

## **LAND, INCOME, MOBILITY, AND HOUSING: THE CASE OF METRO MANILA\***

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### **INTRODUCTION**

Few constraints hinder development of housing as much as exorbitantly priced land, and few cities have land as relatively expensive and yet abundant as Metro Manila in the Philippines. High land prices are rarely due to sheer physical lack or high infrastructure production costs. Land prices rise basically because of demand generated by urbanization and the competition for sites

\*This article is part of a study of housing and urban development by the Housing and Urban Development Council (HUDCC). It was funded through the United Nations Development Programme and by the Government of the Philippines as part of the "Formulation and Implementation of Housing Policies for the Lowest Income Groups" (PHI/88/007). Support also came from Human Settlements and the World Bank. The authors appreciate all the support but affirm that content or conclusions do not necessarily reflect the view of these organizations.

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This study was undertaken with the assistance of Raul Tomas, a Ph.D. candidate at the Michigan State University. Permission to print was requested from the journal *Urban Studies* which is scheduled to publish a version of this article in 1994.

The authors are grateful to Rino Bismark and to Encarnacion Farallo, Felicitas Tan, Fe Dyllaco, and Yoly Velez of the Philippine Women's University for organizing the household survey and subsequent computations. Also generous with their time and insights were officials of Philippine public and private sector institutions too many to be enumerated here. Thanks are due to Shlomo Angel, Stephen Mayo and Thakoor Persaud of the World Bank for helpful comments.

that agglomeration has made more productive. The less the subsequent supply response, the more land prices rise, making idle lands more attractive to investors. Negligible land taxes and zero transaction costs will allow owners to behave in this manner, to hold land vacant while value keeps accruing. Sales take place slowly along the shifting demand curve so that little monopoly rent is lost.

The case of Metro Manila in the Philippines is important because land prices, compared with other prices, have been exceptionally high and worsening (see land prices, page 97) while the availability of skilled construction labor, materials, and finance has been fairly good and improving. Manila can therefore serve as a laboratory case of how extreme pressure from one variable affects the allocation of household budgets and housing welfare. Detailed evidence come mainly from a household survey conducted in June 1991 (see Appendix).

We shall begin with, first, a brief description of Metro Manila and second, a short review of Philippine urban policies. Third is an examination of household spending on shelter by owners, renters, and other types of occupants. Fourth, land prices are analyzed by metropolitan zone and in terms of development costs. Fifth is an account of residential mobility, or its absence, among sample households, a good general indicator of the housing markets. Higher taxes on urban lands are usually recommended to induce more timely land sales and to finance the installation of associated infrastructure. The last section reviews the way such measures have fared in the Philippines.

## **METROPOLITAN MANILA**

The National Capital Region (NCR), an urban zone in west-central Luzon, is the political, cultural, and economic center of the Philippines. It is a conglomeration of four cities and the 13 municipalities with 7.84 million people on 636 square kilometers (as of 1990). The historical center, Manila proper, had 20 percent of the

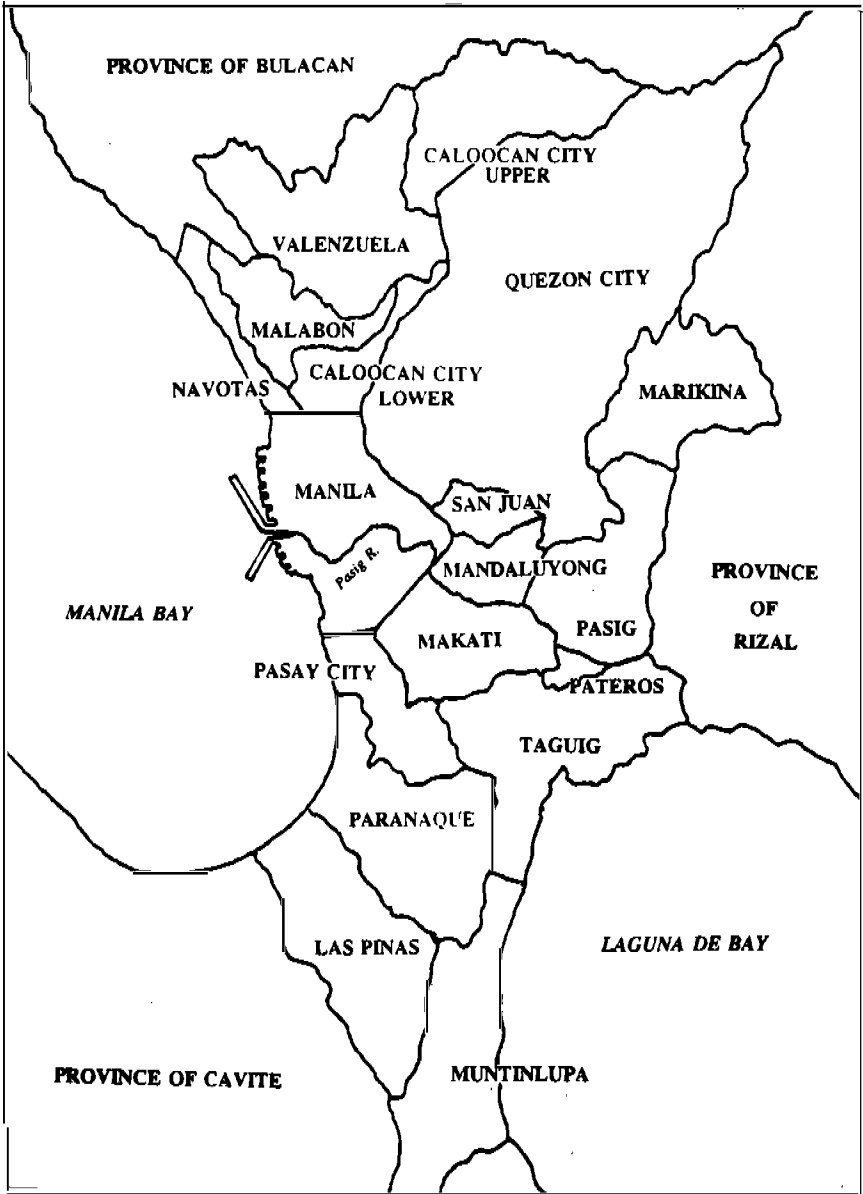
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**MAP OF METRO MANILA**

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population, less than Quezon City to the northeast which had 21 percent. The other cities, Caloocan and Pasay, as well as the largest municipalities, Pasig and Makati, had each less than 10 percent. By 1990, perhaps a million people lived outside of the NCR in towns like Bulacan to the north, Antipolo in the east, Biñan to the south, Bacoor to the southwest, all really part of Metro Manila.

The old City of Manila remains the heart of NCR and the Philippines with its port, industries, offices, and government buildings, including the Malacañang Palace along Pasig River. Here also is a crowded Chinatown and the vast regularized and upgraded squatter settlement, the Tondo Foreshore. Pasay City to the south was the first new zone of residential expansion and is almost densely populated as Manila city. Along its shore, residential tower blocks rise next to time-worn restaurants and entertainment places, and they overlook clusters of squatter huts colonizing land reclaimed by the Philippine Estates Authority (PEA). Inland is the international airport. Industrial activities, however, both large and small-scale, tended to spread northward from old Manila to Caloocan. Density of settlement ranges from high to sparse in that direction.

Quezon City, located northeast of old Manila, became the new capital, a decision made during the reign of President Carlos Gracia (1957-1961) and involving large and controversial government purchases of land. While many government agencies actually moved there, the construction and transfer of the Congress was delayed. Inaction allowed the spread of an informal settlement at the site, the National Government Center. Following the downfall of the Marcos regime in 1986, control over this public land was further relaxed, and the settlement increased to a size greater than Tondo. Quezon City leads population, area, and variety of neighborhood within the NCR.

In the eastern NCR are two expanding municipalities, Makati and Pasig. Development here is still heavily influenced by the activities of two families who owned immense local estates, the

Ortigas and the Ayalas. The patriarch, Don Jose Ayala, became Secretary of Justice in 1936 in the pre-independence Commonwealth. He was ex-officio chairman of the Philippine National Bank, a major land development lender. In 1951, Don Jose Ayala lost in the national election for Presidency to another land speculator, Carlos Garcia. When Makati emerged as the nation's financial center where banks, corporations, and related institutions, both national and foreign, established their headquarters, the Ayala Land Corporation became the prime developer of Makati. Luxury housing and rental units for office workers can also be found here with the highest rents and lowest turnover (percentage of dwellings changing occupants in a year). However, the Asian Development Bank and the country's largest corporation, the San Miguel brewery have their headquarters in Pasig, a municipality that began with an industrial orientation but is now rapidly emerging as a commercial rival of Makati, developing the same combination of office and commercial development, and high-cost housing.

Large areas of empty land are found toward the north in upper Caloocan, Novaliches, and Quezon City; and toward the south in Muntinlupa and Taguig. Unpublished data from Metro Manila Authority Planning Office remain scant and are often extrapolated from sources like the 1986 Land Use Maps of the Metro Manila Commission. Although no part of the NCR is zoned for agriculture, 5,453 hectares were recently reported in such use; and 4,948 hectares were classified as "open land." These expanses were both private and government owned, but were predominantly abandoned and lay idle, with some access roads and utilities but no buildings. Included in these figures were watershed areas, but not the actual waterways or reservoirs. The unpublished estimate is that squatters occupy 10 percent of the land reported either to be in agricultural use or "open land," leaving about 95 empty square kilometers available. About 10 percent of lots in built-up residential areas are vacant and must be added. This represents an additional 20 to 40 square kilometers. These data based on official but

unpublished data extrapolations are consistent with results from our 1991 survey (see Appendix). If 1.508 million households occupied an average of 105 sq m of land each, as our 1991 survey discovered, the total residential areas (excluding roads, etc.) would be 158.3 square kilometers, a mere 24.9 percent of NCR. In 1983, Ernesto Mendiola, chief of the Philippine Human Settlements Regulatory Commission, estimated the residential area as 34.3 percent for NCR, a percentage that includes vacant lots and circulatory (space for roads, footpaths and planned open space), and is therefore consistent with our estimates. (Mendiola 1983:475). Both percentages are low compared with international averages.

Who controls the empty land? Comprehensive information about land ownership in Metro Manila remains hard to find despite an ambitious USAID and World Bank-financed project, the Philippine Real Property Tax Administration Project (RPTA), to organize data collection through local government units. Some orders of magnitude can be inferred, however, from Mendiola's report cited above. He reports that 650 contiguous hectares north of Makati were traced in the early 1980s with 465 owners. Average area held was 14.13 hectares each, enough for developing over a thousand housing lots by each owner. In all NCR, most owners of the idle land has 300 sq m or less, but 44 percent had large tracts, some with 760,000 sq m, enough for 5,000 lots (Mendiola 1983:475-476). In a survey of one northern subdivision, where incomes were only 3.5 times the low Metro median (which is also the poverty level), 43 percent of households owned sites or houses in other subdivisions (Dekker 1992:82). Since most land holdings were small, the actual number of owners of vacant lots may well exceeded 100,000 households, more than the influential five percent of the population.

## A SKETCH OF URBAN POLICIES

Public interventions in land and housing markets go back to the early decades of American rule when Manila had a mere 329,000 inhabitants. For a long time, measures lacked the scope and focus needed for effective urban development. Under the Americans, some traditional thatched nipa houses were demolished in congested districts and poor families were moved to new "sanitary barrios" or "barrios obreros" with streets, water mains, and drainage. During the Commonwealth period of the 1930s, a Homesite Act authorized public acquisition and subdivision of land for laborers, but programs were too costly for the target group (Ocampo 1976).

After the Japanese occupation, a People's Homesite and Housing Corporation took on the task of clearing slums, subdividing landed estates, and building public housing for the poor. But again, land was acquired at unaffordably high prices for the target group of low-income employees. (Angeles 1985:50). From 1947 to 1970, none of the 17 national development plans actually addressed the housing sector (Yeh and Laquian 1979:22). In the early 1970s, a Human Settlement Commission under the Office of the President began to develop land use for all urban areas. Better housing was to be promoted with loans from social security funds for the development of experimental prefabricated housing for the middle class. Thousands of squatters were resettled in core houses at Damariñas, Carmona, and other distant areas. In 1976, with World Bank assistance, a site-and-services program was initiated at Dagat-Dagatan, north of Tondo. Contrary to their stated aims, none of these programs had much impact on general land and housing costs.

In 1978, President Marcos decreed an Urban Land Reform with provisions for regulating ownership, prices, rents, and land in Metropolitan Manila. A number of agencies were set up and consolidated in a Ministry of Human Settlements, under Imelda Marcos, Governor of Metro Manila, but these did not concern

themselves with the basic problem of undoing the incentives for keeping land idle, nor was finance provided for inducing land sales (Mendiola 1983:492). Of the 244 areas for priority development (APDs), only one had vacant land. An important step forward was a modification of building and urban layout codes for low-cost housing, Batas Pambansa 220, which allows lower standards and lots as small as 32 sq m.

In the subsequent government of President Corazon Aquino, the Ministry of Human Settlement was replaced by a Housing and Urban Development Coordinating Council (HUDCC). A medium-term development plan for 1987-1992 made housing a priority, and substantial progress was made by integrating financial intermediaries. By mid-1980s, the emphasis was thus less on the physical and more on strengthening the ability of responsible institutions to finance housing. Another part of this work was the RPTA, mentioned earlier and its Real Property Tax Enhancement Program (CORTEP) that was supposed to improve tax mapping (identifying untaxed properties), assessments, and collections. The aim was to identify and to computerize all sites and their values. Parcels that have previously gone undetected were successfully identified. But the effort everywhere to tax them, including arrears, succumbed to political pressures (see land taxes, page 104). When Mayor Simon of Quezon City tried to raise the tax base by quadrupling valuations, the increase was challenged in the courts, and the mayor was defeated in the election a year later. Even his quadrupling assessments, however, had remained less than a fourth of market prices.

In the Philippines, the property tax is assessed and collected locally, but national legislation now limits the maximum rate on land to 3 percent including the 1 percent earmarked for education. These percentages have actually been only 0.6 percent and only 0.2 percent of "assessed fair market value." It is possible, however, where multiple owners claim the same parcel, more than one payment maybe made to the City Assessor.



To keep tax records up-to-date, surveyors, sellers, and buyers are all supposed to notify the tax authorities, but such is not enforced. In Pasay, for example, Dillinger found that the registrar of deeds had never provided the local tax agency with the names of real estate buyers although these two agencies have their offices across the hall from one another (Dillinger 1991:22). Philippine title records were organized by date of issue, hence assessors find it hard to locate by simply knowing the location of a specific property.

The RPTA program raided identification and assessment by shifting to map-based inventories from owner-declarations. Valuations rose by about 20 percent due to the inclusion of missing plots and by another 20 percent due to more accurate information about known plots. Political pressures soon forced the national government to intervene, however, and assessments were compelled to lag from one to five years behind current market values. With inflation at around 15 percent, the net effect was that reform raised collections by only 1.1 percent. Local officials, according to Dillinger, "refrained from any provocative collection enforcement, allowing average collection rates to drop below 50 percent" (Dillinger 1992:41). A 1991 law, RA 7160, mandates reassessment every three years.

As population, income and both foreign and national investment grew, land prices continued to escalate as well, making standard dwellings and sites unaffordable for more and more households (see p. 97). The difficulty is partly due to obstacles in converting peripheral farm lands to urban use in accordance with the Comprehensive Agrarian Reform Law (RA 6675 of 1988). In 1992, the Philippine Congress passed an Urban Development and Housing Act that called for the "equitable utilization of residential lands ... not merely on the basis of market forces" (RA 7279, Congress of the Philippines, 1992, page 2, section 2 [h]). The act primarily seeks to provide land and housing for the poor and is not a general reform of land and housing markets. Nevertheless, a section calls for the expropriation (with compensation at market

prices) of public domain of all unimproved sites exceeding 300 sq m in highly-urbanized areas and 800 sq m elsewhere. Improvements have to be structures worth at least half as much as the land value. Local governments are supposed to implement these and other provisions using guidelines to be developed by the Housing and Land Use Regulatory Board with the advice of the Housing and Urban Development Coordinating Council (HUDCC). The government of President Fidel Ramos, elected in 1992, has set a target of helping in the construction of 1.2 million dwellings by 1998.

### **INCOMES, PRICES, AND HOUSING CONDITIONS IN 1991**

Housing conditions in Metro Manila according to the 1991 survey (described in the Appendix) were as follows: Three-quarters of dwellings had been built without authorization and were very small. For 84.6 percent of the units, roofs consisted of galvanized iron sheets, and 87.2 percent had walls wholly or partly made of wood. Only 66.5 percent had their own indoor piped water connection and 67.1 percent had their own water-sealed toilets. In one-room dwellings lived 40.3 percent of households and another 40.5 percent had only two rooms. Average household size was 5.2 (median 5), hence on the average, 3.5 persons shared a room. Nine percent of households were doubled up with others. Floor space of the median dwelling was 60 sq m, and the median lot was just 5 sq m bigger than that. Average sizes were 84.6 sq m and 105.2 sq m respectively. In six other East Asian capitals (Beijing, Jakarta, Bangkok, Kuala Lumpur, Seoul, and Singapore), floor space was only somewhat greater, 68 sq m, but quality was much better; for example, 89 percent of units had a water connection (World Bank June 1992: 30,94).

The construction cost per square meter, including materials, onsite-infrastructure, management and contractor profits, of new median-priced (hence low-cost) commercial dwellings was \$148 in Manila, about the same as the average of nine East Asian or six

other middle income countries (World Bank 1983: Table 1). Such a dwelling could, however, be finished in half the time in Manila, indicating a high productivity in the industry. The square meter cost of medium cost housing was \$213, and high-cost housing (unless high-rise) was \$333. High-rise condominiums cost \$611 per sq m (Real Estate, III, 1, January-February 1983).

Crowded NCR districts meant that the average travel time in going to work was short-ranging from 26.4 minutes in Caloocan to 37.1 minutes for residents of Makati. Households spent a median 7.0 percent of their income for transportation in jeepneys and buses that typically (77.2 percent) brought workers to their jobs and students to their school (66.2 percent). Fifteen percent of households lived in units that were often inaccessible because of rainy-day flooding or high tides. Housing worth by tenure mode and income level will be reported after a discussion of tenure.

In 1991, households occupied dwellings in line with three basic tenure types, about one-third for each. Clear owners were 32.3 percent renters of house and lot were 39.5 percent, and irregular occupants were 28.2 percent. "Irregular" is defined as any status other than standard owner-occupancy or renting through the market. Irregular are rent-free occupants, present and former squatters (those with regularized tenure), and owners of the dwelling units who only rent the land or occupy it rent-free. The percentage breakdown of tenure types can be seen in Tables 1 and 2.

Some complexities in the actual situation could not be shown. For example, some renters classified as "regulars" may live on property rented or held in an "irregular" way by the landlord. Irregular occupation also included homes along waterways (esteros), and railway tracks -- 1.8 percent of households, according to the National Housing Authority (NHA). If dwellings along shorelines, on garbage dumps, in playgrounds, and in parks are added, such "unacceptable" housing may approach 9 percent of

**Table 1**  
**INCOME OF OCCUPANTS AND PRICES OF HOUSING BY TYPE OF TENURE:**  
**METRO MANILA, 1991**

	Number	Monthly Income (\$)			Price of House and Lot (\$)		
		Mean	Standard Error (standard deviation)	Median	Mean	Standard Error (standard deviation)	Median
1. Clear owners of house and lot	971	407.3 (384.3)	12.3	296.3	20,882.7 (37,126.6)	1,196.8	12,963.0
2. Renter of housing unit and lot	1,186	287.6 (202.8)	5.9	248.1	10,351.9 (13,168.7)	383.3	6,296.3
3. Rent free occupants	299	224.6	166.7	9,926.7	676.5 (11,593.7)	5,925.9	
4. Irregular owners	547	225.3	7.4 (172.1)	181.5	8,006.2	565.0 (13,034.8)	5,000.0
a. Rent land only	130	236.8	15.1 (171.2)	185.2	10,873.2	1,898.8 (21,593.8)	6,481.5
b. Rent-free land	174	241.1	13.6 (180.2)	185.2	9,804.9	790.2 (10,403.4)	7,407.4

Table 1 continued

	Number	Monthly Income (\$)			Price of House and Lot (\$)		
		Mean	Standard Error (standard deviation)	Median	Mean	Standard Error (standard deviation)	Median
c. Regularized	84	255.7	20.1 (184.2)	206.5	6,223.4	742.7 (6,330.8)	4,814.8
d. Squatting	139	174.5	12.2 (143.4)	111.1	3,593.9	390.5 (4,565.4)	2,333.3
e. Others	20	238.8	40.3 (181.9)	190.4	10,464.5	1,917.4 (8,646.3)	5,555.6
<b>5. Total Sample</b>	<b>3,003</b>	<b>309.0</b>	<b>5.2 (280.0)</b>	<b>237.0</b>	<b>13,313.6</b>	<b>451.5 (8,646.3)</b>	<b>7,407.4</b>

Note: Pesos were converted to US dollars with the exchange rate of P27 = \$1.

Source: Survey of 3,003 households of Metropolitan Manila carried out by a team from the Philippine Women's University, May 14 - July 7, 1991.

**Table 2**  
**RATIOS OF HOUSING PRICES TO INCOMES OF OCCUPANTS BY TYPE OF TENURE:**  
**METRO MANILA, 1991**

	Percentage of Sample  (n-3,003)	Ratios from Table 1 Price of House and Lot to Annual Income		Mean	Ratios from Each Observation House and Lot Price to Annual Income	
		Mean	Median		Standard Error (standard deviation)	Median
1. Clear owners of house and lot	32.33	4.27	3.65	5.13	0.21 (6.40)	3.37
2. Renters of housing unit and lot	39.49	3.00	2.11	3.54	0.13 (4.56)	2.22
3. Rent-free occupants	9.96	3.68	2.96	4.61	0.33 (5.67)	3.03
4. Irregular owners	18.22	2.96	2.30	3.52	0.20 (4.60)	2.22
a. Rent land only	4.33	3.83	2.92	4.27	0.50 (5.72)	2.98
b. Rent-free land	5.79	3.39	3.33	4.20	0.39 (5.14)	2.56

Table 2 continued

	Percentage of Sample  (n-3,003)	Ratios from Table 1 Price of House and Lot to Annual Income		Ratios from Each Observation House and Lot Price to Annual Income		
		Mean	Median	Mean	Standard Error (standard deviation)	Median
c. Regularized	2.80	2.03	1.94	2.65	0.39 (3.30)	1.75
d. Squatting	4.63	1.72	1.75	2.22	0.22 (2.59)	1.34
e. Others	0.67	3.65	2.43	4.68	0.93 (4.21)	2.64
<b>5. Total Sample</b>	<b>100.00</b>	<b>3.59</b>	<b>2.60</b>			

Source: Survey of 3,003 households of Metro Manila carried out by a team from the Philippine Women's University, May 14 - July 7, 1991.

the stock and serve as one clear indicator of the failure of the housing system.

Many irregular occupants squatted on vacant land of owners who were absent or abroad, of retirees who had relocated within Manila, of disputing claimants, or on unused property of government agencies. Toughminded "syndicates" often organized the occupation of such land and distributed sites for a price and monthly fees.

International comparison suggested that the ratio of the market value of housing occupied by clear owners and renters to their income was not unusual in Metro Manila. Clear owners had dwellings worth \$20,900 (median \$13,000), amounts that came to 4.3 (median 3.6) times their annual incomes (\$4,888 or \$407.3 monthly). This ratio compares with 4.1 for an international sample of 15 very large cities in as many countries (Strassmann 1991: 765) and with 4.5 from a 1983 survey of Metro Manila (Struyk and Turner 1986). If the ratios are calculated for each household and then estimated, the median is somewhat lower (3.4) and the mean is higher (5.1, Table 2). The basis for these estimates are replies to survey questions like, "If one wished to sell a house like yours today, at what price do you believe it could be sold?"

Renters of both house and lot had monthly incomes only 71 percent as high as those of clear owners, \$288 (median \$248), and their rents were 15.4 percent (median 13.4 percent) of income (see Table 3). This rental share compares with 16.9 percent of income for the international sample of 15 cities cited above and with a mean of 16.4 percent for median rent in 50 cities in as many countries analyzed for the "Housing Indicators Program" (World Bank June 1992:11). Manila renters believed that the probable market value of their units averaged \$10,400 or 3.0 times their annual incomes (median 2.1). Thus, the value of their premises was only half that of clearly owned units. Renters seemed to have lower priority for housing.



**Table 3**  
**RENTS, INCOMES, AND RENTAL HOUSING PRICES FOR TENANTS:**  
**METRO MANILA, 1991**

	Mean	Standard Error (standard deviation)	Median
1. Monthly income (\$)	287.61	5.89 (202.80)	248.15
2. Price of house and lot (\$)	10,351.90	383.30 (12,168.68)	6,296.30
3. Monthly rent (\$)	44.32	1.02 (35.20)	33.33
4. Rent-to-income ratio (rows 3/1)	0.154	—	0.134
5. Rent-to-income ratio (calculated from each observation)	0.175	0.004 (0.132)	0.145
6. Ratio of house and lot price to annual income (from Table 1)	3.00	—	2.11
7. Ratio of house and lot price to annual income (calculated from each observation)	3.54	0.13 (4.56)	2.22

Note: Pesos were converted to US dollars with the exchange rate of P27 = \$1.

Source: Responses of 1,186 tenants from a survey of 3,003 households of Metro Manila carried out by a team from the Philippine Women's University, May 14 - July 7, 1991.

Irregular occupants had still lower monthly incomes of \$225 or 78 percent as much as standard renters and 55 percent as much as clear owners. For irregular owners, the value of house and lot was 3.0 times their annual income, the same proportion as estimated by standard renters. Within this group, those who rented the land but owned their dwellings were in the most expensive premises, worth \$10,900 or 4.3 times their annual incomes. Squatters reported the lowest values of \$3,600 (median \$2,300) or 1.7 times their (annualized) incomes of \$174 monthly (median \$111). Regularized squatters had incomes 47 percent higher than other squatters and occupied premises worth 73 percent more. Richer squatters lived in areas that were regularized first. Afterwards, they rapidly improved their dwellings. Rent-free occupants (10 percent of all households) usually had some special relation to the owners and had premises (but not incomes) substantially better than those of the irregulars -- dwellings worth \$9,900 or 3.6 times their annual incomes.

These levels of spending on housing in Manila also appeared normal and in line with experience elsewhere. For example, the overall income elasticity of demand was 0.77 percent meaning that a 10 percent rise in income was associated with 7.76 percent rise in the value of house and lot. The elasticity coefficient is highly significant, and the  $R^2$  is 0.273. If an allowance is made for household size and age of the head the elasticity falls only slightly to 0.759. In other words, household size and age are correlated with income. Household composition and gender of the head are not statistically significant.

For the subsample tenants, one can take the logarithm of monthly rent as the dependent variable and compute an income elasticity that is slightly lower: 0.735. (The coefficient is highly significant and the adjusted  $R^2$  is .362.) The elasticity however, rises a bit to 0.769 with an allowance for household size. Tenants with large families tend to rent somewhat less housing than others, given their income level. They make relatively greater expenditures on goods and services than on rent.

If the housing market of Metro Manila fails to deliver reasonably adequate shelter, the failure is not obviously reflected in amounts paid in relation to incomes. But prices may include an unnecessarily high share for the site, allowing less spending for the structure and amenities. Both high site prices and the absence of security of tenure can be a reflection of unusual constraints on the land supply and infrastructure development, and they could account for the low and falling mobility of Manila households, shown on page 101. The result is imperfect allocation and improvement of the housing stock and hindered development of residential construction as an economic sector.

## LAND PRICES

Inhabitants and outside observers have long considered urban land prices to be obstinately high in the Philippines. In the 1960s, Charles Abrams observed that

Neither the magnetism of demand for the temptation of profit can persuade the larger landowners to make use of their holdings or to sell to others who will. The situation is most accurate in the environs of Manila, where land poverty exists amid land plenty (1964:56).

A common international norm is that a housing lot area of 100 sq m will cost as much as the GDP per capita. In the 1970s, Orville Grimes reported that it cost 2.5 times as much in Manila and found the level "incongruously high" (Grimes 1976:131). By 1990, the price of new sites on the outskirts of Metro Manila at P1,000 or US\$37.00 per sq m was 5.2 times as high as national per capita product and 3.65 times as high as the Metro Manila gross city product per person.

The median price per square meter of housing sites in Metro Manila was P1,540 or US\$57, according to our survey. The range of medians by location went from \$41.7 per sq m in the periphery to

\$123.5 per sq m in Makati. According to a bulletin of the real estate industry, however, Makati prices for sites available in 1991 ranged from a low of \$444 per sq m in San Lorenzo Village to a high of \$896 in Forbes Park, one of the most expensive residential village. The best commercial sites along Ayala Avenue cost from \$2,600 to \$3,700 per sq m (*Real Estate Bulletin* III, 1, January-February 1993).

More information comes from a small sample of builders and developers, who were interviewed as part of the World Bank/ UNCHS Housing Indicators Program. These findings were confirmed at a 1992 conference of the Real Estate Developers and Brokers (REDAB). Even a newly-developed site on the urban fringe sold for \$37.0 per sq m in 1991. Raw agricultural land near Manila cost about \$2 per sq m, and when zoned for urban development, rose to a level between \$5.5 to \$7 per sq m. Labor and materials for urbanizing the raw site cost \$6 per sq m; and another \$18 would go to management, marketing, permits, fees, interest, and others. The process normally took 3 to 4 years. Total costs were \$30 per sq m and the sale price of \$37 per sq m (P1,000) gave a profit of \$7 or 23 percent. The "land development multiplier" was about 20 from agricultural use and 6.7 from the urban zoned level ( $37/5.5$ ). For the sample of 45 countries included in the "Housing Indicator Program", the average land development multiplier from urban-zoned land was 4.4 (World Bank June 1992:11,50). For the subsamples of East Asian and Middle income countries, it was only 2.4 and 3.7 respectively. Developed by vacant land was thus so scarce in Metro Manila that new and most remote sites could be sold for price about two-thirds of those estimated for most of the metropolitan area. Some very distant sites already sold for \$55 per sq m in 1991, but a good empty lot in Pasig or Quezon City would have cost \$300 to 600 per sq m (*Real Estate Bulletin* III, 1, January-February 1993).

Median prices per lot and per sq m in the major districts of the metropolitan area can be seen in Table 4. Lots were smallest in old Manila and Makati and largest in Quezon City and the periphery.

**Table 4**  
**LAND PRICES BY DISTRICT, METRO MANILA, 1991**

	1	2	3	4	5
	Mean Lot Size (Sq m)	Median Lot Size (Sq m)	Median Price/Sq m (US\$)	Median Lot Price (US\$)	Share of Land in Dwelling Price (%)
Manila	64.4	50.0	59.3	2,963	47.1
Caloocan	95.6	75.0	49.4	3,704	48.8
Pasay	83.5	75.0	54.3	4,074	53.7
Quezon City	158.8	100.0	74.1	7,407	57.1
Pasig	87.5	70.0	105.8	2,778	44.1
Makati	47.7	45.0	123.5	5,556	62.5
Other NCR	95.8	60.0	49.4	2,963	51.6
Peripheral	134.1	100.0	41.7	4,167	45.0
<b>All</b>	<b>105.2</b>	<b>65.0</b>	<b>57.0</b>	<b>3,704</b>	<b>50.0</b>

Source: Survey of 3,003 households of Metro Manila carried out by a team from the Philippine Women's University, May 14-July 7, 1991.

The combination of size and square meter price made lots cheapest in Pasig and most expensive in Quezon City. In general, lots were estimated to be worth as much as annual household income, from about 19.4 percent less in Pasig to 42.5 percent in Pasay.

Occupants-estimated real estate values are close to prices realized in commercial sales but tend to understate the share of land. Dwellings are bought as a package from previous occupants or from developers of large new subdivisions. The land component in the price will be understated to hide the markup. In no part of Metro Manila, however, was the median share of the lot estimated as less than 44 percent of the value of house and lot. In Makati, it reached 62.5 percent. For the area as a whole, the median lot was worth as much as the house or 50 percent of the combination. This share of one-half for the site compares with about one-third for nine other middle income countries (World Bank June 1992:98-105).

One large developer in the Novaliches section of Quezon City reported construction costs for rather rudimentary 40 sq m houses to be \$92.6 per sq m or \$3,704. If such dwellings were built on 65 sq m sites costing \$2,405 at \$37 per sq m, the combined price would be \$6,109 with 3.94 percent for the site. For unusual charitable reasons, the Novaliches builder chose to charge only \$16.7 per sq m for the sites and kept the land share down to 22.6 percent of \$4,789.50. It is hardly astonishing that, although profitable, his developments have thousands of applicants for hundreds of units before completion. The applicants are screened and are warned against reselling. Some have sold, nevertheless at double the price, around \$10,000. "But where are they going to live now?" Project Director William Reyes, asked rhetorically. "What housing can they get with that money?"

The median clearly owned house and lot, worth \$12,963, would remain beyond the reach of many resellers from Novaliches. But if they had bought such a unit, they would have moved into a structure substantially inferior to what they have sold because of higher land prices (two or three times those of the De La Costa project in

Novaliches). Of course, they might also have returned to being tenants, to doubling up, or being irregular occupiers, and then have used the money for other needs.

Without voluntary or official subsidies, private developers of lowest cost Metro Manila subdivisions could have sold their smallest 40 sq m housing units for \$10,500. Nominally, their 65 sq m lot cost \$2,400, and construction for 40 sq m cost \$5,900, making a total of \$8,300 (*Real Estate Bulletin* III, 1, January - February 1993). Hence, there was a further markup of 26.5 percent. Much more would have brought the dwelling beyond the \$11,900 limit of "social housing" and qualification for a low-interest (9 to 12 percent) loan under the government's Unified Lending Program. But according to reliable informants, a further 20 percent was often secretly charged to households wishing to be selected. For three years, they repaid this unsecured developer-supplied loan at 22 percent interest with post-dated checks. Only land scarcity and the monopolistic power of developers can explain such behavior.

According to our survey, median owner-occupants were in dwellings worth 3.37 times their annual incomes of \$3,556 (Tables 1 and 2), but median income of *all* households was only \$2,844. The lowest new commercial dwelling price of \$10,500 (if not further marked up) was 3.69 times that median income, hence it was unaffordable for the poorest half of the population. In technical terms, the "down-market penetration of the unsubsidized private sector" was 50 percent which compares with 80 percent for Bangkok (World Bank 1993: 15). Needless to say, poor households had to double up, build illegally instead, or find accommodation in the old housing stock, ring the issue of housing turnover and residential mobility.

## MOBILITY

Manila households do not move easily from one dwelling to another, implying low turnover or inaccessibility of the old housing stock. Among surveyed households, only 6.0 percent had moved

during the previous year, an immobility that is at least above that of East Europe during the Communist era. For example, in the East German Democratic Republic, it was only 2.5 percent in 1980-1981. In Colombo, Sri Lanka, where government interference with housing transactions had been drastic, mobility was 5.0 percent in 1981. Major cities in 13 other countries had mobility higher than Manila, an average mobility of 14.3 percent (11.9 percent) without Seoul, Korea) (Strassmann 1991: 765). In Bangkok during 1980 to 1986, it was 19.2 percent similar to that of urban United States, while nine Indonesian cities had a mobility of 8.5 percent. In 1988, (Struyk et al. 1990). The average mobility in 1991 in large cities of 44 countries included in the "Housing Indicator Program" was 9.0 percent. The subsample of six other East Asian cities (Bangkok, Beijing, Jakarta, Kuala Lumpur, Seoul, and Singapore) had 13.3 percent mobility (World Bank June 1992: 11,36).

A 1983 survey reported a Manila mobility of 7.4 percent (Struyk and Turner 1986), hence it seems that Manila mobility has now fallen, as may be true of other cities with deteriorating housing and land markets. Survey responses indicating that only 28.7 percent of households had occupied their dwellings between one and five years in Metro Manila in 1991 also imply an average mobility of about 6 percent annually.

Before analyzing immobility further, one should note its geographical diversity. Mobility was highest in Caloocan (8.1 percent) and Pasig (7.3 percent), and the lowest in Makati (2.8 percent), Manila (4.2 percent), and the Periphery (4.6 percent). Quezon City (6.3 percent) and Pasay (5.9 percent) were close to the Metro Manila average of 6.0 percent. In all districts, the average household had occupied its premises from 12 to 14 years, except for a year less in Caloocan and a year more in the Periphery. Average length of occupancy was 13 years. The survey did not distinguish intra-district moves from others, but at least, migration is not going disproportionately to the Periphery, attracted by cheaper and newly- developed land. Moreover, if the median



household is about halfway through its tenure in a dwelling at the time of a survey, the implication of ten years so far is that the full tenure will be about 20 years. Without population growth or demolitions, this duration would have implied a 5 percent rate of annual turnover.

About half (53.3 percent) of the households surveyed had been newly formed or had migrated to the metropolitan area, and half had moved from another dwelling. The latter had occupied the previous dwelling for an average of 7.1 years (standard error deviation [s.e.]: 0.174; median: 5 years). Owners had occupied their previous unit 8.1 years (s.e.: 0.261; median: 6.0 years). Renters had occupied their dwelling for 6.2 years (s.e.: 0.222; median: 5.0 years). That is a low rate of mobility for tenants, but still 70.8 percent of intra-urban movers had been tenants before. Tenants seemed three or four times more likely to move than owners or irregular occupants. Note that only 10.2 percent of tenants believed that they lived in units affected by rent control although two-thirds of units were technically in that category, meaning monthly rents were below P2,500 (US\$92.6). For comparable housing, units that were actively controlled had rents only 18.1 percent lower. Rent control seemed to be a factor with little effect on mobility.

In most developing countries, "to become an owner" is given as the principal reason for moving to the current dwelling. But in Manila, with its limited access to building land, that aim was given for the present location by only 15 percent of households. Instead, 'housing' was considered a poor bargain, and 55.3 percent of households had chosen their present location primarily "to pay less." The only competing motivations were to be "closer to work" (8.5 percent) or having access to better facilities (6.8 percent). Only 10.2 percent of current non-owning households had any plans to move to become owners. More than a third of these lived in Quezon City.

Among households that had moved from one Metro Manila dwelling to another, the average and median number of moves was

two. Past mobility had been fairly uniform throughout the city, though somewhat higher in Pasay and a bit lower in Makati and the Periphery. These relocating households had been in existence for an average of 19.3 years, and 77.0 percent of them moved only once or twice in that time span. For the relocating households, access to work and better facilities almost equalled ownership as a reason for moving.

### **LAND TAXES AND PUBLIC POLICY**

The explanation for the shelter predicament of Manila and other Philippine cities is not just that people are poor and cannot afford to buy much land and housing. Rather, many may be poor precisely because land prices are high in a way that hinders urban development and productivity growth. Major inputs for residential construction, apart from sites, come from finance and the building industry, and as mentioned before, these are tolerably efficient in Metro Manila. Skilled construction workers require a premium of only 40 to 60 percent above the wages of unskilled laborers (compared with about 100 percent) in other East Asian or middle income countries). At a cost of \$100 to \$200 per sq m, low to mid-cost housing projects of about a hundred units can be built in three to six months, twice as fast as in six other East Asian capitals (World Bank June 1992:78). The financial system retains elements of subsidy and repression and is slow in collection and foreclosure but high in public sector arrears (26 percent). It is also rather underdeveloped compared with those of Asian neighbors; but has been reformed in recent years (World Bank 1990). What mainly holds back the housing sector, hence much of the urban economy, is the high land prices, as described above.

The solution for inadequate housing is therefore not merely assistance for target groups of the urban poor in this or that neighborhood -- although that is better than nothing. The problem is not just poverty but the specific structural distortion of the high land

prices. If these prices were as low as in comparable developing countries, and given the share of income that Filipinos are spending for housing, as much as 50 percent more shelter could have been built (a reallocation from the site price), and fewer than 28 percent of household would probably live under irregular tenure arrangements. There would be more mobility yet less of a problem of squatters and "squatting syndicates" and less than three quarters of housing would have been built in an "authorized" manner.

Another probable negative consequence of high and rising land prices is an effect on saving. To the extent that household wealth of landowners rises toward higher labels automatically through the agglomeration and speculative effect on land values, saving through foregone consumption is less needed. In 1990, gross domestic savings in the Philippines was 16 percent of GDP, which compares with 34 percent for Thailand, 33 percent for Malaysia, and 37 percent for Indonesia (World Bank 1992:234-235). Price rises of urban land could explain part of the difference. Whenever wealth can be accumulated merely through holding urban land, the pressure for saving out of income will be less.

Promotional literature of real estate agents in Manila smoothly plays up this nearly tax-free bonanza: "In real estate, people who have already made some financial gain can attest to the fact that it stands head and shoulders above any other form of investments.... The most common types of investments compared with real estate are money market, stock market and jewelry. "These are shown to have real rates of return of 3.6 percent, 7.0 percent, and 5.0 percent respectively, compared with 12.5 percent real rates for holding real estate. Even adjusted for inflation, the article suggests wealth can double in six years. In five Quezon City districts, land price per sq m had risen by an average of 15.1 percent from 1991 to 1992. The reader should "Buy properties with as much as leverage as possible, with little or no money down ... And unlike other investment fields, the real estate market never experiences price fluctuations. Instead, there is a consistent increase in prices. Therefore, if the investment

is not real estate, almost always, the odds and inflation are against you" (*Real Estate Bulletin* III , 1 January - February 1993:2).

Data from the 1991 survey show the consequences of the urban land problems. It benefits quite a few but hurts many others as reports, both national and international, have also noted. An Asian Development Bank report (ADB 1989:53) said, "While there is no overall shortage of land supply in urban areas ... the majority of low and medium income families cannot afford to pay for residential land." The Housing and Land Use Regulatory Board (HLRB) lacked power to implement a coordinated development plan, and even where two parties agree, "...the legal process associated with land acquisition are long and tortuous." For the National Housing Authority, land acquisition had proved a most difficult and time-consuming task, measured in years, not months." Use was never made of power to impose an extra tax on idle land and to levy special assessments. Hence, there were "no financial incentives for owners to develop their idle land since taxes on such land are very low" (ADB 1989:54).

The Philippines have no restrictions on corporate ownership of land, on inheritance, or on price when sold. Transactions are monitored by the courts, the Land Titles and Registration Authority, and the Bureau of Lands. All land is therefore registered, but reports from local registrars of deeds to the Authority do not distinguish among agricultural, commercial and residential land, and in any case, reports are not available to the public. Even the extent of clear versus contested titles is not generally known. An undisclosed but large fraction of land is owned by government agencies. In some Philippine municipalities, one can even attribute as much as a third of the high Land Development multiplier (6.7) to the enervating costs and delays of dealing for three to four years with a complex and cumbersome bureaucracy (Blunt 1993).

A widespread (but not unanimous) view of experts on urban land and public finance is that land price inflation can be brought down best, not through direct controls or expropriation, but through

attracting enough hectareage to come voluntarily into the market through sufficiently high taxation on land that should be urbanized. The experience of Taiwan has been studied as a successful application (Lent 1977). Other developing countries with higher taxes on vacant urban land are Argentina, Bolivia, Botswana, Brazil, Chile, Columbia, Cote d'Ivoire, Ecuador, Peru, Senegal, Syria, Tunisia and Turkey (Bahl and Linn 1992:171).

According to Yoingco (1988: 10-11), the general idle land surtax has never been collected in the Philippines, as mentioned above, because of inability to agree on a definition of "idle." In the Philippines, land taxation of up to local government units that exempt some tracts and levy lower taxes than what is allowed on other properties. Assessed values could be updated only every five years (now three years) and have lagged seriously behind the rate of inflation of 14.8 percent for the 1980s (GDP deflator).

Revised valuations must be authorized and are subject to challenges in court, but clear national standards do exist. According to a recent article by Tan,

The most important obstacle to effective implementation of the RPT ... [Real Property Tax, remains] the case-to-case method of valuation, which makes it physically impossible for local governments to achieve a fair and accurate valuation. The method is also prone to corruption, since each property owner is given the opportunity to negotiate with the assessor on the value of the property. This problem, combined with power politics at the local level, works against the implementation of RPT (1993:169).

The assessor for peripheral Antipolo did raise assessment an average of 660 percent during 1985-1990 reflecting actual sales and showing that it could be done. But in five Makati neighborhoods, assessed values in 1992 were only 16.7 percent of the prices of land advertised commercially (Tan 1993:162-163). For Quezon City

and one other municipality in Metro Manila, the property tax rate was 2.0 percent assessed value that were 19.3 percent of market values in 1991. Therefore, the effective tax rate was only 0.386 percent.

Low assessment was aggravated by shortfalls in actual collection (ADB 1989: 55). The penalty rate for late payment (2 percent monthly) was less than the return on alternate investment (Bahl and Linn 1992: 115). From many parcels, taxes were collected only at the time of sale.

As a result of low tax collection, local governments lacked funds for building and maintaining roads, drainage, and other infrastructure. Even what was built was too costly because of unnecessarily sporadic low-density development. The public sector lacked the means to "ensure that the location and phasing of infrastructure investment to guide private investment goes to low-cost environmentally suitable, urban expansion zones" (ADB 1989: 53). Local governments lacked funds for building the infrastructure that would have made more land physically accessible. Low land taxes fostered holding idle land and forced expensive dispersion in some areas and congestion in others a vicious circle.

When a social problem and its solution have been identified but little is done, chances are that opposing groups with power believe action means loss for themselves. Perhaps Robert Wade had it right in *The Economist* (April 4, 1992:81) that the "unpromising conditions" of the Philippines are a case "where the state elite is fused with the business and landed elites" in ways that hinder pro-market intervention. An official close to President Aquino was pessimistic about reform because of the strong opposition from some Congressional leaders, who own vast urban properties, and influential landed private sector individuals" (*Business Star*, February 21, 1991). The problem, however is not just that some families own vast tracts of land and cannot be pushed to sell through appropriate taxes. As stated before, by now unreported thousands of middle class Filipinos have put their savings into urban lots and

make up a strong constituency against substantial and efficient tax reform. Real estate may be their principal investment, their only dependable hedge against inflation, and their best hope of future wealth.

In 1989, Dekker studied in detail how one private northern subdivision of 725 hectares with 1,390 houses was organized in about two decades. He concluded that,

The case study of this paper showed that there is little reason for optimism with regard to cooperation by the bureaucracy ... Of crucial importance was the large measure of discretion politicians and officials enjoyed with regard to their involvement in the housing project and land distribution. This wide room for manoeuvre results from the fact that a strict and clear vision and policy toward the housing problem by the public authorities is lacking ... Personalism results in the concentration of land in the hands of those who use land mainly for investment purposes; in this way, personalism enhances the vacancy of relatively scarce land and with that, it undermines the functioning of the conventional land market (Dekker: 90,93).

Lower land prices for many can only be obtained by reducing expected wealth of others. One may tax site value or its betterment, withdraw development rights, or arrange readjustment schemes. But as Doebele had noted, most measures seem to

threaten, directly or indirectly, all property owners from the landed elite, the rising speculator, and the middle-income investor to the low-income family for whom land and house are its greatest economic stake in life ... Historically, major taxation or acquisition of urban land has occurred only at moments of revolution ... or at times when the general public outcry against soaring urban land prices and exorbitant profit-making from land sales have forced governments to act (Doebele 1983: 365).

In the absence of reforms, Metro Manila is likely to keep a much higher land development price markup than estimated in Bangkok, Hong Kong, Jakarta, Kuala Lumpur, Seoul, or Singapore. The city may remain lowest in urban infrastructure spending per capita and in access to amenities like piped water. The share of housing built without title or permits and made of impermanent materials will remain highest, while the annual construction of dwelling units of all types per thousand inhabitants will nevertheless stay lowest among these seven East Asian capitals (World Bank 1993). Conditions in provincial cities will reflect the same basic pressure, an unresponsive land market.

## **CONCLUSION**

The 1991 housing survey showed that Metro Manila households pay an income for dwellings that is no higher than the share typically paid in other countries. But Filipinos have less adequate housing than might be expected because so much more of this share of income is used for purchase of the land. In Manila, the lot is worth as much as or more than the dwelling itself. Negligible property taxes on idle land have discouraged timely sales and have hindered the performance of land markets, housing construction and the consequent turnover and allocation of the entire housing stock. A counterpart of these impaired markets is the low residential mobility of households compared to those in other countries. Another result is the extent of irregularity and lack of security of tenure which, ironically goes with lower mobility.

It may be that the acceleration of squatting and a fear of "professional squatting syndicate" has been more effective in triggering Philippine urban reforms than recognition of paralyzing economic effects. The 1992 Urban Development and Housing Act and a newly-elected administration are committed to urban land reforms. As one step, developers are henceforth to provide a hectare of land for social housing for every four hectares of



commercial housing that they develop within any municipality. Enforcing this, however, is not easy and does not address the basic problem. It is further more doubtful that this measure will persuade the powerful lobby of developers to favor an effective tax and administrative reform for bringing land to market.

The ADB consultants realized that "In the Philippines, as in other countries, a tax on idle land would be politically sensitive" (ADB 1989:55-56). Reviewing the literature on taxation in developing countries, Ahmad and Stern find the land tax "theoretically superior" and easy to monitor, but they note that "the rich and powerful have been particularly successful" in blocking it because "resistance to proper valuation and collection can be fierce and effective." Bahl and Linn have observe that there is a clear and dominant trend ... in the direction of taxing land at a differentially higher rate than improvements" (1992:100). But going a step further to pure site value taxation "can be perilous for the government, possibly also for the economist, and his damage credibility as an advisor" (Ahmad and Stern 1989:1074-75, 1078). Meanwhile in the Philippines, structures and equipment are taxed at *ad valorem* rates which are twice, or more as high as residential land (Tan 1993:156).

A forcefully clear explanation of the benefits of land taxation to landowners, developers, and the public depends heavily on accurate data, so that one may consider that achieving better record keeping and transparency from government agencies, as well as the capability to analyze the local situation using international indicators, as a promising sign of reform. In May 1993, a "National Shelter Indicators Roundtable Consultation and Workshop" was held with high-level representatives from both legislative and administrative branches of the Philippine government. The aim was to institutionalize better monitoring of the shelter sector in terms of equity and efficiency. The urban impasse in the Philippines, though extreme, has counterparts in other countries, where, with decades of experience, we have learned that tax collection becomes politically acceptable when the link to public services and smoothly functioning markets is understood.

## APPENDIX

### *Design of the Household Survey*

The household survey was carried out in conjunction with the UNCHS/World Bank Housing Indicators study during the period May 14 to July 7, 1991, by a team from the Philippine Women's University under the direction of Ms. Encarnacion Raralio. The sample was drawn not only from the official National Capital Region (NCR) but also from the peripheral settlements beyond NCR boundaries that has effectively become a part of Metro Manila. This addition is the urban contiguous area in the provinces of Bulacan, Laguna, Cavite and Rizal within commuting distance of the NCR. One respondent for every 600 households was to be sampled. With a population of some nine million and an average household size of five, the designated sample size was therefore 3,000.

Sampling design and the survey instrument of 58 questions were submitted to the Philippine National Statistical Coordination Board for technical review and clearance. This stratified, two-stage sampling design and estimating procedure was based on the Integrated Survey of Households of the National Statistics Office. In the eight major domains (Manila, Caloocan, Pasay, Quezon City, Makati, Pasig, other NCR, and the Periphery), there were 183 subdistricts called barangays. These were the primary sampling units, and their probability of selection was determined by the number of households in each area according to the 1990 Census of Population and Housing. Households were the secondary sampling units and were selected from the subsamples of barangays according to a formula giving each households in a major domain an equal probability of selection. The number of households selected in all primary sampling units represented the total number of households within the domain. Lack of an up-to-date master list of households resulted in the use of barangays maps and updated lists of residents prepared by barangay officials

or by the local homeowner associations for the final selection. Thus, the choice of households was determined by a random selection from structured groupings of barangays, based on the number of households in each.

After no serious problems were encountered in pre-testing the questionnaire, eight well-trained interviewers with two supervisors carried out the field enumeration. The usual editing and verification processes were carried out to ensure that the final set of 3,003 responses was complete and reasonable. Computations used the SPSS PC+ software package.

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