13,288
1977*	370,583	86,600	26,450	270	12,538

Table A.8: Trends in incomes, consumption and savings

- YD: Personal disposable income, million drachmas, current prices\*.
- SN: Savings of households and private non-profit institutions, million drachmas, current prices.
- SANB: Net non-business capital inflow, million drachmas, current prices.
- SAED: Foreign exchange deposits in banks, million drachmas, current prices.
- C: National private consumption, million drachmas, current prices; based on the direct method of estimation.

Source: Ministry of Coordination, National Accounts of Greece, 1958-75, 1973-77. N.S.S.G., National Accounts, Greece, 1948-1970. Bank of Greece, Report of the Governor, various years; N.S.S.G., Statistical Yearbook of Greece, various years. SA has been estimated from the equivalents in US dollars; the conversion rate has been 30 drs for the years up to 1974, 32,3 for 1975 and 36,9 for 1976. (\*) YD 1948-57 and 1975-76 includes savings of corporations.

Table A.8: Trends in incomes, consumption and savings

Year	YD	SN	SANB	SAED	C
1948	18,113	-1,084			
1949	24,043	2,153			
1950	28,710	1,493			29,426
1951	33,168	1,987			33,737
1952	34,660	1,467			37,097
1953	46,545	4,659			44,408
1954	53,047	1,635			52,184
1955	61,096	5,032			59,047
1956	71,579	7,252			66,738
1957	76,878	7,574			71,514
1958	79,396	6,096			76,230
1959	82,383	6,160			79,837
1960	87,820	6,671	(n.a.)		84,429
1961	98,824	9,023			91,160
1962	104,409	10,904			96,251
1963	117,627	11,950			104,510
1964	131,529	17,374	1,593		116,227
1965	151,555	20,288	1,740		130,843
1966	166,960	20,677	1,959		144,521
1967	179,830	24,642	1,632		156,510
1968	191,825	21,645	2,160	300	168,497
1969	214,604	27,784	2,403	681	184,316
1970	240,023	38,650	2,868	1,308	206,390
1971	272,127	49,642	4,146	2,550	222,004
1972	310,554	59,948	5,706	4,551	250,570
1973	399,195	92,029	8,118	5,298	310,041
1974	463,933	89,790	7,359	1,902	386,834
1975	557,807	(n.a.)	10,090	378	462,451
1976	675,085		13,310	4,266	546,814

Table A.9: Trends in private residential investment, household liquid assets, housing credit and housing consumption

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- IHPR: "Private residential investment": Gross private fixed capital formation in dwellings, million drachmas, current prices.
- WS: "Household liquid assets": currency in circulation and sight, savings and time deposits by individuals and private enterprises, million drachmas, current prices.
- FH: Bank financing of housing: annual cash outflows for housing loans by special financial institutions, million drachmas, current prices.
- CH: "Housing consumption": product of the sector "ownership of dwellings" in national accounts, million drachmas, current prices.

Source: IHPR: Ministry of Coordination, National Accounts of Greece, (Athens 1976, 1979).  
 WS: NSSG, Statistical Yearbooks of Greece, various years.  
 FH: U.N., E.C.E., National Monograph, pp. 133-134, CPER, Development Program for 1976-80: Housing, (Athens, 1976), p. 12, and National Mortgage Bank of Greece, Annual Reports, various years.



Table A.9: Trends in private residential investment, household liquid wealth and housing consumption

Year	IHPR	WS	FH	CH
1948	484			1,917
1949	764			2,553
1950	1,123			3,039
1951	1,599	(n.a.)		3,742
1952	1,957		(n.a)	4,186
1953	2,695			4,838
1954	3,109	5,948		5,776
1955	3,731	7,641		6,764
1956	4,188	9,969		7,283
1957	3,946	14,062		7,986
1958	5,009	17,014	222	8,371
1959	4,945	21,694	315	8,927
1960	5,620	26,057	367	9,653
1961	6,081	30,042	237	10,388
1962	7,381	37,032	346	11,060
1963	8,075	45,169	500	11,782
1964	9,974	52,274	695	12,498
1965	11,930	58,904	753	13,727
1966	13,190	69,752	1,099	14,699
1967	11,955	81,411	2,169	16,082
1968	16,805	95,815	4,205	17,836
1969	20,739	111,492	4,742	19,551
1970	19,443	133,656	4,426	21,099
1971	22,906	163,186	5,079	22,865
1972	31,832	201,870	7,292	25,048
1973	41,071	231,968	6,191	28,798
1974	27,438	280,391	3,060	33,888
1975	37,437	355,687	5,752	38,508
1976	46,800	448,889	8,897	43,650

Table A.10: Trends in dwelling construction costs, rents and  
the general price level

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P: "General price level": implicit deflator of the gross domestic product. 1958=100.0

PR: "Price index of rents": implicit deflator of the sector "ownership of dwellings" in national accounts. 1958=100.0

PH: "Price index of dwelling construction": implicit deflator of gross fixed capital formation in dwellings. 1958=100.0

PR/P: Relative price index of rents

PH/P: Relative price index of dwelling construction

Source: Ministry of Coordination, National Accounts of Greece (Athens, 1973, 1976, 1979). N.S.S.G., National Accounts of Greece, 1948-1970 (Athens, 1972)

Table A.10: Trends in dwelling construction costs, rents and the general price level.

Year	P	PR	PH	PR/P	PH/P
1950	55.8	51.2	54.0	91.7	96.7
1951	62.6	60.5	62.8	96.6	100.3
1952	65.2	63.9	65.8	98.0	100.9
1953	75.7	70.7	71.8	93.3	94.8
1954	84.6	81.2	82.7	95.9	97.7
1955	91.0	91.5	91.6	100.5	100.6
1956	99.4	94.3	94.8	94.8	95.0
1957	98.4	97.2	97.4	98.7	98.9
1958	100.0	100.0	100.0	100.0	100.0
1959	99.7	101.1	100.7	101.1	101.0
1960	103.5	105.0	101.4	101.4	97.9
1961	105.6	107.7	101.5	101.9	96.1
1962	109.2	111.2	109.2	99.1	98.1
1963	112.2	112.8	110.1	100.5	98.1
1964	115.3	114.2	111.1	99.0	96.3
1965	121.9	116.2	114.3	95.3	93.7
1966	123.9	120.6	115.9	97.3	93.5
1967	127.1	125.0	117.9	98.3	92.7
1968	128.9	129.6	126.3	100.5	97.9
1969	132.1	132.2	130.5	100.1	98.7
1970	136.1	133.6	130.5	98.1	95.8
1971	139.9	135.6	127.9	96.9	91.4
1972	146.8	137.6	141.7	93.8	96.5
1973	167.2	146.0	177.2	87.3	105.9
1974	218.0	169.0	228.3	77.8	104.7
1975	237.4	177.1	242.0	74.8	101.9
1976	272.2	191.7	282.7	70.4	103.8

Table A.11: Trends in the consumer price index, rents, and the cost of housing expenditures: Urban Areas

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P(U): The general consumer price index, measured for urban areas: June 1959=100.0

PR(U): The price index for rents, measured for urban areas. 1973=100.0

PRE(U): The price index for housing expenditures (rents, water, fuel, electricity), measured for urban areas. June 1959=100.0

PR(U)/P(U): Relative price index of rents, urban areas.

PRE(U)/P(U): Relative price index of housing expenditures, urban areas.

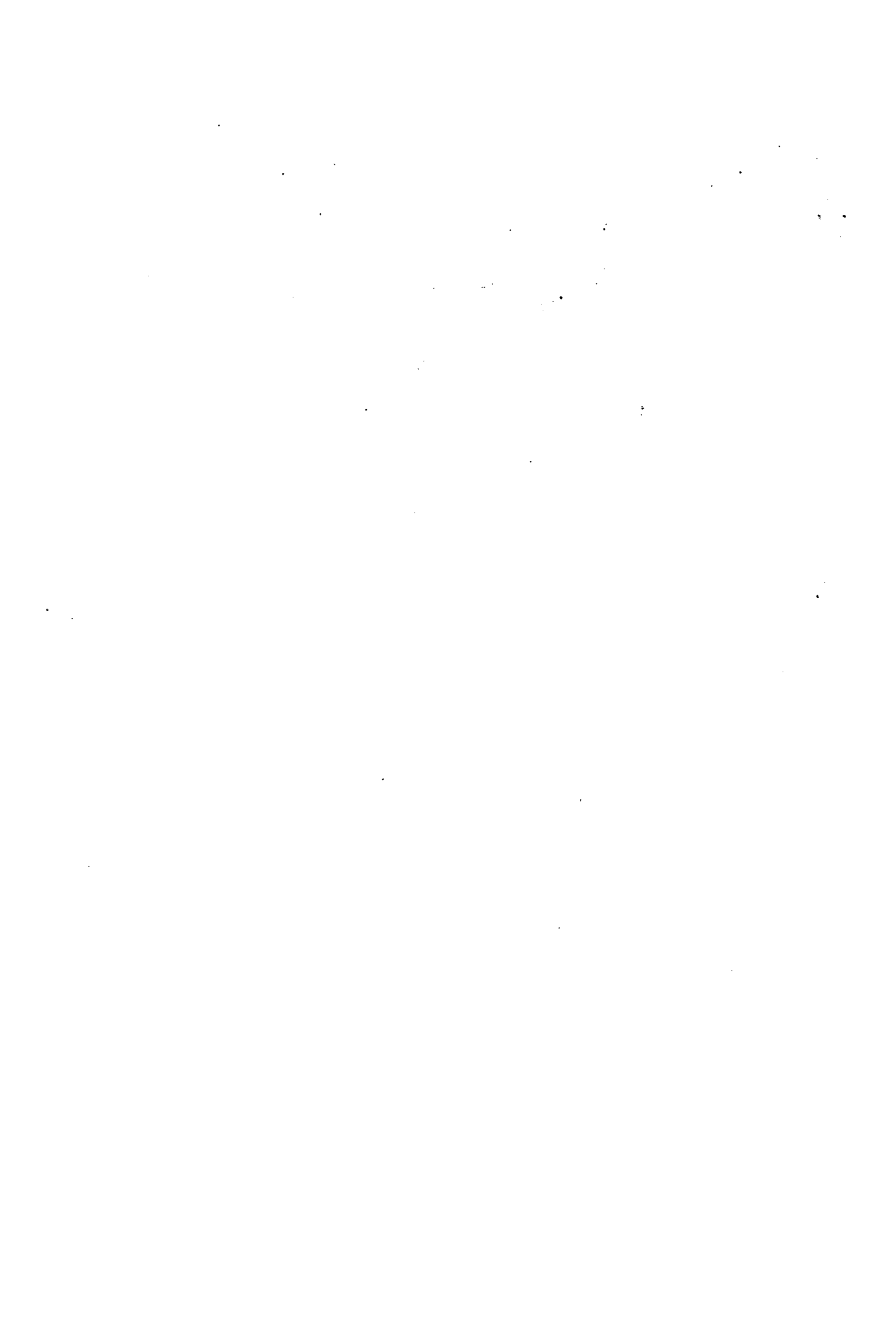
Source: P(U), PRE(U): NSSG, Statistical Yearbook of Greece, various years.

PR(U): S. Drosos, "The Development of Housing Rents", in Economicos Tachydromos, May 6, 1976 (in Greek) (based on unpublished data).

(\*): PR(U) and PR(U)/P(U) for 1976 are based on PR in table A.10.

Table A.11: Trends in the consumer price index of rents and the cost of housing expenditures: Urban Areas.

Year	P(U)	PR(U)	PRE(U)	PR(U)/P(U)	PRE(U)/P(U)
1959	100.7	71.5	101.1	71.0	100.3
1960	102.3	74.2	103.6	72.5	101.2
1961	104.1	76.0	105.1	73.0	100.9
1962	103.8	77.9	107.1	75.0	103.1
1963	106.9	79.6	109.5	74.4	102.4
1964	107.8	80.5	111.4	74.6	103.3
1965	111.0	83.8	112.6	75.5	101.4
1966	116.6	85.1	115.9	72.9	99.3
1967	118.6	88.3	118.3	74.4	99.7
1968	119.0	91.7	122.2	77.0	102.6
1969	121.9	93.7	124.3	76.8	101.9
1970	125.5	94.8	124.9	75.5	99.5
1971	129.8	96.2	125.6	74.1	96.7
1972	134.9	98.1	127.6	72.7	94.5
1973	155.8	104.4	136.1	67.0	87.3
1974	197.7	117.2	173.4	59.2	87.7
1975	220.8	127.8	124.1	57.8	56.2
1976	250.2	142.9*	137.8	57.1*	55.0



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