

Fall 1976

THE POLITICAL ECONOMY OF
INTERNATIONAL ECONOMIC EXCHANGE
AND DEVELOPMENT: A SYSTEMS
APPROACH TO THE STRUCTURING OF
THE INTERNATIONAL ECONOMIC
SYSTEM

THOMAS MARTIN BAUMGARTNER

Follow this and additional works at: <https://scholars.unh.edu/dissertation>

Recommended Citation

BAUMGARTNER, THOMAS MARTIN, "THE POLITICAL ECONOMY OF INTERNATIONAL ECONOMIC EXCHANGE AND DEVELOPMENT: A SYSTEMS APPROACH TO THE STRUCTURING OF THE INTERNATIONAL ECONOMIC SYSTEM" (1976). *Doctoral Dissertations*. 1128.
<https://scholars.unh.edu/dissertation/1128>

This Dissertation is brought to you for free and open access by the Student Scholarship at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact nicole.hentz@unh.edu.

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International

300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR

77-3458

BAUMGARTNER, Thomas Martin, 1943-
THE POLITICAL ECONOMY OF INTERNATIONAL
ECONOMIC EXCHANGE AND DEVELOPMENT: A
SYSTEMS APPROACH TO THE STRUCTURING OF
THE INTERNATIONAL ECONOMIC SYSTEM.

University of New Hampshire, Ph.D., 1976
Economics, general

Xerox University Microfilms, Ann Arbor, Michigan 48106

© 1976

THOMAS MARTIN BAUMGARTNER

ALL RIGHTS RESERVED

THE POLITICAL ECONOMY OF INTERNATIONAL ECONOMIC
EXCHANGE AND DEVELOPMENT

A Systems Approach to the Structuring of the International
Economic System

by

THOMAS BAUMGARTNER
Lic.oec., Universitaet Zuerich, 1968
M.A., University of New Hampshire, 1971

A THESIS

Submitted to the University of New Hampshire
In Partial Fulfillment of
The Requirements for the Degree of

Doctor of Philosophy
Graduate School
Department of Economics
September, 1976

This thesis has been examined and approved.

K. J. Rothwell

Thesis director, Kenneth Rothwell, Prof. of Economics

George W. Betz

George Betz, IMF-Adviser to the Bank of Indonesia

Thomas Burns

Thomas Burns, Asso. Prof. of Sociology

William R. Hosek

William Hosek, Asso. Prof. of Economics

Heidemarie Sherman

Heidemarie Sherman, Asst. Prof. of Economics

July 22, 1976

Date

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	v
ABSTRACT	vi
I. INTRODUCTION	1
II. THEORETICAL ASSUMPTIONS AND THE REAL SYSTEM OF INTERNATIONAL TRADE	19
1. The Heckscher-Ohlin Model and the Leontief Test	20
2. Multi-Factor Models of Trade	30
3. Trade and Trade Controls in an Imperfect and Dynamic Social System	46
4. The Structure of Trade Controls and Trade Flows	55
5. Summary	62
III. ELEMENTS OF A SYSTEMS APPROACH TO INTERNATIONAL EXCHANGE AND STRUCTURING	66
1. Actors and their Goals	67
2. Multi-Dimensional Valuables	74
3. Systemic Ramifications of Economic Exchange ..	78
4. Unequal Exchange	84
5. The Structuring of the International Economic System	88
IV. INTERNAL RESTRUCTURING	94
1. The Fall in the Wheat Price, 1873-1896, and European Adjustments	95
2. Power and Group Interests as Determinants of Economic Systems Adaptation	103

V.	THE STRUCTURING OF EXTERNAL ECONOMIC EXCHANGE RELATIONS	117
	1. Internal Structure as a Factor in External Structuring: The Establishment of an Unequal Exchange Relationship between England and Portugal	119
	2. World Power and External Restructuring: The Bretton Woods Agreements	133
VI.	STRUCTURING AND RESTRUCTURING: DILEMMAS AND TURNING POINTS	149
	1. The Dilemma between Domination and Development: The Case of Comecon	151
	A. Divide and Rule as a Strategy of Relational Control	151
	B. Domination and Development in the Case of Comecon	154
	2. A Turning Point for the International Economic System: The Oil Crisis	160
	A. Origins of the Power Reversal	160
	B. The Transformation of the International Economic System	166
VII.	CONCLUSION	179
	BIBLIOGRAPHY	184

LIST OF ABBREVIATIONS

Comecon	Council for Mutual Economic Assistance (CMEA)
DC	Developed Countries
EEC	European Economic Community
GATT	General Agreement on Trade and Tariffs
H-O	Heckscher-Ohlin model
IBRD	International Bank for Reconstruction and Development; the World Bank
IES	International Economic System
IMF	International Monetary Fund
ITO	International Trade Organization
MNC	Multinational Corporation
NIEPO	New International Economic and Political Order
NTB	Non-Tariff Barrier
OAPEC	Organization of Arab Petroleum Exporting Countries
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
R&D	Research and Development
UDC	Underdeveloped Countries; Less Developed Countries; Developing Countries
UNCTAD	United Nations Conference on Trade and Development

ABSTRACT

THE POLITICAL ECONOMY OF INTERNATIONAL ECONOMIC
EXCHANGE AND DEVELOPMENT

A Systems Approach to the Structuring of the International
Economic System

by

THOMAS BAUMGARTNER

The institutions and structures of the International Economic System (IES) become increasingly questioned as the countries of the Third World insistently demand a New International Economic and Political Order (NIEPO). In this context, the analysis of international economic exchange requires a more detailed and differentiated set of actors, and a multi-dimensional conceptualization of economic valuables and actors' goals, including, besides the economic dimension, social, political, cultural and military aspects of exchange. Furthermore, a dynamic analysis of international exchange has to incorporate the constraints placed on actors by IES institutions and structures, the actors' attempts to shape institutions and structures favorable to their action opportunities, and the feedback patterns which link the aggregate multi-dimensional exchange outcomes to the maintenance or transformation of the IES. Such an analysis has to include as inputs into and outputs from the operation of the IES inequalities in control by actors over valuables and power resources and in actors' positions in the structure of relationships. The existence of conflict between actors, and of patterns of dominance and dependency, is fundamental to this conceptualization of the IES.

This focus implies a political economy approach to international economic exchange where economic behavior is analyzed as an integral part of behavior in a social system encompassing economic, social, cultural, political and military spheres. The multi-dimensionality of economic exchange, the feedback patterns between the multiple levels of the IES, and the role of power inequalities necessitate the use of a systems method

of analysis.

A review of international trade theories and their empirical verifications shows that the strict assumptions of the Heckscher-Ohlin model have undergone modifications and relaxations and have been alternatively formulated to include, mostly implicitly, elements of the systems model mentioned above. Accordingly, Chapter III presents a more formal description of systems elements: the hierarchy of actors and their goals and action opportunities; the multi-dimensionality of valuables; the occurrence of systemic ramifications, i.e., the non-evaluated spin-off and spill-over effects of exchange activities by lower-level actors. The unequal accrual of power resources to actors in the IES through systemic ramifications is defined as unequal exchange. Higher-level actors particularly attempt to structure and restructure the IES to generate unequal exchange patterns where a country's lower-level actors have action and exchange opportunities which produce positive systemic and power ramifications.

Chapter IV elaborates on systems internal restructuring in response to events in the IES. The reactions of five European countries to the fall in the wheat price after 1870 illustrate the proposition that restructuring is in part determined by the interests of those groups which possess meta-power with which to institute adjustments favorable to their group interests.

Chapter V elaborates on two aspects of the structuring of the IES. The first, the development of an unequal exchange system between Portugal and England in the 17th century,

demonstrates how the dominant groups in Portugal exchanged economic concessions with long-term negative developmental ramifications for short-run military and political support measures by England. These higher-level exchanges helped to maintain the groups' continued dominance and favored their economic interests, all, however, to the detriment of the political and economic long-run development of Portugal. The second case demonstrates the use of a position of world dominance by the U.S. during World War II to realize, through the IMF, World Bank and GATT, the American conception of a democratic economic world order with favorable consequences for her own commercial interests. However, the power relations implied by the Bretton Woods institutions were different than those actually existing at the end of World War II and those later emerging with the economic development in Europe and Japan, with the result, that these institutions played their assigned role only for a few years after 1958.

Chapter VI deals with the problem of domination and development and the origins of systems transformations. The case of Comecon illustrates the dilemma faced by a dominant country, here the Soviet Union, between a strategy of divide and rule to ensure its continued dominance, and the development of institutions and structures favoring cooperation, growth and development necessitated by competition with another developing system. The second case traces the origins of the present conflict between OPEC and OECD. On the one hand, the exploitation of the oil producing countries led to the formation of OPEC. On the other, the rapid economic growth in the OECD area

shifted patterns of oil production and consumption. Both factors increased the relative power of the countries united in OPEC leading to increased oil revenues and control over oil production. OPEC is therefore in a position to engage, together with other Third World countries, in further attempts to restructure the IES in tune with their interests and vision of a less unequal world.

The concluding chapter suggests that the case studies have demonstrated the usefulness and fruitfulness of the systems approach to the political economy of the IES. Yet, this is clearly only the beginning of a further elaboration, formalization and verification of the systems approach to problems of international economic exchange, development and transformation of the IES.

CHAPTER I

INTRODUCTION

Today's international economic system (IES) is under attack. The countries of the Third World (UDC) demand with increasing insistency, at least since UNCTAD I in 1964 but especially since the events of October 1973, a revision of the rules and institutions governing international trade and investment as well as international financial and monetary matters.¹ Academic and official views in the industrialized countries (DC), confronted with the failure of the development strategies of the 1950's and 1960's to reduce inequality on the world level and to bring about self-sustained growth except in a few highly favored countries, are increasingly willing to consider and discuss such a course of action. The speech of the U.S. Secretary of State Henry Kissinger at the 7th Special Session of the UN General Assembly in 1975 provided assurances of an American willingness to participate in such discussions (Kissinger, 1975b).

However, UDC demand the establishment of a New International Economic and Political Order (NIEPO) (Bergsten, 1975;

¹For the present purpose all countries not belonging to the Comecon or the OECD (the developed countries - DC) are included in the category of Third World or underdeveloped countries (UDC). This is a short-hand way of talking about the world situation and fundamental interests in the world system.

Gardner et. al., 1974)² while the larger industrialized countries belonging to the OECD seem to consider at most some marginal adjustments. On the other hand, some representatives of OECD countries take the increasing interdependency of the world's countries as a fundamentally new fact which demands basic adjustments in the world system (Cooper, 1968, 1972a; Brown, 1972; Duchêne et. al., 1974; Moynihan, 1975).³ Some believe on the one hand in the need for, and the coming of, some form of world government. Their research is consequently directed towards the development of 'preferred world futures', the institutions made necessary by them, and the desired transition paths who could get us from the present to these futures.⁴ Others have subsumed the fact of world wide interdependency in the metaphor of 'spaceship earth'. They argue that the global system is facing in the near future limits to

²The declaration and action program "The Establishment of a New International Economic Order" passed at the Special Session of the UN General Assembly on "Problems of Raw Materials and Development" in May 1974 is reprinted in the UN Monthly Chronicle, May 1974. The resolution passed at the Special Session in September 1975 on "The Development of International Economic Cooperation" is contained in the UN Chronicle of October 1975.

³However Waltz (1970) maintains that at least the larger DC still possess an absolute freedom of action.

⁴The World Order Models Project is centrally concerned with the conceptualization of such alternative 'just world orders' (Bhagwati, 1972a; Mendlovitz, 1975). The concerns and goals of this project are not necessarily the same as those underlying the views and demands of the UDC with respect to a NIEPO.

its growth in population and material well-being (Meadows et. al., 1972; Mesarovic and Pestel, 1974). The implicit or explicit conclusion is that only structural and institutional changes both on national and world levels will keep the world system safely within the limits of a finite environment. The only difference is that some believe that the world will gradually and almost automatically evolve towards such a new structural and institutional setting while others see the need for rapid, planned and coordinated policy responses in the next few decades.

But whatever view or approach is taken, the structure and institutions of the International Economic System (IES) are centrally involved in these considerations and deliberations. Or, whatever the future changes in the global system, if brought about through agreed upon and planned action or through unplanned and chaotic struggle, the world economic order will be qualitatively transformed (Jolly, 1975:4). This suggests that the analysis and modelling of international economic exchange as it relates to systems development and transformation will have to deal explicitly with at least four aspects of economic action. These four aspects -- dealt with in the past in a very limited if not arbitrary way -- are:⁵

⁵ Economic historians, institutionalists, neo-institutionalists and, to some extent, Marxists, studies in the fields of industrial organization, development, and more recently also urban and environmental economics, as well as numerous area, industry and case studies have frequently touched upon these aspects both descriptively and analytically. But the statement is true in the same sense that Gardiner Means' comment is true when he argued that theoretical economists have so far refused to reformulate "over-all theory in terms of the pervasive non-classical competition" which has been shown to exist so much

(i) Economic Actors. Theory is still based on undifferentiated sets of households and firms, and in the case of international trade theory, of countries. While households have hardly changed since the time Adam Smith developed classical economics, firms form today a hierarchy of organizations of vastly different size, scope, and organizational structure. In the theory, the multinational corporation (MNC) with its "global reach" (Barnet and Mueller, 1974) is conceptually the same as the corner grocery store, a point central to the criticism of neo-classical theory by Galbraith (1968). Furthermore, to this day, governmental units are only implicitly included in theoretical macro-analysis as undefined managers of aggregate demand, exchange rates, tariffs, and as providers of foreign aid, to mention a few of the more important activities that impinge on the IES.⁶ But not only are they unspecified, they remain organizations without multiple goals and interests, and contradictory internal and differentiated power structures which characterize them in real life. Even more complete

(Means, 1972:ix).

Kolm (1975:136) argues that economists in the past have already covered almost any subject and dealt with most problems. References quoted here and in subsequent chapters represent therefore an eclectic selection in support of the arguments presented.

⁶The 'New Political Economy' recognizes the need to analyze government in order to understand economic policy. To this end, its representatives apply the propositions and tools of neo-classical economic theory to the analysis of political behavior. First contributions were made by Downs (1957) and Buchanan (1968), more recent treatments are by Bartlett (1973) and Breton (1974).

abstraction is made of the rapidly increasing number of sub-national governmental units, non-governmental national and international organizations, governmental international organizations, and even some supranational organizations with almost independent powers. Many of these organizations participate and intervene in the international economy and are also often heavily involved in the efforts at economic development (Hawkins, 1970:98-110).

(ii) Economic Values. Theory limits itself to the analysis of households, firms, countries and, to a limited degree as just argued, governments. These economic actors try to maximize economic goal functions within constraints. The latter are often economic in nature, especially when formulated explicitly, although the economic action space is implicitly understood to be also constrained by non-economic institutional factors. It is clear that social life is more than economic life. It includes in addition to the latter political, social, cultural and military aspects (Chodak, 1973; Galtung, 1971). This multi-dimensionality characterizes interests and goals of actors, the material and non-material valuables which are the means and often the ends of social life, as well as the outcomes of the many interactions between actors.^{7,8}

⁷Organizational theorists like Maslow (1954:80-106) and March and Simon (1958) were some of the first social scientists to stress the importance of non-economic goals for individuals in their roles as homo oeconomicus once they had reached a certain material subsistence threshold. Galbraith (1968) and Boulding (1969) for example argued that therefore tastes and preferences could not be assumed to be autonomously determined but were the result of social processes (including advertising). Myrdal (1972), and also Boulding (1969), argue

(iii) Institutions and Economic Activity. Mainstream economic theory takes institutions as given. Actors belonging to an exchange system are assumed to have equal access chances to every other actor in the system.⁹ Therefore little attention is paid to the constraints social norms, moral values, rules and laws place on economic action possibilities and outcomes. Institutional factors are habitually classified as remaining unchanged over the time period analysed

that economic behavior can and is often moral behavior, that egalitarianism is an established fact which makes it impossible to build a utility theory on the basis of an individualistic rationality assumption.

⁸Today, economic theoreticians use four methods to circumvent the problem of multi-dimensionality. (i) They continue to postulate that households and firms are purely economic constructs which are able to abstract from the interests they or their individual members may have in other spheres. (ii) They take refuge in the assumption that the economic actors are able to assign economic values to all events, outcomes, and goals in the non-economic spheres of social life. (iii) They recognize explicitly the existence of variables in other spheres but postulate that they can be treated like any economic variable. This is the approach of the New Political Economy. And (iv) they accept that case (ii) does not hold because of institutional limitations. The concept of "externalities" is used to handle and explain ad hoc economic and non-economic outcomes not reflected in the economic calculus of those actors party to an economic activity which gives rise to an externality.

⁹The importance of limited information, transportation and transaction costs for the structuring of interaction possibilities have been recognized since the important work by Coase (1952, 1960) and Buchanan and Tullock (1962). But despite these contributions, Rothschild (1975) could complain recently that the pure theory of international trade neglects these costs almost completely and this despite the fact that such cost factors are probably more important in international trade than national one.

or as not being significantly affected by the activities modelled.¹⁰ These views have two general consequences for research specification. Firstly, actors are assumed to maximize action outcomes passively within the institutional limits in which they find themselves. Actors are not seen as being actively concerned with overcoming unsatisfactory constraints through direct action.¹¹ However, corporate mergers, political lobbying and bribing, and many research and development activities could be seen as purposeful activities of this kind.¹² Secondly, not much effort is undertaken to study those outcome dimensions of economic activity which strengthen or undermine a given institutional set. Economic theory is essentially based on linear action-outcome patterns; inputs are transformed into outputs and even such important economic variables like income and wealth distributions are not part of the output vector. Feedback which could affect the initial conditions of

¹⁰The short-run nature of the analysis is justification for this procedure. However, the temporal limits of this short-run are never specified, nor do models of economic growth deal with such institutional considerations, although they are certainly concerned with the long-run (Britto, 1973:1360).

¹¹However, see Perroux (1964:2).

¹²The largest MNC have to be seen as supra-national organizations "whose internal decisions have as much impact on patterns of trade and international relations as decisions taken by governments" (Child 1969:1).

this type are rare except in the work of Myrdal (1958, 1968). However, the absence from economic models of feedback mechanisms with respect to structural and institutional factors as well as of active actors who try to overcome the constraints facing them becomes more critical with the emergence of global corporations, increased world interdependence and the emergence of bottlenecks and limits facing all countries of the world.

(iv) Structural Inequality and Conflict. In general, actors in a system are structurally differentiated.¹³ For one, actors differentially exercise control over and have access to resources and valuables in the many spheres of social life. This differentiation exists not only in terms of the quality and quantity of resources controlled but also in the degree of control exerted over them. Secondly, actors find themselves in different positions within a historically determined structure of relationships between and among the actors of a social system. All these inequalities constrain action opportunities and action outcomes and in turn are affected by them.¹⁴ Consequently,

¹³Point (i) referred to the need to differentiate more extensively between different categories of actors. The focus here is on the differentiation of actors of a given category. Both problems involve structural differentiation but at different levels.

¹⁴Price theory is including many of these elements implicitly in its analysis insofar as revenues for example determine budget constraints or a firm is limited in its pricing actions depending on the number of competitors in the market. But the full significance of such differences becomes clear only in a dynamic analysis which includes inequality itself as a variable. (See also footnote 16).

actors may engage in attempts at directly modifying these structural constraints.

Structural inequalities of the kind described here are pervasive and persistent elements in the different spheres of social life including the economic sphere. For Arthur Lewis, for, example, economic growth leads inescapably to inequalities of many kinds as growth, in general, causes impoverishments of some professions, sectors, geographical regions, and maybe even countries (Moynihan, 1975:42).¹⁵ It seems natural, in this context, to suspect in initial inequalities the leading causes for continued uneven growth and development processes.¹⁶ Inequalities provide actors with differentiated powers

¹⁵ See also I. Adelman and Morris (1973). However, Kuznets (1955, 1966) adduces some evidence from Germany, Britain and the U.S. showing that economic growth and development increased personal income inequalities only in the initial phases of industrialization. (See also following footnote.)

¹⁶ Both Friedmann (1972) and Kaldor (1970) develop models of regional development where initial imbalances lead to further uneven development. In this context, Kaldor argues that the existence of a central government with increasingly more important central taxation and expenditure powers limits regional intra-country inequality which, therefore, is not allowed to or cannot develop to the extent that inequality develops on the world level. Kuznets (1966:206-217) too seems to assign to the central government an important non-market role in reversing the development of income inequality in the later stages of economic growth in industrialized countries. I. Adelman (1975) makes the same point.

Myrdal (1958, 1968) developed his principle of circular and cumulative causation in order to explain increasing inequality. Initial inequalities of a general kind are the cause for these vicious circles. The same holds for the marxian models of uneven development (Amin, 1971).

Bowles (1972) uses initial inequalities to explain the

and enable some actors to use their power to structure the system in their own favor (Wilber and Wisman, 1975:673). But in the case where inequalities lead ultimately to the institutionalization of inequality, conflict between actors is much more likely to prevail than basic harmony. This does not mean that conflicting goals and relations are necessarily dominant and replacing harmonious ones as the basic foundation of social activity. However, models of world trade cannot a priori assume harmony of interests, and absence of conflict and dominance patterns, when income inequalities at the world level are two hundred times larger than at the time of Adam Smith (Kaldor, 1970).¹⁷

The model developed and illustrated in this treatise incorporates in a central way elements which reflect the critique

reproduction of inequality through the school system.

None of these approaches has been absorbed in the core theory. Even the concept of immiserizing growth remains a fringe concept in international economics despite the increasing income inequality on the world level (Bhagwati, 1969a: 325-338; Johnson, 1967b). This remains so despite the demonstration that immiserizing growth is not only the result of faulty policies but can occur with simultaneous growth in several countries and the absence of monopoly power in international trade (Bhagwati, 1969b; Melvin, 1969). Of course, the important point to explain in this context is the particular processes that produce the appropriate shifts in the offer curves (Balogh, 1973:8).

¹⁷ Benjamin Ward (1972) makes many of the points mentioned in the above discussion of the four aspects. If economists want to be able to contribute to the solution of social problems they will have to deal with three areas: (i) the growing importance of externalities; (ii) the increasing interrelationship of economic variables with non-economic factors; and (iii) the problem of distribution.

made above of some aspects of economic theory and, specifically, international trade theory. The chosen title -- The Political Economy of International Economic Exchange and Development. A Systems Approach to the Structuring of the International Economic System -- suggests three different levels of analysis: (i) the method used is systems analysis; (ii) the approach is one of political economy; and (iii) and the subject is the structuring of the international economic institutions and structures which mediate the economic exchange activities of actors belonging to different countries. Initial interests in questions and problems related to the changes in the terms of trade between UDC and DC led to the realization that these questions demanded a more general framework of analysis going beyond the pure treatment of economic trade theory.

The adoption of a larger perspective suggested in turn the use of a systems analysis. As the research proceeded on the bases of the individual cases reported in chapters 4, 5 and 6, it became necessary to develop new systems concepts and elements in order to be able to describe the fundamentals of each situation. Of course, the availability of this language made the chosen political economy approach much richer and helped to bring about a general view of the problems analysed.¹⁸

¹⁸The particular research results reported here have greatly benefited from and have also substantially influenced simultaneous research on other economic problems (Baumgartner and Burns, 1974; Baumgartner *et. al.*, 1975c), non-economic problems (Baumgartner *et. al.*, 1975a), and general theoretical and methodological questions (Burns and Meeker, 1975; Baumgartner *et. al.*, 1976b).

The scientific perspective governing the conceptualization and model of the IES is inspired by the particular approach to modern systems theory originally outlined by Buckley (1967).¹⁹ This perspective focuses on actors as social beings which act in a complex world. Their action possibilities are constrained by the distribution of resources of many kinds, by institutions in different spheres, and their positions in the structure of possible relationships to other actors and valuables. In general, actors are significantly differentiated in all three respects and, as a consequence, will experience systematically different outcomes as they act and interact within the social system. Existing inequalities will therefore most probably be maintained as basic inequalities become and are built into the institutions themselves. However, the system is complex. Actors are not only economic actors but to differing degrees also social, political, cultural beings. They therefore have often to reconcile conflicting goals and possibilities which often belong to different spheres. In general, actors are unable to model completely and accurately the world in which they act and interact. As a consequence, human action, including economic action, has unintended consequences which may affect the distribution of valuables, the actors' positions in the structure of

¹⁹Important further developments appear in Burns (1973), Burns and Buckley (1974) and Buckley *et. al.*, 1974).

A different contribution to the development of a systems theory of development is by Tehranian (1974).

Parsons and Smelser (1956) present an early argument why the economy should be analysed as a subsystem of the larger social system.

interactions, and institutional effectiveness in ways which are undesirable from the viewpoint of dominant actors. The operation of the system may in this case lead to systems transformation possibly even in the direction of greater equality among the actors.

Actors will also often be unwilling to operate within the given constraints of the system and they will attempt to modify directly the constraining factors (like institutions) which limit them in their action capabilities. These activities, directed towards the higher-level characteristics of the system (which are normally taken as given in economic analysis), the unintended consequences of human activity²⁰ and several natural structuring factors as well as the differentiated outcomes from the normal operation of the system provide feedback links within the system (Baumgartner et. al., 1976a). Such links are central properties of the systems model of society (and therefore the IES) and their modelling and analysis are crucial to the understanding of societal development, and especially the links between international economic activities and national development and economic growth of DC and UDC.

²⁰Unintended consequences are not synonymous with random events or effects. The former can be quite deterministic events which however were not foreseen by the actors when choosing the course of action producing them. They are the result of decision models which contain faulty or incomplete representations of reality (Rosen, 1974; Burns and Meeker, 1975; Baumgartner et. al., 1975c).

Such a systems approach and the model and its constituent elements developed here have general applicability in the analysis of social systems, both on the macro and micro levels (Burns, 1974; Baumgartner *et. al.*, 1975b). However, the focus in this instance is explicitly on the economic sphere of social life. But the analysis is and cannot be purely economic in the sense that only economic values in terms of utilities and profits determine the consumptive and productive activities of the households and firms while all the other values and goals, institutional constraints, and non-economic effects of economic activities are either absorbed in an all-embracing ceteris paribus clause or simply excluded from the analysis.²¹ Here, institutions and non-economic values and goals affect significantly and explicitly economic behavior. Conversely, economic activity has non-economic results and its effects on institutions are also explicitly included in the analysis. Institutional, structural and power factors are integrated with economic factors. It is in this sense that one can speak of a political economy analysis.²²

²¹See footnote 8 of this chapter for an elaboration on this statement.

²²Only a few remarks about the use of the term 'political economy' can be made here. The term becomes today again increasingly popular after its early use in the 18th and 19th century to describe economic analysis in general (especially in its classical form). Even Samuelson now claims this label for his kind of economic theory and analysis (Samuelson and Scott, 1975:v). As already explained in footnote 6 of this chapter, the term of the 'New Political Economy' is claimed for an analysis which applies the theorems and propositions of neo-classical

The case studies which served as background for the development of the theoretical conceptualization of the systems approach to political economy problems, and which will be used in chapters 4, 5 and 6 to demonstrate and amplify this approach, are all taken from the area of international economics and economic development. This area has been chosen for a detailed study not only because of its topicality. Economic development is a long run problem and furthermore can only succeed if it is accompanied by developments either in a parallel or possibly dialectic fashion in other spheres of social life. Economic development is only continuous if institutions develop concurrently with the growth of productive powers. Development therefore includes all the elements which make up the characteristic nature of the systems approach as outlined above.

Past economic developments of both DC and UDC can be understood only in the context of the operation of the IES (Wallerstein, 1974; Amin, 1971).²³ Most countries will continue

economic theory to the analysis of the behavior of governmental actors (Uphoff and Ilchman, 1972:1). The political economy of marxian analysis links the operation of the economic system to the non-economic superstructure, using at least on the more abstract levels of analysis a dialectic relationship between the two. Institutional and neo-institutional economics, or what Gruchy (1947:550) once called 'holistic economics', is insofar political economics as its focus is on the structure and functioning of human relations as determinants in the production of goods and services. Technological change is seen as the driving force, moderated by individual and group goals, including non-economic ones -- determining the development path of the economic system and its institutions (Gruchy, 1972:293-298; 336-337).

²³The dialectic links between continuous economic growth and development, structural and institutional transformations,

to be linked very intensively to the IES independent of its future forms. It is therefore of continuing interest to inquire about the links which may exist between the structure of the IES, the types and nature of international economic exchange activities, and their developmental consequences for the national systems involved in these activities. As a corollary, it is of importance to model, analyze and understand the relationship between exchange outcomes and the stability or transformation of the institutions and structures which make up the IES. These matters include the study of the active attempts by social actors to structure the IES in such a way that its operation generates outcomes which are supportive of their objectives, both economic and non-economic. It is this focus on the IES and the interaction of its structural and institutional forms with economic exchange and its outcome which characterizes this treatise as an economic one, even though the analytical framework is concerned with the social system and its operation as a whole.²⁴

and the changing nature of trade structures is admirably demonstrated in the model of development presented by Paauw and Fei (1973) where they differentiate between phases of import substitution, export promotion and export substitution. Okita (1970) presents a somewhat similar description (although concentrating on the last phase) of the Japanese 'virtuous circle of accelerated growth'.

²⁴Breton (1974:11-21) uses some of the same arguments to justify his type of New Political Economy analysis as valid economic analysis. However, the argument is not only one over the boundaries of economics and the economic process which Boulding (1969) and Galbraith (1973) would like to see extended in specific directions, and Georgescu-Roegen (1966:101-107) and

Chapter II shows that much of the traditional theoretical discussions and empirical investigations of international trade problems use elements and concepts which are at the basis of the approach outlined here and elaborated and applied to specific historical cases in the later chapters. However, these elements and concepts are mostly treated as refinements or deviations from the structure of the classical market model underlying economic theory since Adam Smith. But when all these refinements and deviations are brought into the same theoretical framework, it becomes quite obvious that this system is qualitatively different from the one postulated in economic theory and underlying so much of our economic reasoning. Chapter III therefore will present in a relatively abstract way the major elements and concepts necessary for the analysis of the economic aspects of such a system. Chapters IV, V and VI provide the application of this systems model to past and actual events in the IES. Chapter IV concentrates on the ramifications internal to a country due to events in the IES. Chapter V concentrates on the IES itself. Two instances in the past are investigated where a country used an initial power advantage to try to structure parts or even the whole of the IES in an attempt to maintain this power advantage

Kolm (1975) in a more general way, the latter calling for a 'science morale et politique'. One consequence of the acceptance and modelling of a world full of "interdependencies and complex causal sequences" is the need to abandon the positivist methodology (Kapp, 1970; see also the reply by Beckerman (1972) and the rebuttal by Kapp (1972) and indirectly by Showler (1974).)

and possibly even to further it with the aim of assuring complete dominance. Chapter VI deals also with the structuring of the IES. But the focus here is not so much on the basis of such structuring attempts and the processes of using power to structure the IES than on the problems and dilemmas that can be inherent in such structuring efforts. A first part illustrates the dilemma that can arise between the desire to structure a dominance system and the need to maintain a minimal economic performance of the collective system. A second part concentrates on the possibility of turning points in a system of dominance using the recent events of the oil crisis as illustration of the processes related to such reversals.

CHAPTER II

THEORETICAL ASSUMPTIONS AND THE REAL SYSTEM
OF INTERNATIONAL TRADE

The theoretical framework in economics underlying much of the analysis related to international trade is in large measure based on or linked to the Heckscher-Ohlin (H-O) model. This chapter therefore begins in Section 1 with a brief description of the basic assumptions and propositions which make up the H-O model.²⁵ A review and discussion of the effort by Leontief (1954) to test the model by showing that U.S. trade was in fact H-O trade concludes the section pointing out how Leontief's effort started a process of, more implicitly than explicitly, relaxing the H-O assumptions. Section 2 continues the review of different trade models and their tests but focusing more on alternative hypothesis and explanations. The purpose of this review is twofold. For one, it becomes clear that many tests which purported to verify the H-O model were in fact using assumptions fundamentally different from those originally postulated in the model. Secondly, the modifications of the H-O model as well as the alternative

²⁵Section 1 is not intended as a survey of trade theory. Reviews of the development and present state of the pure theory of international trade are presented by Chipman (1965a, 1965b, 1966), Bhagwati (1969a:3-122) and Chacholiades (1973) among others.

hypothesis show clearly that they contain many of those assumptions and elements which were deemed to be essential elements of a systemic analysis of the IES. Section 3 then returns to the H-O model, describing its policy implications and comparing them with recent developments in this area. Section 4 takes up the problem of trade intervention and controls by pointing out that the structure of trade controls in DC is quite specific. The same holds for the structure of exports and imports of DC and UDC which differ significantly for the two groups. These two findings combined suggest that they are the result of a purposeful will set to impose a certain structure on the IES. A summary section then relates the findings in Chapter 2 to the introductory remarks in Chapter 1 thus setting the stage for the theoretical developments of systems elements in Chapter 3.

1. The Heckscher-Ohlin Model and the Leontief Test

The pure theory of international trade is centrally concerned with (i) the demonstration of the causes of trade; (ii) the determination of equilibrium prices and quantities traded; and (iii) the welfare implications of trade and trade controls. In this sense international trade theory is micro-economic price theory where countries replace households and firms as the basic units of analysis without however eliminating the latter as the basic actors in the system. In order to be able to proceed with the analysis on this level of aggregation and to arrive at the conclusions of the H-O theorem

that a country exports the goods which use intensively the relatively abundant factor,²⁶ production and welfare functions have to be constrained. The production function on the country level has to be homogenous of the first degree. This in turn implies that the economy on the country level has to exhibit the structure of an economy in perfect competition. If in addition the production functions exhibit diminishing marginal returns along isoquants, factor and commodity price ratios will be uniquely related to each other (Samuelson, 1948, 1949).

Social welfare functions can be constructed and not simply assumed only if individual households have identical and homothetic tastes, or instead of the latter condition, equal factor endowments (and therefore equal income and wealth positions) (Chacholiades, 1973:122-128).²⁷ Samuelson (1948, 1949) has shown that if the production functions in the two

²⁶ Factor abundance can be defined using either a quantity or a price definition with implications for the determination of the exportables in case of factor intensity reversal (Chacholiades, 1973:202-204).

²⁷ The sufficient conditions for identical tastes on the country-level are restrictive. Chacholiades (1973:123) maintains that tastes are reasonably identical within a given country especially if it has a uniform culture. This argument however undermines the importance of consumer sovereignty as any planning agency could take over its role in a market economy and allocate the goods in the same pattern to consumers. Samuelson (1956) has shown that an appropriate social indifference map can be constructed if one assumes a redistribution of income which maximizes social welfare. This naturally begs the question.

countries are identical and without factor intensity reversal over the relevant range,²⁸ and if the consumption patterns in the two countries are identical, trade will tend to equalize relative factor prices and take on the structure predicted by the H-O theorem.²⁹ It is in this sense that international trade is a substitute for international factor mobility in equalizing marginal rates of transformation and substitution in the two countries.³⁰

The significance of the H-O theorem is contested. This does not surprise in view of the restrictive assumptions that are necessary to arrive at the strong version of the theorem as stated by Samuelson (1948, 1949) and the large gap between these assumptions and reality. The formal correctness of the theorem is not in doubt but the meaning of it, or the value of the conclusions based on it with respect to the ex-

²⁸The investigation by Minhas (1962) seemed to confirm the existence of widespread factor intensity reversals. Subsequent research has produced contradictory evidence (Bhagwati, 1969a:100-107).

²⁹Samuelson (1971) revises his strong statement of 1948/49 that relative factor prices will be equalized through trade. He accepts now the original Ohlin version that the opening of trade will only narrow the difference between relative factor prices.

³⁰Additional conditions are incomplete production specialization and absence of transportation costs. Factor supplies have to be absolutely inelastic and while world commodity markets are perfectly competitive, factors of production are absolutely immobile internationally.

planation of the sources of trade, the determinants of the observed trade pattern, and the formulation of trade policies are.

Chipman (1965a:479) lauds the theorem as representing "probably the most complex and impressive theoretical structure that has yet been developed in economic thought." Clement et. al. (1967:96) see the theorem's value not only in its logical consistency but also in its superiority to the labor-cost theory of trade. But as Kornai (1971:9) argues in his general criticism of the foundations of neo-classical general equilibrium theory, a theorem should not simply be accepted because its assumptions and axioms are internally consistent and its derivation is logically unassailable. Rather assumptions and basic propositions should also describe the real world in sufficiently accurate terms.^{31,32}

³¹ 'Sufficiently accurate' is the key expression. Unfortunately we do not have a developed concept capable of measuring the 'degree of proximity' between theoretical postulates and the structure of the real world (Kolm, 1975:131).

³² Haberler (1961:20-21) and Harrod (1957:37), the latter on the basis of the presence of factor intensity reversals, question the scientific value of the theorem on similar grounds.

Cooper (1970:436) expressed recently his doubts about the relevancy of the pure theory of trade noting that Michaely (1968) seemed to be able to explain the pattern of trade without making a passing reference to the H-O theorem but stressing accidental historical developments as determinants of specialization in and export of manufactured products.

Others see the value of the theorem in its setting of a benchmark. Chacholiades (1973:265) thinks that its value lies in the fact that it allows the identification of those variables which determine the impact of free trade on factor prices. Harry Johnson (1968a:88; 1970a:19) takes a similar position. The theorem is not a prediction about the real world but states the necessary conditions for factor price equalization and therefore for world welfare maximization.³³ The theorem permits the identification of those real life conditions which prevent the factor price equalization from coming about. One can then determine and design the appropriate corrective policies.

In this situation one could naturally fall back on the positive methodology of Friedman (1953:1-43) and accept the H-O theorem and its underlying assumptions as a valid base for further analysis if the propositions derived from it coincide with reality. However, such tests are rather difficult to design as the so-called Leontief paradox clearly demonstrated. Leontief (1954, 1956) tried to establish the link between factor availability, factor proportions and the trade structure of the U.S. in one of the most important tests of the H-O model. His findings, unfortunately, were rather con-

³³That is, the theory becomes "the 'grand parable' that is still defended against non-believers but is not taken too seriously as a scientific explanation of 'what is'." (Wilber and Wisman, 1975:672). See also Shubik (1970).

trary to the expected result.³⁴ He found, using the input-output table of 1947 for the U.S., that U.S. export industries as a whole were relatively more labor intensive than import replacing industries. This result was in contradiction to the predicted pattern based on the H-O theorem and the widely accepted assumption of the U.S. as a relatively capital rich country.³⁵ Leontief's findings did not lead to the rejection of the H-O model. For one, methodological and statistical objections led to doubts about the validity of Leontief's test. Secondly, and more importantly, modifications in the basic H-O assumptions seemed to be able to resolve the paradox without somehow destroying the central idea of the theorem.³⁶ Leontief

³⁴It is difficult to understand why Leontief ever thought that his test could verify one of the H-O predictions. Samuelson (1949:181) himself seemed to be much more cautious in this respect:

I cannot pretend to present a balanced appraisal of the bearing of (the H-O) analysis upon interpreting the actual world, ...: on the one hand, I think it would be folly to come to any startling conclusions on the basis of so simplified a model and such abstract reasoning; ...

³⁵Leontief did not show that the U.S. was capital abundant. He simply assumed it. Naturally it is not permissible to conclude from the relative factor proportions of the exportables that the U.S. is relatively capital rich (Jones, 1956-57).

³⁶Concise reviews of this debate are contained in Bhagwati (1969a:28-34), Chipman (1966:44-57), Clement *et. al.* (1967:98-104) and Travis (1964). Bhagwati (1969a:33) pronounces himself an agnostic on the veracity of the H-O theorem. Clement *et. al.* (1967:104) call essentially for a better data base to allow a fair test of the theorem. The data base is still a problem as Finger (1975a) points out.

(1956) himself introduced efficiency units of labor as the modifying additional element.³⁷ This can be taken to mean either that different countries have different production functions, that factors of production are not homogenous, or that additional factors of production beyond capital and labor are important in the production process.³⁸ In general the model was expanded to encompass a multi-country, multi-

³⁷Bhagwati (1969a:31) points out that the use of relative wages as efficiency weights already presupposes the correctness of the H-O theorem. It also means that the wage rates are implicitly contained in the independent variable used to explain the relative factor price and therefore implicitly the (average) wage rate. This is obviously an improper procedure.

³⁸Caves (1960:93-101) discusses these definitional problems. The three explanations seem to be closely linked. A non-homogenous factor implies that the units embody differentially one or more characteristics. But it is rather arbitrary if one sees, for example, human capital as such a differentiating characteristic making labor non-homogenous or as an additional factor of production besides 'pure labor'. Also, Haberler (1961:20), leaning on Samuelson (1948: 181-182), has pointed out that production functions in different countries can always be made equal if enough variables are explicitly recognized. But in the latter case the concept of the production function becomes empty.

Posner (1961:326-328) rejects the multiplication of the number of explicitly recognized factors of production because analysis then becomes description.

commodity and multi-factor world.^{39,40}

The Leontief test raises, however, the much more general question to what extent the different conclusions of the H-O theorem can be actually tested. The model, its theorems and all of the welfare theoretical conclusions based on it are derived from long-run, comparative static equilibrium analysis. The IES however is rarely static or in equilibrium and the observed trade patterns and price relations do therefore not reflect equilibrium positions. The most one can hope for is that trade under these circumstances

³⁹The H-O theorem becomes quite ambiguous in some of these cases and depends on the adoption of additional restrictive conventions or reinterpretation of concepts. For a discussion see Clement *et. al.* (1967:56-60) and Baldwin (1971b:132).

For example, multi-factor models lead to definitional problems with respect to the concept of relative factor endowments and factor intensities (Samuelson, 1953-54; Bhagwati, 1969a:26). And Jones (1971), e.g., has to assume in his three-factor model that only two factors enter into any one commodity. It also becomes impossible in the multi-factor case to reason a priori that the production functions in different countries are in fact the same (Chacholiades, 1973: 225). Lacking this proof the H-O theorem becomes even more a logical system with only tenuous links to the analysis of trade. If the production functions are really different, then the theory would have to include a theory of the production of the production function before it could be applied to the analysis of trade.

Ambiguities occur also in the multi-country case where one can adopt bilateral or multilateral definitions of relative factor abundance (Bhagwati, 1969a:26-27). The simplest expansion of the traditional H-O model seems to be possible in the multi-commodity case (Bhagwati, 1972b). But even this case demands reinterpretations (Chacholiades, 1973:216-224; Vanek, 1968; Vanek and Bertrand, 1971).

⁴⁰The multi-country case does not seem to have affected the Leontief test as the U.S. was clearly the leading country. Tatemoto and Ichimura (1959) however show that Japanese exports

produces a tendency towards the purported trade pattern and factor price equalization (Chacholiades, 1973:264). The problem with a test of the H-O model lies in the interpretation and specification of these tendencies.⁴¹

The Leontief test of the factor content of U.S. trade was based on the U.S. input-output table and trade structure for 1947. This period lies about halfway in between the end of the war and the beginning of European reconstruction. The U.S. accumulated net exports of over \$32 billions between 1946 and 1949. 1947 alone contributed almost one third to this trade surplus. West Germany at that time was still under allied control. Its economy was administered and controlled. Its currency reform took place only in 1948. The British devaluation of 30% in 1949 was a reflection of the serious disequilibrium of the British economy in the immediate post-war years. Kindleberger (1962:78-80) mentions that the trade structure of West Germany and other European countries during these years did actually remain the same as in the prewar years. The trade structures did not adjust to the drastically changed factor availabilities. Instead reconstruction was directed towards the reestablishment of the prewar factor

to more developed countries are relatively labor intensive, those to less developed countries relatively capital intensive.

⁴¹This is one of the fundamental points of criticism of positivist (neo-classical) economic theory. See e.g. Hollis and Nell (1975), Kaldor (1972), Kornai (1971), Mini (1974), Solo (1975) and Wilber and Wisman (1975).

proportions through massive capital formation financed with Marshall aid. And finally, as Travis (1964) has pointed out, most countries had actually at that time a sophisticated tariff system in place and had had so for many years.⁴² It is therefore not very clear what the Leontief test could have possibly proven. This problem seems also to hold for alternative trade theories which will be discussed in the next section. A testable model, it seems, would have to include not only a positive theory about the trade determining effects of the elaborate tariff systems (Travis, 1964) including the even more complex systems of non-tariff barriers (Baldwin, 1970) which actually exist, but also some notion of reaction or adjustment speeds of the IES to various changes.⁴³ That alternative trade models seem to be often superficial and journalistic might only reflect this lack of a general theoretical model capable of handling the complexity of the IES (Bardhan, 1970:5).⁴⁴

⁴²Baldwin (1971b:130;139) points out that tariffs can shift trade away from the postulated H-O structure without, however, generating the paradoxical structure found by Leontief.

⁴³Time is essentially a logical element in the models of growth and trade (Soedersten, 1964; Bardhan, 1970) as Robinson (1962:22-29) points out. They lend themselves only with difficulty to the analysis of these problems. Also, Stern (1973:865) mentions that these models do not incorporate the dynamic effects of tariffs and other trade control measures.

⁴⁴ Ohlin (1970:331) himself seems to be little perturbed by this variety of competing approaches:

In the last few years I have become more

The next section will provide a review of such alternative formulations of the determinants of trade. They all relax in one way or another the stringent assumptions of Samuelson's formulation of the H-O model.

2. Multi-Factor Models of Trade

As mentioned in the preceding section, Leontief's paradoxical findings stimulated a renewed and not yet terminated search for additional factors of production which when incorporated in the model could explain the observed structure of trade and still preserve the idea that relative factor proportions determine trade structures. These so-called neofactor proportion accounts of the determination of trade patterns - as opposed to the neotechnology accounts - have taken different factors of production as the missing explanatory factor although, basically, they are all concerned with the complete specification of capital and labor (Harry Johnson, 1970a).⁴⁵

sceptical about the fruitfulness of the application of so much scientific energy to a refined and detailed analysis of models based on violent abstractions. It is perhaps more fruitful to use several new models, and to admit that they all, taken together, can do little more than increase our understanding of the problem.

⁴⁵Baldwin (1971b:141-143) concludes at the end of his extensive review and testing of alternative trade models that a two-factor model will never be sufficient to explain trade patterns. He agrees with Hufbauer (1970) and Kenen (1970) that more elaborate models are necessary which include not only multiple factors but also barriers to factor mobility and to trade.

Land and natural resources, the latter possibly conceived as a differentiating factor of land, were introduced early on as the missing explanatory factors. The relative abundance of land and resources would provide countries with a comparative advantage in the production and export of resource-intensive products, i.e. raw materials, agricultural products and their processed derivatives (Vanek, 1963; Linder, 1961:81). On the other hand, many studies used human capital as the missing third factor of production.⁴⁶ The controversy about Leontief's use of efficiency units of labor as an explanation for his paradoxical findings showed, as already pointed out, that it is rather difficult to distinguish additional factors of production from different production functions (Samuelson, 1948:182). For example, managerial know-how is often said to differentiate production functions rather than make labor non-homogeneous (Clement *et. al.*, 1967:102). Of course, once the idea of non-homogeneity of labor was accepted, it became clear that capital was similarly differentiated and was made up of the basic unit "pure waiting" and specific technological characteristics embodied in physical units of capital which thus gained a historical time dimension

⁴⁶Bharadwaj and Bhagwati (1967) for India, Roskamp and McMeekin (1968) for East Germany, and Kenen (1970) in a theoretical analysis have provided early investigations of this type.

Keesing (1965) uses a measure of labor skills as the only trade determining factor of production.

(Kenen, 1965a, 1965b). It was also argued that these different factors were complements rather than substitutes in the production process (Vanek, 1963). This means that the production functions are restricted to certain factor proportions, thus breaking the link between relative factor prices and factor proportions. This line of thought leads to the view of technological knowledge and its actual application as a source of differentiated production functions. In this case the analysis expands quickly to the study of the production of technological change, its diffusion and thus to the wider socio-political circumstances which affect these two processes (Hufbauer, 1970).

Technology as a trade determinant factor can also be conceptualized in different ways. For Jones (1970) technology makes for different production functions while Lowinger (1975) for example uses technology as equivalent to human capital in determining trade. Kenen (1965a, 1965b) on the other hand, treats technical characteristics of capital equipment as differentiating elements of pure capital understood as waiting. And Samuelson (1948) implies that technology, human capital, and organizational know-how are complementary elements in the process of production.

Technological factors, or their proxy, expenditures on research and development (R&D), become the explanatory variable in the neotechnology account of the determination of trade patterns. The core of this explanation centers around the

product cycle theory of trade (Vernon, 1966).⁴⁷ This view is actually based on the dynamic application of monopolistic competition theory to international trade. It is very empirical but suffers from a lack of formal elegance compared to the Samuelson version of the H-O theory (Harry Johnson, 1970a). In this explanation, countries and their producers achieve temporary monopolistic comparative advantage positions which are the result of technological leadership, product differentiation and the early exploitation of economies of scale. The maintenance of this comparative advantage depends on the continuous creation of new products or product variations through R&D.^{48,49} Large firms in large and high-income countries will be better able to create and maintain such temporary monopoly positions because of three aspects of the R&D process. For one, large firms with large and high-income home markets will be able to minimize the risks inherent in

⁴⁷Vernon (1970) and Wells (1972) contain further theoretical and empirical contributions and relevant bibliographies. Finger (1975b) presents a new version of the product cycle hypothesis where the rate of product turnover becomes an additional explanatory variable besides technology and labor skills. Finger also argues that the 'technology gap' trade model of Posner (1961) is indistinct from the product cycle model.

⁴⁸Bhagwati (1969a:35-36;108) interprets the 'availability' trade theory of Kravis (1956) in this way.

⁴⁹This explanation is product oriented. Keasing (1967) and Grubel *et. al.* (1967) include technological process innovation as an additional explanatory factor (see next note).

R&D. They are, therefore, able to continue to create new products and new technologies and to exploit economies of scale in the production of these new products. Secondly, these large firms are frequently part of oligopolistic markets in their home country, have production facilities in many countries, and are able to protect their technological findings through patents. In short, they are already in a position to exploit oligopoly positions even without the dynamics of technological change (Hymer, 1972). And thirdly, the diffusion of technological innovations even if they are legally unprotected, requires resources and time. Temporary protection is therefore assured simply because the innovations will not spread instantaneously to other countries (Mansfield, 1975:373-375). The product cycle occurs because a new product will be first produced in the country of its creation and exports will start as other markets accept the new product. As these markets grow and as local competitors might start up their own production, local production will begin either on a licensed basis or in production facilities owned by the original producer. This production is initially restricted to the assembly of imported parts, but in the end, production will be independent of parts shipped by the original producer. The product might ultimately even be exported back to the country of origin. This shift takes place as competing products appear and the initial monopoly position is eroded. Cost calculations begin to favor low-wage countries as the center of

production.⁵⁰ In this sense, trade based on a technological monopoly gives way to trade based on traditional factor proportions (Kindleberger, 1974:41).^{51,52}

Linder (1961:87-88) offers a related explanation for trade in manufactures. Demand conditions in the home market determine the range of manufactures that are produced in a country. Only these goods will be exportable because only under these circumstances are the risks and costs of export marketing acceptable. Trade in manufactures will therefore take place primarily between countries with similar tastes

⁵⁰Stobaugh (1971) argues that a secondary product cycle based on process innovations is superimposed on the first cycle based on product innovation and thus prolongs the monopolistic advantage of the originating country. See also the analysis by Seev Hirsch (1967).

⁵¹Harry Johnson (1970a:14) points out that R&D can be included in the concept of capital. This suggests that in fact both the neofactor and neotechnology accounts of trade determination are basically based on the same set of factors. In fact, the use of an index of value-added per employee as the explanatory factor of trade (Lary, 1968) points to the same conclusion. Harry Johnson (1970a:16-17) argues that this index picks up the effects of labor-capital ratios, human capital, as well as neotechnology factors like scale economies, product age and differentiation.

However, in the end the fact remains that the neotechnology account is concerned with developments over time, market structure, and, as will be discussed later on, international mobility of the factors of production.

⁵²A country can occupy a bridging position where it finds itself as recipient in product cycles originating recently in DC and as a second generation originator of product cycles with even less developed countries (Hufbauer, 1966; Seev Hirsch, 1971).

Akamatsu (1961:205-209), Higgins (1968:623-624) and Kojima (1975:84-85) explain such a trade pattern with the "catching-up product cycle" where a country's industries find themselves in different phases of product cycles.

and income levels.⁵³ The demand conditions in most UDC are sufficiently different from those in DC, according to Linder, that the former will be hard put to find exportable manufactures to DC among their home market oriented products (Linder, 1967).⁵⁴ More recently Linder (1971:504) argued that home market demand determines also the search for technological change.⁵⁵ Declining home market demand will therefore in general lead to increasing uncompetitiveness on world markets.

⁵³I.e., these countries come close to satisfying the H-O assumption of identical consumption patterns. On the other hand, the Linder hypothesis clearly differs from the H-O model in assuming positive information, marketing and transportation costs (Linder, 1961:87-90). It is therefore not clear to what extent trade between UDC or between DC could be close to H-O trade.

Linneman (1966:180-196) and Kindleberger (1962:8-25) provide some indication for the importance of transportation costs as a determinant of trade structure. Kindleberger especially uses such costs to explain trade overlap which is one facet of reality which cannot be explained with a pure H-O model. But see on this point Finger (1975a).

⁵⁴The Linder model assumes producer initiated exports. However, MNC and possibly large DC-based retail organizations may well initiate UDC based production and exports according to DC demand patterns.

⁵⁵Schmookler (1966) presents the model of the demand determination of technological change. Linder suggests that this means that UDC and DC will follow different paths of technological development.

Exports will decline together with production for the home market.⁵⁶ Exports are therefore demand determined, either directly or indirectly, both in the short and long run.

Both the dynamic model of Linder (1971) and the product cycle theory introduce technological know-how and technological change as explicit trade determining factors. This means that the H-O assumption of identical production functions has been dropped. Or if one considers technological know-how as a separate factor of production or as a capital differentiating characteristic, international factor mobility has been introduced into the model thus relaxing another H-O assumption. Most technological know-how today is produced in the highly industrialized countries and then either consciously transferred or indirectly diffused to other countries. If one considers technology as one of the trade determining factors, then one introduces an imperfectly mobile factor into trade models.⁵⁷ Of course, it has been recognized for some time that the absolute dichotomy between perfect intra-country factor mobility and absolute intercountry immobility is far from

⁵⁶ Temin (1966) and Kindleberger (1962:59) provide examples with the experience of the British steel and textile and the U.S. textile and car industries.

Hsu (1972) presents the formal Linder model.

⁵⁷ If on the other hand the differences are accounted for by different production functions, one would have to model the process whereby the production functions become transformed under foreign influences.

realized (Kaldor, 1970). Mundell (1957) showed that international factor migration in response to factor price differentials can reestablish factor price equalization. Harry Johnson (1958:84-92) and Meade (1955), on the other hand, analysed the effects of factor movements upon income distribution and shifts in production and demand patterns and the terms of trade.⁵⁸

However, the total impact of factor movements are likely to be much more complex, especially in terms of their dynamic and long-term ramifications. For one, it is selected sets of a given factor which tend to move between countries. Secondly, factors are often moved by a special category of actors, the MNC. Not only are these factor transfers made on the basis of firm internal decisions, but they frequently involve the simultaneous transfer of complementary factors, labor with managerial know-how and other specialized skills, technology, and either finance capital or capital equipment with specific embodied technological characteristics (Yudin, 1968). And thirdly, the effects of such factor migrations depend very much on the particular socio-political conditions in and possible cultural differences between the sender and receiver countries.

The complexity of these conditions and of the ramifications to which they can give rise, and the different weight

⁵⁸Subsequent research has built on this line of investigation. See, e.g., the analysis of capital mobility by Chipman (1971) and Wan (1971) and of labor mobility by Kenen (1971).

given to them in the evaluation of factor movements, underlying the conflicting evaluations accorded to labor migrations. Harry Johnson (1968b), taking an internationalist position using a comparative static model, is unreservedly for such movements. They maximize world income although rarely giving rise to compensatory payments. Patinkin (1968), taking the nationalist position and being aware of this lack of redistribution of income gains, stresses the negative growth effects in the emigration country due to the loss of highly skilled labor, the 'brain drain'. Myint (1968:238-252) on the other hand takes a middle position. Labor migration, or in his case, migration of highly skilled and educated labor out of UDC, is the result of structural disequilibria which cannot be overcome within the near future. Emigration is therefore a safety valve which prevents the eruption of sociopolitical tensions and conflicts which could easily affect the growth rate by more than the uncompensated export of human capital.⁵⁹ The same can be said about capital and technology movements. The contradictory evaluation, e.g., of the effects of foreign direct investments of MNC is based on similar differences.⁶⁰

⁵⁹The immigration of large pools of relatively unskilled labor into the industrialized countries of Northern and Western Europe generates also social and political problems which in turn can feed back to the economic sphere.

⁶⁰See the study by the U.S. Department of Commerce (1972) which is unreservedly positive, the more reserved report by the U.S. Tariff Commission (1973), and the papers in Kujawa (1973) reflecting the negative viewpoint of organized labor.

The product cycle hypothesis and related trade models discussed at the beginning of this section have implicitly introduced into trade theory large producer organizations with world wide interests which are far different from the firm of neo-classical price theory. It has already been mentioned that these organizations have reduced the barriers to international factor mobility, or have at least changed the character of this mobility. In this context it has been suggested that the effects of their activities, both in the home and host countries, are not very clear and certainly complex, especially when the latter are UDC.⁶¹ But of special interest in the present context are those aspects of MNC which

⁶¹Kindleberger (1972) suggests that these effects changed with time and growth of MNC.

General reviews of the issues raised by MNC are presented by Barnet and Mueller (1974) and Wilkins (1974). The preceding footnote listed studies evaluating the effects of MNC in DC. With respect to UDC, May (1974) finds MNC to be extremely beneficial. Pearson (1969:99-123) finds foreign direct investment in such countries to be overall beneficial for them. Hirschman (1969) concurs but counsels nonetheless gradual desinvestment, mostly for political reasons. A recent study by the United Nations (1974) is overall critical of the benefits that will accrue to UDC. (See also Evans (1972) and Barnet and Mueller (1974:148-184).) The net benefits depend crucially on the conditions under which MNC are allowed to invest. At one time, Seers (1963) suggested a UN organization to strengthen the bargaining power of host UDC. Mueller (1973) was once sceptical about the ability of these countries to reassert their control over the MNC but now thinks it is possible (Barnet and Mueller, 1974:185-210). Bergsten (1974b) concurs with the latter view but fears that the home countries of the MNC could try to retaliate and thus start an investment war unless a generally accepted code of conduct is drawn up. D. Wallace (1973) deals exhaustively with the problem of the international control of MNC investments.

differenciate them from the classical price taking firm of the H-O model insofar as they relate to the four aspects of the IES discussed in the first chapter.⁶²

For one, MNC are their own very best international customers. Trade, finance and investment activities are therefore not arms' length transactions, i.e., do not necessarily reflect market conditions (Vernon, 1973:98-99).⁶³ One aspect of this situation is the use of manipulated intra-corporate transfer prices for goods and services in order to minimize tax liabilities and to circumvent exchange controls and limits on profit repatriation.⁶⁴ Secondly, MNC frequently engage in foreign direct investments only if they can exploit or have to preserve some kind of oligopolistic or even

⁶²The emergence of the MNC duplicates in many ways the development of the large integrated oligopolistic firm in the U.S. at the turn of the century. The effects on the world level could well be equivalent to those on the national level (Hymer, 1972).

⁶³Gray (1972) provides many examples of the consequences this can have in his analysis of the Canadian experience with foreign MNC.

⁶⁴See Barnett and Mueller (1974:151-162). Zenoff and Zwick (1969:428) argue that "intracompany sales are the single most important method of effecting a movement of capital between countries in which companies have operations." On the other hand, Arpan (1971:71-72) found a rapidly declining use of transfer-pricing for tax minimization by MNC.

monopolistic advantage.⁶⁵ Thirdly, MNC are often worldwide multi-plant organizations with similar production facilities in several countries. This not only provides them with the possibility of closing down one facility in the face of unpleasant host government decisions without endangering the operation of other dependent operations.⁶⁶ It is also possible that in these cases decisions with respect to local operations are made on the basis of the global interests of the MNC and not on the basis of the conditions existing in the host country (Hymer, 1970).

But even more important is that many MNC are more than economic actors limiting their actions to the market place. They are in fact economic and political entities (Hymer, 1970), and by using their resources, they are even able to keep "sovereignty at bay" (Vernon (1971). Recent history clearly shows that MNC are important political actors which intervene in the politics of their host countries or are at least able to induce the governments of their home countries to do so on their behalf (Sampson, 1973). Often, these political activities

⁶⁵This point is stressed by many authors, see e.g. Caves (1971, 1974), Kindleberger (1969) and Weigel (1974).
Kindleberger (1969:201-207) proposes international harmonization of investment conditions to prevent MNC from exploiting UDC competing against each other for their investments.

⁶⁶Moran (1973) describes recent financing strategies by MNC exploiting natural resources to limit the danger of nationalization through increasing artificially the costs of nationalization (especially the political costs).

preempt foreign policy decisions of their home governments (Model, 1967) or they become active agents in behalf of the foreign policy of their home governments (Gray, 1972:253-290). Or, as the events during the Arab oil boycott in 1973 and 1974 revealed, they fill the policy vacuum left by their governments if these are unable to reach necessary foreign policy decisions (Mikdashi, 1975:6).⁶⁷ It is no wonder that Kindleberger (1969) and Ball (1970) predicted at one time the actual or at least imminent demise of the nation-state in favor of the transnational enterprise as the basic organizational unit of the world system.

While this political aspect of MNC may yet be kept under control, the socio-cultural effects of the activities of the MNC may prove to be more significant. These effects arise not only because the export or local manufacturing of products which issue from the rich, consumer-oriented economies of the industrialized world propagate and reproduce the lifestyles predominant in these countries. The effects of investment activities of MNC on work attitudes and organization, and the cultural and socio-political structure of host societies through the introduction of modern western technologies are probably even more important.⁶⁸ Hymer (1972) warned that the

⁶⁷Barnet and Mueller (1974:72-104) give a compendium of these different political activities by MNC. Vernon (1972) contains several papers discussing the political as well as military implications of MNC activities. See also the case studies on the activities of oil companies by Pinelo (1973) and Penrose (1968).

⁶⁸Chapter 3, Section 2, will take up this point.

MNC would reproduce its hierarchical organization (Chandler and Redlich, 1961) at the world level. The strata of the least developed countries would contain the manufacturing activities supervised by regional headquarters located in the middle-income strata of countries. The richest countries would become the seats of the MNC where all the strategic decisions would be taken and where much of the research activities would be concentrated.⁶⁹

All in all it is clear that the MNC are unlike the traditional economic actors of classical economic theory. They have not only economic but also socio-cultural, military and political effects and capabilities. These capabilities -- not just the economic ones -- are actually used in attempts to shape actively their environment for their own benefits.

The extensions of the original H-O model as well as those trade models which deny any overt link with the H-O model have raised the question of the proper conceptualization of the model elements and the proper theory formulation. Practically, this meant the gradual relaxation of the strict assumptions underlying the Samuelson formulation of the H-O theorem. In other words, the models have attempted to reflect more fully the complexities of the real world. The proliferation of explanatory variables and models is a reflection of the problematic of trying to construct simple

⁶⁹Brown (1970:260-265) describes a plan by ITT to tie all its subsidiaries into one central, real-time computer, located of course near its headquarters in the United States.

models for a complex world. One aspect of this is the acceptance of elements of oligopolistic competition in the IES.⁷⁰ The product cycle hypothesis and related conceptualizations have gone furthest in this direction although any model that includes technological change as a variable comes close to accepting such a market structure.

Neo-classical price theory has always argued that oligopolistic market structures were non-optimal from a welfare standpoint. The opposite, however, may hold in a world of factor mobility, technological change, growth and development.⁷¹ Harry Johnson (1968d, 1969:60, 1970a) now thinks that such competition -- especially in the form of MNC -- is not "a socially undesirable imperfection of market structure" but a dynamic and rational mechanism to create knowledge, generate and spread new technologies, and to bring about modern patterns of consumption appropriate for developing economies. One consequence of this view is that government intervention to control and correct oligopolistic behavior is once more considered

⁷⁰Hymer and Rowthorn (1970) argue that the emergence of the U.S. MNC has lessened competition in world markets, in part because they induced a concentration in European and Japanese industries. Harry Johnson (1970c) on the other hand thinks that competition has increased because the entrance of MNC into hitherto isolated national markets has lessened monopolistic control of these markets by national firms. Caves (1974), after surveying many empirical studies, thinks that MNC are unlikely to increase competition if they participate in markets for differentiated consumer products.

⁷¹Any text in Industrial Organization contains evidence for this. Galbraith (1968) presents this conviction most forcefully.

unwarranted (Harry Johnson, 1971).⁷² Yet, despite all the welfare arguments against government intervention, or at least certain forms of intervention, in the past and today, we find that governments have always intervened into the working of the IES. The combined effect of these interventions has had very specific results raising the question of the proper model construction again although from a different angle. The next section will deal with these issues.

3. Trade and Trade Controls in an Imperfect and Dynamic Social System

Government intervention to control trade flows and the impact of events in the IES upon the national system generally are pervasive and of long standing. The arguments in favor of such interventions have changed over time (Harry Johnson, 1974). Welfare analysis based on the H-O model has consistently suggested that free trade or at most a limited range of control measures is best. If market imperfections exist, the best policy is always to remove directly the imperfection or end the condition which makes the real situation diverge from the H-O assumption.⁷³ When the imperfections are country internal and

⁷²This shift in theoretical argumentation to rule out government interference has its root in the change from mercantilistic to classical, and then from classical to neo-classical economics (Mini, 1974; Solo, 1975).

⁷³That is, as long as only one imperfection exists or all imperfections are removed at the same time. Otherwise the ranking of policies has to occur with the help of the theory of second-best. The results become much more ambiguous in this case.

their removal is not feasible or impossible, first-best policy is to use a tax combined with either a production or consumption subsidy to reestablish equality between rates of transformation and consumption and the relative commodity prices (Bhagwati, 1971).^{74,75} This ranking of policies applies even in the only 'true' infant industry case where the public goods nature of knowledge acquisition may lead to an otherwise sub-optimal production of such knowledge (Harry Johnson, 1970b).⁷⁶ Trade is in general preferable to no trade

⁷⁴Stern (1973) and especially Corden (1971, 1974) provide a complete review of the issue and contain extensive bibliographies.

⁷⁵Domestic distortions can be endogenous, i.e. they arise out of the laissez-fair operation of the perfect system. Or they can be the result of unintended consequences of past governmental action (autonomous policy-imposed distortions) or of instrumental policies through which the government wants to achieve objectives which demand such distortions (Bhagwati, 1971:73-74).

⁷⁶Harry Johnson (1970b) shows that all other arguments normally used to justify the protection of infant industries refer actually to forms of market imperfections. In all of these cases the optimal first-best policy is a tax and subsidy scheme. (See also the analysis by Grubel (1966) and Baldwin (1969).)

Harry Johnson (1970a:19-20) himself seems, however, to entertain at times more differentiated views so when he wonders if the complex problems of modern industrial competition can still be handled adequately with the existing theory of tariffs.

Another problem is that the infant industry argument refers to a truly dynamic event which entails probably more than the traditional externality argument (Bhagwati, 1969a:80). Also, List's argument for infant industry protection was very much concerned with what might be called today nation-building, i.e. non-economic effects (List, 1971:151-158; Senghaas, 1975).

except in the case of increasing returns to scale (Bhagwati, 1969a:83-85). Tariffs are always less optimal than a scheme of taxes and subsidies except in the following cases: (i) when domestic demand is smaller than the optimal scale of production. A temporary tariff or quota may in this case be sufficient to allow producers to attain lower production costs and even become internationally competitive (Pomfret, 1975). (ii) A tariff is the first-best solution when the imperfection lies in monopoly elements in world markets which cannot be affected by domestic policies (Bhagwati, 1971:79).⁷⁷ And (iii) a tariff may be useful in increasing the welfare of an individual country although such an optimal tariff itself will, in this case, introduce a distortion into the world system (Harry Johnson, 1951-52; Chacholiades, 1973:435-440).⁷⁸

This ranking of trade intervention policies can be used to determine optimal intervention policies for the

⁷⁷This welfare analysis is based on the case of complete monopoly and perfect competition. It does therefore not necessarily arrive at conclusions which are valid for international markets where MNC introduce intermediary structures of oligopoly and monopolistic competition discussed in the previous section (Balogh, 1973:89 (Note 1)).

⁷⁸These gains from an optimum tariff reduce the welfare of the international system. Also, they do not only depend on objective conditions but are predicated on certain retaliation patterns (Harry Johnson, 1953-54; 1968c).

achievement of 'non-economic' objectives.⁷⁹ A tariff is an optimal trade intervention policy if the goal is increased self-sufficiency, i.e. reduced dependency on imports.⁸⁰ A tax and subsidy scheme is first-best policy if domestic production has to be maintained at a high level in order, e.g., to maintain sufficient production capacity for military emergencies. Tax and subsidy schemes are also best for the maintenance of factor employment at a given level or for the limitation of domestic consumption (Harry Johnson, 1964; Bhagwati, 1971:78). Real domestic product will be decreased in all of these cases although real income - defined to include the welfare gained from achieving the non-economic objectives - will be maximized (Harry Johnson, 1965a:259.^{81,82}

⁷⁹This is the 'instrumental policy case' referred to by Bhagwati (1971) (See note 75).

'Non-economic' means in this context that the goal achievement necessitates a loss of real product, not that the goal does not belong to or not affect directly the economic sphere (Harry Johnson, 1964:7, 1965a).

⁸⁰A tariff which achieves a given objective with minimal loss of real product is called a "scientific tariff" by Harry Johnson (1960) and a "made-to-measure tariff" by Corden (1974: 203).

⁸¹Kindleberger (1972:388) points out that the difference between real product and real income is not a neat one. Many nationalistic policy cases provide also some kind of consumer or producer goods. They can spur people on to more savings, greater productivity, or make them accept an unfavorable income distribution.

⁸²Harry Johnson (1965a:268-269) explains within this framework a country's changing preference for free trade and

Tariffs can be preferable to tax and subsidy schemes even in the absence of non-economic objectives or external monopoly elements because of the lower direct economic costs which are incurred in the administration of such trade control schemes (Corden, 1974:59-67). Harry Johnson (1965a:259) gives three reasons for the political preference for tariffs which are related to the administrative cost argument: (i) It is more difficult to collect the taxes necessary to finance subsidies than to levy an appropriate tariff: (ii) those who benefit from import protection for example do not wish its real cost to be readily ascertained or to depend on annual budgetary approvals as would be normally the case with tax and subsidy schemes: and (iii) industries must make believe -- both nationally and internationally -- that they are internationally competitive without government support. This is easier with import protection.

The acceptance of such arguments or of the validity of non-economic objectives as in the case of the scientific tariff is an important and fundamental step outside the boundaries of

protection. A country which is already a net-exporter will have a relatively low marginal preference for additional home production. In this case real product and real income (including the non-economic objective) is almost the same and free trade will maximize both. The marginal preference for home production will increase if a deteriorating international competitive position reduces home employment. Real income maximization will lead to protection at the price of a less than optimal product. (It seems that this model is based on Keynesian and not classical assumptions.)

the H-O framework.⁸³ Goals other than pure product maximization are included in the social welfare function and this opens the possibility to include goals as legitimate variables for analysis which belong to non-economic spheres.⁸⁴ Furthermore, Harry Johnson's reflections reported above on the preference for tariffs over tax and subsidy schemes point to the fact that trade and trade controls take place in a dynamic social system with conflicts and that trade analysis and policy prescription cannot abstract from these fundamentals.

This means that any trade policy -- scientific and optimal or not -- which is supposed to correct existing market imperfections or to benefit some groups but not others, activates conflicts. Although these conflicts may remain political conflicts, they can easily become social, military and economic conflicts (or affect already existing conflicts of this type). These conflicts imply not only direct economic costs (in the form of a once and for all downward shift in the growth path)

⁸³It already led to a reevaluation of the whole customs union argument (Cooper and Massell, 1965a, 1965b; Krauss, 1972).

⁸⁴Economists have always arbitrarily limited the number and character of variables to be included in the preference function of 'rational economic man' (Hollis and Nell, 1975). This made it rather difficult to explain irrational governmental policies (Penrose, 1971:232) without taking recourse to the concept of political market failure (Goeran Ohlin, 1969: 174).

due to the related resource use. They affect the character and stability of social relationships which in turn are important determinants of capital and labor productivities.⁸⁵ This means that optimal situations and policies (if measured in traditional economic terms with a strong ceteris paribus clause) may become non-optimal measured on the same basis if the dynamics of the social system and its economic repercussions are included in the analysis. A non-optimal policy or situation if traditionally evaluated may become economically optimal because of benign or relatively weak negative repercussions.⁸⁶ This point will be illustrated in more detail in chapter 4 when the adjustment paths of various European countries in the case of the drastic fall in the wheat price after 1870 are discussed.

A second aspect of the fact that trade and trade controls exist in a dynamic social system with conflicts relates to the distributional problem. A move from a non-optimal to a more

⁸⁵The direct resource costs of conflict as well as the costs of controlling worsened social relationship can increase conflicts because they divert resources from private and social consumption (Baumgartner *et. al.*, 1976a; DeVille and Burns, 1976; see also O'Connor, 1973).

⁸⁶Balogh (1963, 1973) makes the same argument pointing out that in real life the comparative static end situation of the economic system will not be reached because of the social processes. These theoretical positions can therefore not be used to rank policies.

Kindleberger (1968a:503-504) makes the same point with respect to devaluations.

welfare optimal trade system implies in general a different income distribution with some individuals, groups or countries being worse off than in the original situation. The usual argument is that in such situations the gaining actors are able to compensate the losing ones and still realize an improvement in their own situation. Such compensation strategies are however rather rare in real life and normally not institutionalized.⁸⁷ However, distributional conflicts lie at the heart of many social conflicts and it seems that relative income positions are often more important than absolute ones. In these situations individuals, groups and countries probably prefer to rely on the existing situation or to use their power in clear-cut situations to increase their income share rather than rely on a questionable political process.⁸⁸ Furthermore, such redistributive processes are not costless and the existing non-optimal situation may well provide a larger real product than attempts to bring about a more optimal allocative system that necessitates difficult redistributive policies (Cooper, 1975:21, 26-27).⁸⁹ And finally Cooper (1968) pointed

⁸⁷The U.S. has recently improved its system of adjustment assistance. See the three papers by Metzger, Fooks and the Department of Commerce in the report by the Commission on International Trade and Investment (1971).

⁸⁸Baldwin (1970:7-8) notes that governmental decision-makers are rather reluctant to discuss and decide distributional questions.

⁸⁹Both Chipman (1972:209) and Stern (1973:879) point out that such redistributive decisions have to be based on the distributional consequences of trade liberalization policies. These, however, are rather difficult to determine.

out that institutionalized redistribution mechanisms on the international level are even less frequent than on the national level. Agreed upon international redistribution policies -- although rare -- are also more easily broken without any consequences (at least for certain countries) than on the national level where periodic national elections provide at least some automatic checks.

All in all, it is not surprising that in situations where activities in the IES have complex repercussions in the national and international systems and where the social processes related to economic adjustments in the wake of events in the IES or to changes in the trade control measures may have significant feedback effects on the economic sphere itself, governments continue to intervene to control the links between their economies and the IES. It is furthermore not surprising that, despite the welfare implications of the H-O model to the contrary, tariffs and other non-optimal trade control measures are used very liberally.⁹⁰ It is therefore

⁹⁰Curiously enough, GATT allows tariffs but not tax and subsidy schemes for manufactures.

Overall protection and trade intervention has hardly diminished despite several rounds of tariff reductions since 1945. Non-tariff barriers (NTB) -- see Stern (1973:867-873), Baldwin (1970, 1971a), Harry Johnson (1967a:104-106), Walter (1969) and the papers in Chapter 5 of the report by the Commission on International Trade and Investment Policies (1971) -- and country internal industrial policy measures -- see Goeran Ohlin (1969, 1975) -- have taken the place of reduced tariffs in controlling trade. Goeran Ohlin (1969) suggests that tariff reductions forced governments to use these other trade control forms to maintain overall control. Harry Johnson (1975:45) thinks that the realization by governments that the latter were superior to tariffs made them asquiesce in the tariff reductions in the first place. The superiority of many

of interest in this context to inquire about the structure of these trade control measures and the trade flows generated in part by them. This may give us some clue to possible additional motivations behind the use of trade control measures. The next section will therefore present a summary of the relevant findings.

4. The Structure of Trade Controls and Trade Flows

In general, the structures of tariffs and NTB applied by DC have very specific forms. Nominal and the higher effective tariff rates increase as products become more highly processed. That is, DC tend to encourage the import of unprocessed primary products or of manufactures in early stages of processing. Similarly, both nominal and effective tariff rates are lower for technologically sophisticated manufactures predominantly traded among industrialized countries than for manufactures like shoes and textiles for which UDC possess a comparative advantage.⁹¹ Consequently, it is not surprising to find that manufactures

industrial policy measures -- especially many subsidy programs -- derives from the possibility to protect and expand export markets. This, instead of domestic market protection through tariffs, becomes important due to the need to minimize unit costs despite large scale production and high R&D expenditures (Harry Johnson, 1974:13-15).

⁹¹Zandano (1969) shows that nominal and effective tariff rates in industrial countries are positively related with labor intensity. However, Zandano sees in this result a positive verification of the H-O model which suggests that import barriers will increase the relative income share of the relatively scarce factor. This implies that the relatively unskilled workers must be a politically powerful group in the industrialized countries (Harry Johnson, 1965b).

imported by DC from UDC face tariff rates above the average rate on all the manufactures imported by DC.⁹²

There exist strong indications that NTB are also biased against the exports of UDC. This is as much the result of conditions specific to UDC as due to the specific forms of the NTB of the DC. Walter (1971:197) argues that producers in UDC are in general less able to surmount a given barrier than those in DC. This is so because most of these producers have a low capability to deal with the complicated issues raised by most NTB because of their lack of commercial experience.⁹³ They are also less able to switch production to products which face lower or no NTB due to general structural limitations present in the economies of UDC (which are in part of the Linder-type). And they are frequently without appropriate informations about the NTB and therefore incur unanticipated selling costs. But maybe even more important is that the exports of UDC are often subject to especially tough health and quality standards which introduce a direct cost bias against them. Walter (1971:202) also shows that the incidence of NTB in DC against imports from

⁹²These propositions are based on detailed calculations by Balassa (1965, 1967a, 1967b, 1968). Additional evidence can be found in Basevi (1966), Harry Johnson (1967a:90-91; 96-104) and Streeten and Elson (1971:62-63). Little *et al.* (1970:273) show that the tariff reductions in the Kennedy Round did not reduce this bias.

⁹³However, subsidiaries of MNC should not be affected by this. One would also expect sales organizations in DC to provide the necessary expertise if the products are really low priced ones.

UDC is higher than against imports in general.^{94,95}

The structure of trade flows⁹⁶ exhibits a pattern which leaves the same impression as the structure of trade controls, namely of being intentionally structured. Partner concentration of exports and imports are in general higher for UDC than DC.⁹⁷ Galtung (1971:102) correlated per capita GNP and the percentage of employment in the non-primary sectors -- both measures of degree of development -- with an index

⁹⁴Harry Johnson (1967a:85) points out that those primary products exported by UDC to DC in competition with the latter's own products "are subject to the most complex and generally severe restrictions involving quantitative control over imports ... as well as tariffs or equivalent price-raising charges." Although other primary products face lesser import barriers, they are nonetheless often subject to heavy excise taxes (as in the case of oil and tropical agricultural products).

⁹⁵This structure of NTB and the shift from tariffs to NTB (see note 90) raise some questions about the value of tariff preferences recently granted by most DC to UDC (Little *et. al.*, 1970:274; International Labor Organization, 1970:337; Cooper, 1972b).

⁹⁶Three indices to measure trade structures are used: (i) Geographic or partner concentration, i.e. the extent to which a country's exports go to or its imports come from one or a small number of countries; (ii) commodity concentration, i.e. the extent to which a country's exports or imports consist of different commodities (irrespective of destination or origin); and (iii) trade composition which is an index for the degree of processing which differentiates a country's exports from its imports.

For the exact specification of these indices and a discussion of their advantages and disadvantages see Michaely (1962), Coppock (1962), Galtung (1971), and also Hirschman (1945), Kojima (1971) and Theil (1967).

⁹⁷Imports are generally less concentrated than exports (Michaely, 1962:19-20).

of partner concentration for a large number of countries. The coefficients were $-.52$ and $-.72$ respectively.⁹⁸ The study of Hirschman (1945) of the trade structures during the 1930's especially for Japan, Germany and the United Kingdom suggests that such a pattern of trade concentration is a consciously designed result used by large and developed and therefore dominant countries to make small and less developed countries economically and politically dependent on them.⁹⁹

The commodity concentration measures indicate a similar structure for the composition of trade as for the direction of trade. Galtung (1971:102) again finds relatively high correlations of $-.89$ and $-.87$ respectively for per capita GNP and the percentage of employment in non-primary sectors when regressed against commodity concentration of exports.¹⁰⁰ The data of Michaely (1962:16) suggests that, among DC, smaller countries have a higher export commodity composition ratio than larger ones while the concentration ratios among UDC is

⁹⁸Coppock (1962) and Michaely (1962) support Galtung's findings for the trade structure of the late 1950's.

⁹⁹Linneman (1969:121-123) shows that both in the late 1950's and early 1960's the neighborhood effect -- i.e. the effect of having contiguous borders with other countries on trade between them -- was not larger than the cousin effect. The latter measures the influence of past commercial, economic, political and social ties on trade flows. It is therefore essentially an indication of the strength of colonial and post-colonial ties. This influence becomes even more pronounced when controlling for distance and not just neighborhood (Linneman, 1966). See also J. A. Pincus (1968).

¹⁰⁰See also Lloyd (1968:27) and Coppock (1962).

slightly higher for the larger ones. This suggests that underdevelopment and position in a structure of dependency relationships are the determining variables and not smallness of the country and factors singled out in the Linder hypothesis per se. This view is reenforced by the particular relationship between the commodity concentration ratios for exports and imports. DC have generally low export and also low and relatively equal import concentration ratios. Countries with high export concentration ratios have generally lower import commodity concentration ratios (Michaely, 1962:14). This structure is obviously the result of a lack of industrialization as it is generally UDC which have high ratios for their exports.

Both Michaely (1962:22) and Galtung (1971:102) find a positive correlation between partner and commodity concentration although Hirschman (1945:140-151) had originally hypothesized a negative one. According to Hirschman a country with only a few commodities to export had to sell them necessarily to a relatively large number of countries. However the absorptive capacities of DC compared to concentrated production capacities of UDC are so large that it is quite possible for commodity and partner concentrations to go hand in hand.¹⁰¹ This does not mean that major DC do not use their arsenal of trade control measures to reenforce this pattern with the

¹⁰¹ Both situations minimize marketing costs which does not mean that the UDC benefit in the form of higher net prices. The oligopolistic character of international trade implied by these trade structures suggest that the DC are the major beneficiaries.

intent to make sure that the UDC are as much dependent on them as possible.

The point, that lack of industrialization is in part the determinant (as well as the result) of such a trade concentration, is reenforced by Galtung's data on the trade composition and its correlation with the variables of underdevelopment and concentration (Galtung, 1971:102). In general, trade of UDC is made up predominantly of the export of raw materials and food and the import of manufactured goods while the opposite is true for DC.¹⁰² The implications and consequences of such a trade structure of high partner and commodity concentration and of an extractor status for UDC is clear for Galtung (1971) and Hirschman (1945).¹⁰³ This structure implies

¹⁰²Galtung labels them extractor and processor states. His sample contains one UDC -- Jamaica -- with processor status. The 12 DC in the sample which are weak extractors -- their average trade composition index is half as high as the average index for 37 UDC -- include such industrialized countries like Australia and New Zealand, Canada and South Africa, Sweden, Denmark and Finland. Obviously the consequences of being an extractor country is different if one possesses an indigenous industrial base.

¹⁰³Some attempts have been made to verify the link between trade structure, export stability and development. Coppock (1962) and MacBean (1966) show that UDC do not have a higher export earning instability than DC. Maddison (1970: 103-106), Erb and Schiavo-Campo (1969), and Massell (1970) disagree using different methodologies and time periods. Askari and Weil (1974) have recently suggested that manufactures' exports experience a greater instability than exports of non-manufactures (see also Naya (1973)). Michaely (1962:66-101) and Massell (1964) found, however, a correlation between commodity concentration and export volume and earnings fluctuations. This, however, is in part due to the fact that small countries or countries with small export sectors experience greater fluctuations in their exports and that these

the presence of an imperialistically structured IES and provides the conditions where trade between UDC and DC will maintain if not reenforce this structure. The processes of such a structuring of the IES or parts of it will be described in more detail in Chapter 5 while Chapter 6 will focus on the problems and dilemmas associated with such structuring efforts.

The analyses of Galtung (1971) and Hirschman (1945) differ in many aspects from the analysis based on the H-O model although they frequently use the same elements. For one the models now are totally non-normative but try to explain what exists in all its complexities in the IES. The basic premise is, of course, the existence of international conflict among countries and the desire of these countries to assure their domination and to structure the IES to their own benefit, economically and otherwise. So it becomes important to see what the long-run specific trade patterns are and how they affect growth and development paths of the countries. The question now is no longer what the conditions are of a given commodity produced. It is rather to find out if it facilitates development in the longer run. Growth can be seen as a dynamic economic although dynamic process. Development however is dynamic and systemic, i.e., it

countries have higher than average concentration ratios.

Khalaf (1974) has argued that there is no correlation between export concentration and economic development, but Glezakos (1973) finds that export instability affects growth negatively but only for UDC.

involves all the spheres of a social system and implies transformations of the institutions and structures that regulate social life. One consequence is that trade and services have now to be evaluated with respect to their influences on such developmental transformations and the conditions under which their production, exchange and distribution generates specific repercussions in the system. These are the points which have already been touched upon in Section 3. It was especially in Section 3 that I pointed out that economic policies which are non-optimal according to the model can become quite optimal once their systemic effects are accounted for. I also suggested there that the reason for the persistence of non-optimal trade control measures in this section now has reviewed some evidence on the structure of trade flows which suggests that it is more than the actual resource distribution and cost-minimizing relations. The suspicion is high that there is a logic behind these trade structures insofar as they are closely identified with the different levels of development of the countries of the world.

5. Summary

The first chapter suggested a need for a theoretical analysis to deal with the complexities of the economic system in general and the IES specifically by paying attention to and developing more fully four aspects of economic activity. The complex hierarchy of actors with their goals and



the presence of an imperialistically structured IES and provides the conditions where trade between UDC and DC will maintain if not reenforce this structure. The processes of such a structuring of the IES or parts of it will be described in more detail in Chapter 5 while Chapter 6 will focus on the problems and dilemmas associated with such structuring efforts.

The analyses of Galtung (1971) and Hirschman (1945) differ in many aspects from the analysis based on the H-O model although they frequently use the same elements. For one the models now are totally non-normative but try to explain what exists in all its complexities in the IES. The basic premise is, of course, the existence of international conflict among countries and the desire of these countries to assure their domination and to structure the IES to their own benefit, economically and otherwise. In doing so it becomes important to see what the long-term implications of specific trade patterns are and how they affect the long-term growth and development paths of the competing countries. The question now is no longer what the static welfare implications are of a given commodity produced and traded. The problem is rather to find out if it facilitates growth and development in the longer run. Growth can be seen as a purely economic although dynamic process. Development however is dynamic and systemic, i.e., it

countries have higher than average concentration ratios.

Khalaf (1974) has argued that there is no correlation between export concentration and economic development, but Glezakos (1973) finds that export instability affects growth negatively but only for UDC.

involves all the spheres of a social system and implies the transformations of the institutions and structures which regulate social life. One consequence is that traded goods and services have now to be evaluated with respect to their influences on such developmental transformations and the conditions under which their production, exchange and consumption generates specific repercussions in the system. These are points which have already been touched upon in Sections 2 and 3. It was especially in Section 3 that I pointed out that economic policies which are non-optimal according to the H-O model can become quite optimal once their systemic effects are accounted for. I also suggested there that this might explain the persistence of non-optimal trade control measures. This section now has reviewed some evidence on the structure of trade flows which suggests that it is more than the result of actual resource distribution and cost-minimizing commercial relations. The suspicion is high that there is a purpose behind these trade structures insofar as they are clearly identified with the different levels of development reached by the countries of the world.

5. Summary

The first chapter suggested a need for a broader analysis to deal with the complexities of the economic system in general and the IES specifically by paying closer attention to and developing more fully four aspects of economic systems: The complex hierarchy of actors with their goals and action

capabilities; the multidimensional character of economic valuables; the relationship and feedback mechanisms between institutional and structural constraints and economic activity; and the nature of structural, including economic, inequalities, and their effect on the operation of an economic system in the presence of conflict and competition. Underlying both of the latter two points was the concept that actors in an economic system will actively try to structure the system in their favor by trying to build institutions and structures which facilitate and beneficially influence their own economic activities.

The present chapter started out with a review of the assumptions underlying the strict formulation of the H-O model and then discussed the modifications, alternative definitions of variables and concepts which were introduced in the course of its testing subsequent to Leontief's paradoxical findings. The combined effect of all this effort is raising questions with regard to the preservation of the fundamental traits of the H-O model. The third section discussed some alternative trade determination models and hypothesis. Although they represent themselves as alternatives, the differences between them and the more complex H-O based propositions are rather minimal. It seems that the alternatives eliminate the use of certain concepts, like for example the production function, which had become a fuzzy concept anyway in the course of the testing of the H-O model.

The section on trade controls indicated a parallel to the expansion of the H-O model. The original normative

concern with the development of precise rankings of different policies with respect to their welfare optimality broadened to include the concept of a scientific tariff and the acceptance of non-economic objectives as valid data for determination of positive optimal policies. The discussion of the structures of trade controls and trade flows indicated, however, that, in this area, the acceptance of what is has not yet been fully completed.

Yet, it is quite clear that trade related theoretical work has in fact recognized the importance of many of the elements and aspects singled out as important in the first chapter. The recognition of non-economic objectives in the determination of welfare optimal trade policies suggests the importance of governments and the national power structures supporting them. The focus on technology as a trade determining factor, especially in the product cycle theory, has led to special consideration of the role and possibilities of MNC, a category of economic actors certainly different from the classical firm of economic theory. Technology and its impact on the social system in the course of its diffusion to other countries implies the multi-dimensionality of capital goods. Technology diffusion and the related phenomenon of limited international mobility of factors of production, the issue of appropriate controls over the worldwide activities of MNC, and the very specific structure of trade controls all raise the issue of the role of institutions in the determination of trade and especially the consequences of trade. The pervasiveness

of trade controls suggests that conflicts over the distribution of the economic product both on the national and international level are a basic feature of the IES. The present discussions in several international forums over the future shape of the institutions of the IES bear this out. The economists who use the H-O model as the basis for their analysis have recognized this situation, e.g., in their development of the concepts of scientific and optimal tariffs. This, as well as the structure of trade controls and trade flows, contains implicitly the idea that countries and their governments structure external and internal relationships. The following chapter will now develop the central elements which have been mentioned here as part of a systems approach to the IES.

CHAPTER III

ELEMENTS OF A SYSTEMS APPROACH TO INTERNATIONAL EXCHANGE
AND STRUCTURING

This chapter will take up the many implicit suggestions made in the course of the presentation of the H-O model, its testing, and alternative explanations of trade and international economic exchange. The purpose here is to develop in a relatively abstract and explicit manner the elements which appear to be embedded in so much of international trade theory, analysis and description, and which I judge to be central to the formulation of a systems model of the IES. These elements have been selected and are developed for the purpose of explaining and modelling the structuring and restructuring of the IES, a topic that will be taken up in more detail in the chapters following this one.

Section 1 develops the concept of a complex hierarchy of actors where the actors on different levels of the hierarchy possess different sets of goals and different capabilities to structure the system. Section 2 deals with the multi-dimensional nature of valuables and the consequences this has for the decision-making by actors. Section 3 develops the concept of systemic ramifications of exchanged economic valuables, that is, the processes through which the multi-dimensional nature of exchanged valuables is realized in a social system. Special attention will thereby be given to those

ramifications which have implications for the power positions of the actors involved and therefore will have consequences for their ability to structure and restructure the system of which they are part and the interaction conditions linking their system to others. Section 4 develops the concept of unequal exchange, that is, the unequal distribution of power resources through the systemic ramifications of economic exchange and the implications this has for the maintenance or transformation of a structured unequal exchange system. Section 5 deals with the concept of structuring, i.e., the determination of the institutions and structures of the IES by powerful actors so that the system operates in their favor.

1. Actors and their Goals

Actors in a system are individuals, organized collectivities of individuals, and collectivities of such collectivities. The latter two classes of actors can be called organizations. Actors are able to make decisions with respect to the use or disposition of valuables over which they exert control.¹⁰⁴ In doing so, actors interact with each other or at a minimum impinge on other actors' future action possibilities. The nature and amount of valuables that actors control, the degree of control over these valuables, the history of their decisions and interactions, and the general

¹⁰⁴It is always individuals that make decisions and execute actions even in the case of organizations. Economic theory assigned this role to the entrepreneur but the modern business organization is certainly more complex than that.

framework of rules, regulations and laws, which are an implicit and explicit part of any system to which such actors belong, constrain differentially the actors' ability to make decisions and to engage in actions. Actors are also constrained by their position in the structure of relationships among the actors in the system.¹⁰⁵

The desires, needs, goals and interests of actors are generally complex. One and the same actor may simultaneously possess goals and interests of an economic as well as of a social, cultural, political, and military nature (Galtung, 1971).¹⁰⁶ It is of course possible that a given actor, for example a firm, may emphasize primarily economic goals and interests in deciding about a future course of action. In this case the decision-making members of the firm suspend or disregard goals and interests they might have in different roles or as members of other organizations. Similarly a member of a military unit may choose an action based solely on the military objective of destroying a given objective. And politicians

¹⁰⁵Structure refers to the form of the totality of links among the elements which make up a system (Kornai, 1971:52; see also Machlup, 1967:81). The concept 'structure' is restricted here to the description of the set of links and relations among actors and between actors and valuables. Actors, valuables and structure are three characteristics of a system in difference, for example, to the use of 'structure' by van Nieuwenhuijze (1969:146) where actors, valuables, relations and values are all part of the structure of the system.

¹⁰⁶Economic theory uses the heuristic device of the firm and the household in order to circumvent the problem that the same individuals are both producers and consumers at the same time. How far the absolute separation of identities as postulated by economic theory is really maintained is an empirical question.

may in fact attempt to choose a course of action which maximizes their votes in a future election as some political economy models of political behavior postulate (Goodhart and Bhansali, 1970).

Organizations are always made up of individuals and these are members of a society and as such have goals and interests belonging to many if not all of the spheres of social life. They will generally remain conscious of them even if they have to act within a single sphere or have to act as a representative of a collective actor with well defined interests limited to one sphere. Furthermore, the actions of large-scale organizations -- large with respect to the system in which they operate -- often do have sizable impacts on values and interests belonging to spheres other than the one in which the action was primarily taken. Feedback mechanisms can then affect directly the organizations' primary interests.¹⁰⁷ Or, other actors, especially governmental units (belonging to the political sphere), may react to these effects in controlling future operations of the organizations in their primary spheres of interest.¹⁰⁸ In both cases, the organizations can do better in the long-run by considering all possible effects even if they occur outside their spheres of prime interest.

¹⁰⁷For example, compliance of U.S. enterprises with discriminatory policies of Arab governments could reduce sales in their home market because of boycotts by offended customers.

¹⁰⁸The sale of weapons to countries in conflict with other countries might induce the government of the exporter's country to introduce a licensing system for future exports.

In addition, large organizations have the necessary means to intervene directly with actors belonging to other spheres in order to influence their decisions and actions when they could hinder or facilitate the organizations' activities in their spheres of prime interest.¹⁰⁹ In this case, as in the others, actors will try to satisfy multiple goals belonging to two or more of the spheres of social life.¹¹⁰

In some cases, it may be possible to determine a predominant sphere of interests for a given category of actors; in other instances, actors will have a wider spectrum. The range of interests for a given type of actor may vary with the nature of the system in which it operates. Interests may change as an actor grows or transforms itself. The firm is an illustration of the latter occurrence. Some of them became oligopolists in national markets and thereby were forced to include political goals in their decision matrix. MNC are frequently aware, e.g., of the military and cultural implications of their investment decisions.

Achievement of the goals in one sphere may contribute towards the realization of goals in other spheres. Economic

¹⁰⁹Political lobbying by companies affected by or potentially affected by laws and regulations is often cheaper than compliance with existing or proposed laws and regulations.

¹¹⁰Eels (1972:108), using the framework developed by Parsons and Smelser (1956), arrives at a similar view: "The Multinational Corporation, as a concrete collectivity, is not a sub-subsystem of the economy. Like all concrete collectivities, it is multi-functional, and its goals are accordingly assignable to each of the four functional subsystems of the society."

production capacities provide military capabilities (Knorr, 1973). Schools produce not only human capital but they also socialize students (Bowles, 1972). Government financed hospitals provide health services as well as votes for the responsible politician. On the other hand, goals may conflict and trade-offs have to be sought or accepted. Price increases raise profitability but may also produce a political backlash with negative effects on future government contracts. The assembly line can increase productivity but creates workers' alienation which depresses productivity (Terkel, 1974) and ultimately may lead to a different political system. Or on the level of the world system, free trade may maximize economic output and related welfare. But if this system creates increased inequality, resultant conflict and warfare may well lead to drastic reductions of world welfare in the long run.

There is a multi-level hierarchical structure associated with the total population of actors in a system. At the base are individuals followed by smaller collectivities (families, local firms). There are increasingly larger collectivities (corporations that operate in national markets, parties) and the state government (and its agencies) making up a national system. Some of these actors together with international intergovernmental and non-governmental organizations have interests in more than one national system (Feld, 1972:11-13). They have therefore a direct interest in events related to the international system and in the rules underlying its organization. Each actor with such an international

orientation is in principle strongly oriented towards a particular national system, or in the case of intergovernmental international organizations, towards the national systems which are represented in the higher-level organization. However, international organizations which do not have such a dominant orientation are already beginning to emerge parallel to the increasing integration of the world system.¹¹¹

Exchange between actors belonging to the same system is intra-system exchange; exchange across a system boundary is inter-system exchange. International exchange is therefore exchange between actors belonging to different national systems. However, it is possible that the exchanging actors are part of the same higher-level actor as in the case of intra-MNC transactions. In general, actors engaged in international (external) exchange are also participating in national (internal) exchange. Both internal and external interactions can take place between actors which belong to the same level or to different levels in the multi-level hierarchy of actors.¹¹²

¹¹¹MNC of this type are called "international corporations" by Kindleberger (1969:182), "transnational corporations or enterprises" by Kirchner (1964) and Hochmuth (1974:3), "poly- and geocentric MNC" by Perlmutter (1969), and "cosmocorp" by Ball (1970). Essential in all these cases is that these firms have worldwide production and marketing interests without however being centered organizationally or in spirit in a national system.

¹¹²Higher-level actors operate in more extended systems (Tinbergen, 1965). It has already been pointed out that Harry Johnson (1965a), for example, enlarged the governmental preference function by 'non-economic' objectives (see Chapter 2,

Although corporations acting in the international system may concentrate on the satisfaction of their economic interests and goals, state governments will generally try to realize interests which belong to several spheres. These goals and interests are complex because governments represent many different actors with widely different demands. The pattern of goals and interests represented by a government in turn depends very much on the socio-political structures existing within the national system. These structures and the struggles for political domination within a society affect a state's action and outcome preferences.¹¹³ Therefore a government will normally not simply try to maximize the national economic product through its interventions in the national and international system, but will intervene in and try to structure the IES so that economic and non-economic goals of its actors are realized.

Section 3). Another important consequence is that higher-level actors set the rules and laws which regulate the behavior and activities of the lower-level actors. In this sense MNC are subordinate to national governments (Wilkins, 1974:439). However, as the geographic extent of the reach of MNC is larger than the one of national governments, true transnational corporations may well be able to reverse their clear hierarchical subordination (Coleman, 1974).

¹¹³Chapter 4 on internal restructuring of systems will take up this point with respect to the different European reactions to the agricultural crisis after 1873.

2. Multi-Dimensional Valuables

It was suggested at the beginning of the previous section that actors possess, control or desire valuables which are used by them to engage in actions and interactions. Valuables are any symbols, attributes, conditions, resources and commodities which allow actors to satisfy their interests and reach their goals. Any entity of this kind that is useful to an actor in his attempts at goal fulfillment is a valuable within the system to which the actor belongs. Valuables are in general characterized by a vector of attributes which belong to the different spheres of social life, i.e. the economic, cultural, social, political and military spheres. This multi-dimensionality of valuables is an objective feature of valuables.

Economic commodities, for example, may entail much more than the creation of new productive capacities, or the possibility of producing valued outputs through their use as inputs into a firm's production process, or the provision of satisfaction through consumption. Trucks do not only provide transportation services but project also military capabilities and preparedness. Truck factories can be converted into assembly lines for armored vehicles (Knorr, 1973). Electronic components and their use in cheap, mass-produced means of communication provide the basis for cultural, social and political transformations.¹¹⁴ Consumer goods, if they are imported or produced

¹¹⁴MacLuhan (1964) provides a provocative formulation of this idea. There exists a large political science literature

locally under license or as a competitive copy of importable goods, together with their advertised virtues and qualities, transmit the values of the particular society in which they originate. This is also true for investment goods. These embody technologies which reflect the cultural, social and political aspects of societal organization in the originating society in the most general sense.¹¹⁵ On a more concrete level, technologies imply specific patterns of work organization, work rules, worker-management relations, and also management techniques.¹¹⁶ It is exactly the diffusion of these patterns, rules and relationships which some authors see as the most (if not only) positive aspect of foreign direct investments under the control of MNC (Steuer and Gennard, 1971; Streeten, 1972:215-216).¹¹⁷ These enterprise or factory

which links communication with modernization (Lerner, 1958; Pye, 1963; McCrone and Cnudde, 1967; Rogers, 1969; Frey, 1973). Pool (1973) discusses military and political implications of communication systems.

¹¹⁵Technology itself is value-laden and assumes and subsumes cultural values (Illich, 1971). Navarro (1974:10) argues that it is therefore impossible to strictly separate technological and cultural diffusion processes.

¹¹⁶Dubin (1958) discusses the links between technology and worker-management interaction patterns. Woodward (1965) outlines a model in which technology determines the organizational structure of enterprises. Aldrich (1972) confirms the existence of such links.

¹¹⁷The argument here is not about the positive or negative nature of these effects but simply about their existence and therefore the need to arrive at a multi-dimensional conceptualization of valuables.

internal patterns in turn have an impact in the larger society (Udy, 1970) and ultimately affect even the social and political basis of the host society.^{118,119} On the other hand, even the transfer of finance capital can have different psychological implications depending on their form as aid payments, portfolio investments, or direct foreign investments (Bergsten, 1973:103-104; Gergen and Gergen, 1974). Their political implications are different not only because different categories of finance accrue to different actors in the social hierarchy. Direct foreign investments lead to the acquisition of property rights. In most countries, these give the right, or at least the moral right, to influence political processes in the host countries.¹²⁰

¹¹⁸Grow (1975) for example shows that those industrial sectors in China which had been built up with Soviet technology were also those which had adopted most completely Soviet organizational methods. Desai (1972) shows that both the Soviet Union and the U.S. were quite aware of these linkages when they were considering the financing of the Bokaro Steel Plant in India.

The existence of this mutual interaction between technology, enterprise organization, and social and political societal structures was at the heart of the Chinese break with the Soviet Union, the Cultural Revolution and the current discussions in China (Wheelwright and McFarlane, 1970; Dean, 1972).

¹¹⁹It is effects like those described here which lie at the heart of the controversy over the beneficiality of MNC and their direct foreign investments. For additional references see Chapter 2, Section 2.

¹²⁰The fears about Arab investments in the U.S. after the massive oil price increases were in part based on such considerations (see Chapter 6, Section 2).

However, multi-dimensionality is not the same as the simultaneity of economic and power effects as in the model of

The multi-dimensional vector of characteristics is an objective attribute of a valuable in the sense that its use by actors in actions and interactions in a social system has effects in several (but not necessarily all) spheres of social life. Actors, however, will consider in general only a subset of these characteristics when evaluating valuables which they control, desire or need. For one, the goals and interests of actors are limited as pointed out in the first section of this chapter. (But they do not have to be limited to one sphere alone.)¹²¹ In addition, actors in general are not able to include all possible systemic effects of their activities in their evaluation and decision making, nor do they necessarily follow the 'rational' maximizing decision strategies of economic theory. The actors' situation and the consequences of their actions are too complex.¹²² Insofar as actors make decisions and take actions on a limited basis, evaluated effects will reflect only a limited spectrum of the

Hirschman (1945:14, 78-79). Power derives from control over valuables and is not simply another dimension of a valuable. See the next section on this point.

¹²¹Goals and interests of actors are in part a social product themselves. They reflect knowledge, socialization, and legal constraints present in the systems to which actors belong (Buckley *et. al.*, 1974; Baumgartner *et. al.*, 1975c).

¹²²Actors may also be unable to collapse the evaluations of several dimensions into a suitable uni-dimensional index like price, utility or votes. This can introduce inconsistencies, intransitivities and indecision into decision making (Burns and Meeker, 1975).

totality of systemic effects. This means that in the case of economic transactions, even if economic actors decide and act in a perfect economic world without imperfections and market failures, prices reflect only a limited range of all systemic effects occurring in the process of production, exchange and use of commodities. The corollary to this proposition is that actors with different bases of evaluation and decision making, and who are in a position to regulate the behavior of lower level actors, may want to intervene and structure the system so that the actions and interactions taken by these lower level actors on the basis of their evaluations and decisions will reflect the interests of the higher level actors.¹²³ The next two sections will develop more fully the concept of these systemic effects while Section 5 will take up the structuring of systems by higher-level actors.

3. Systemic Ramifications of Economic Exchange

Price in economic exchange and therefore international trade theory reflects the economic aspects of production and consumption processes -- measured in terms of costs and benefits -- as evaluated by the marginal sellers and buyers participating in a market. Social and private evaluations coincide as long as markets are perfect and property rights are

¹²³Optimal and scientific tariffs or the inclusion of non-economic objectives into the economic governmental preference function are examples of such behavior. See Section 3 of the preceding chapter.

completely specified.¹²⁴ Externalities, a divergence of private and social costs and benefits, result when these optimal market conditions are not fulfilled. The preceding section has defined the concept of multi-dimensionality of valuables, including economic commodities. It has been suggested that, as a consequence, of multi-dimensionality production, exchange, and consumption of economic valuables entail a wide array of effects and processes in the different spheres of a social system.¹²⁵ It has been argued that, for various reasons, actors will include in their evaluation and decision making with respect to their economic actions only a limited number of these effects and processes. It follows that a multiple of these effects, actions, and processes prior to, simultaneous with, and subsequent to the action considered will not be reflected in the valuation of the economic valuable exchanged. The totality of these effects,

¹²⁴Market failures (Bator, 1958) result when property rights are impossible or non-feasible to specify, or are not completely specified and enforced for political reasons. Interdependence of preference functions (Arrow, 1971) and differential lengths of time horizons can also produce divergences between social and private evaluations.

The existence of such divergences has led -- especially in the context of development planning -- to the development of cost-benefit analysis and the use of shadow pricing and investment criteria. (On the latter point see Kahn (1951), Chenery (1953), Galenson and Leibenstein (1955), Eckstein (1957) and the review of this debate by Chenery (1961).)

¹²⁵The same can be said for any action in any other sphere of a system. That is, a political scientist may analyze political activities as involving multi-dimensional valuables.

actions, and processes excluded from the private decision calculus of the actors are summarized under the concept of systemic ramifications. The systemic ramifications in the case of economic exchange can be separated analytically into the categories of spin-off and spill-over effects (Galtung, 1971:98). Spin-off effects are those systemic ramifications which occur within the sphere to which the exchange action and exchanged valuable belongs. Spill-over effects in contrast are all those ramifications which have a bearing on one or more of the spheres other than the one in which the action responsible for the ramifications takes place.¹²⁶

It is through the systemic ramifications, the spin-off and spill-over effects of exchanged economic valuables, that

¹²⁶The idea of ramifications of economic exchange and international trade is not new. Singer (1950:476) for example argued that the most important element in the economic life of a country is "the mechanism by which 'one thing leads to another', and the most important contribution of an industry is not its immediate product ... but ... its effects on the general level of education, skill, way of life, inventiveness, habits, store of technology, creation of new demand, etc." (See also Bauer, 1968:49).

Hirschman (1958:98-119) seemed to take up this theme with his concept of forward and backward linkages. Originally Hirschman and, today for example Panchamukhi (1975), give a very narrow economic meaning to these linkages. Hirschman (1967), however, goes clearly beyond the narrow demand/supply imbalance conceptualization in his analysis of the successes and failures of development projects. Using terms like indirect benefits, side effects, spillovers, linkages, repercussions, he describes spin-off effects like the acquisition of new skills through learning-by-doing, the learning of cooperation and discipline by entrepreneurs, etc. Spill-over effects are the acceptance of the idea of family planning, heightened social and economic tensions, the spreading of corruption, and shifts in political power towards particular professions (Hirschman, 1967:160; see also Streeten and Elson, 1971:54-59). Raj (1975) has recently given such an expanded interpretation of the concept of linkages. Ng (1975) uses the concept of 'indirect externalities' in a way similar to the concept of systemic ramifications.

their multi-dimensionality is realized in the different spheres of the social system. Their nature and extent depend on the nature of the valuable exchanged, the specific terms of exchange, the exchanging actor and his internal structure (for example in the case of MNC), the position of the actor in the structure of relationships with other actors, and the institutional and structural properties of the system to which the actor belongs.¹²⁷ Of course, these ramifications can be positive or negative with respect to a given standard which is in general some measure of economic growth and social

¹²⁷ Important structural categories are: (i) The action and interaction possibilities of the actor in the system. The denser and the more extended interaction networks are, the easier it is for the actors to react to a given exchange. This is true for cities with their agglomeration effects (Werner Hirsch, 1973:22; Hoselitz, 1953; Mills, 1972:16-17), national market systems (Bauer, 1968) and especially international market systems as the development of the capitalist world economy since the 15th century demonstrates (Cipolla, 1966, 1970; Rodney, 1972; Wallerstein, 1974). The structure of production has similar importance. For example, Kindleberger (1956:229) argues that countries at higher stages of economic development benefit more from free trade than those at lower stages because the former are more differentiated and therefore factors of production have it easier to exit from and enter a given industrial sector. Baldwin (1963) thinks that agriculture integrates people more than mining. Rosenberg (1964) argues that industrial sectors experience different feedbacks than agriculture. (ii) The relative interaction pay-offs. Burns and Meeker (1975), for example, discuss the influence of pay-off structures on the behavior of game participants. (iii) The orientation of actors towards society. Included here are such factors as n-achievement (McClelland, 1961), behavior according to tradition and norms (Ohmae, 1975), class and ethnic conflicts which can produce isolation and distrust (Meade 1961), etc.

It is therefore not a question of exports of raw materials and agricultural products versus manufactures but of the conditions under which they are produced (Myint, 1954:153). It is structural differences of the kind suggested here which make Australia experience possibly more positive ramifications than, e.g., the Philippines or Thailand although their trade compositions are about the same (Galtung, 1971:102).

development.¹²⁸

The exchanged valuables and the systemic ramifications of exchange may entail commodities and services as in economic theory, but also rights and action opportunities, structural adjustments, behavioral modifications, processes, symbols and attributes. Of special importance for the analysis of the structure of the IES and its evolvement over time are those valuables and systemic ramifications which are power resources and which affect the power positions of the actors in the system. A power resource is any valuable which allows an actor controlling the resource to exercise control over his environment (Burns, 1975).¹²⁹ Three types of power can be defined: (i) The power of actors within a system to take advantage of action opportunities in a system in order to realize positive gains and to control, minimize or prevent negative effects. (ii) The meta-power to structure the system to which the actor belongs so that the actions of and interaction between actors of the system generate productive gains and positive systemic ramifications while losses and negative ramifications are prevented, or at least minimized and possibly overcome. And (iii)

¹²⁸Myrdal (1958:27-33) calls the negative effects "backwash effects", the positive ones "spread effects".

¹²⁹Power, or the capability of getting things done, is clearly a potentiality. The existence of power and the exercise of power, e.g., in an attempt at control of other actors, are not the same thing. The actual exercise of power may not entail the full use of power (Burns, 1975). In this sense power is "a partly unobservable counter-factual property of a complex system" (Alker, 1973:371).

the meta-power to structure the external social environment of the system to which the actor belongs by regulating and influencing the relationships between the actors of the system and actors belonging to other systems. The purpose of this use of meta-power is again to increase the gains and advantages accruing to the system (and minimize those of the other systems) in the process of exchanging and interacting with the other systems.¹³⁰

Spin-off and spill-over effects of exchange activity defined in terms of these three types of powers contribute to a process of social differentiation and social structuring whereby some actors (e.g., states or corporations) develop or maintain comparatively greater capabilities or powers relevant to the particular environment in which they find themselves. That is, actors acquire or develop through exchange transactions differential capabilities or powers to act in their environment, to take advantage of productive or exchange opportunities, to prevent or control negative spin-off and spill-over effects, or to restructure themselves or their environment

¹³⁰Power is exercised by actors to control directly the outcomes of their actions and interactions. Meta-power is the power of higher-level actors (see Section 1 of this chapter) to control the structure and institutions of a system and thus influence and regulate indirectly the relationships and interactions between actors, either higher-level or lower-level ones.

To structure a system means also to restructure it as social systems have always a history. The use of the term 'restructuring' emphasis the structural dynamics of a system and the conflicts between present and desired structures.

The use of meta-power to restructure the IES will be taken up in Section 5 of this chapter and illustrated on hand of historical examples in Chapters 4,5 and 6.

to their advantage. Of special interest are the cumulative or self-reinforcing feedback patterns, Myrdal's "benign" and "vicious circles", whereby differences in systemic capabilities are amplified and developed over time.

4. Unequal Exchange

Unequal exchange is exchange whose systemic ramifications, i.e., the spin-off and spill-over effects, result in a differential allocation or unequal distribution of power resources among the actors and subsystems involved in the exchange.^{131,132} The unequal allocation of power resources is the output of an unequal exchange system. The differential allocation of power resources through such exchange may either maintain or modify the distribution of control over power resources and the action capabilities and positions of actors in the structure of social relations. This provides the conditions necessary for the occurrence of unequal exchange in the future. That is, such conditions make up the institutional-structural input into the unequal exchange system. Unequal exchanges may

¹³¹Emmanuel (1972) defines unequal exchange as a purely economic phenomenon using a marxian scheme of accumulation. Non-economic factors define the structure of the IES which produces unequal economic exchange and reproduces the system of uneven development (Amin, 1971, 1973). The necessary condition for unequal exchange to occur is the ability of the DC to set and maintain low wages in the UDC. Wolff (1974) and Barnett (1975) provide historical evidence for such structuring of low wage labor.

¹³²Countries are subsystems of the IES. Actors here are mainly corporations and governmental organizations which participate in international exchange activities.

have at least three types of socio-structural outcomes, depending on the beneficiaries of the differential allocation of power resources: (i) The outcomes of exchange maintain the original distribution of power resources. The social structure is maintained and reproduced. However, the exchange could be equal, in that an initial structure of equality in terms of the distribution of relative power is maintained. (ii) Exchange outcomes may be unequal and modify the original distribution of power resources (including position in the structure of relations), developing or solidifying such a structure, i.e., leading to increased inequality. In this case, the inequality of exchange favors those actors (or systems) already occupying positions of power advantage. (iii) Although inequality is typically reproduced and possibly developed further through exchange, important changes in resource distributions and transformations of the structure of relationships may take place under certain conditions, in some instances in the direction of increased power equality. In this case, unequal exchange favors the relatively powerless. Social structures based on a particular distribution of control over certain strategic resources and action capabilities may undergo such a significant transformation due to a shift in the relative importance of power resources, thereby altering the basis of social structure.¹³³ Its transformation may also come

¹³³The importance of one power resource or set of power resources will vary from social environment to another depending on their critical or strategic significance in the particular context. This context is naturally subject to alteration by natural and social forces.

about because actors previously in a more or less disadvantageous position unexpectedly gain resources or develop capabilities which enhance their position of relative power compared to those actors who have been in the dominant position. Such changes occur typically when an actor exogenous to the system provides the relatively powerless actors in the system with additional power resources or opportunities for new relationships with power advantages (Baumgartner et. al., 1975b, 1976a). Also, new valuables or sources of such valuables may emerge, be discovered or created within the system or new social relationships may emerge, particularly in connection with such changes, and transform power relations in favor of disadvantaged actors.¹³⁴

Unequal exchange is investigated through the comparative study of actors in an exchange system. One may examine a class of buyers (or sellers). The members of the class will gain or accumulate action opportunities and power resources at differential rates even in the case where they are producing, exchanging or consuming the same valuable. Or one may look at the parties engaged in an exchange relationship. Unequal exchange in this case can occur on three different levels: (i) the participants directly involved are affected differentially in their relationship; (ii) the exchange between two traders affects in unequal ways the capabilities and powers of the respective systems to which they belong; (iii) meta-level

¹³⁴Chapter 6, Section 2, deals more extensively with power reversals.

exchanges between two systems, negotiated between the systems' representatives or leaders, have spin-off and spill-over effects which change the relationships of the two systems and of their actors with each other.

In the case of international exchange, the investigation may focus on two different aspects of unequal exchange and its effects on the system capabilities of societies with different internal socio-economic structures and positions in the international structure of relationships. First, the systemic outcomes of the same productive and exchange activities may differ between two or more classes of countries in that those countries engaged in the same trade activity, paying the same price for the same valuable in world markets, may experience markedly unequal ramifications from this activity; in this sense, they would be engaged in unequal exchange.

Second, one may investigate the processes whereby exchange between two or more countries is structured in such a way that the powers of the relatively powerful country or countries are enhanced further, or in the limit maintained, while the development of such powers in the other country or countries are affected either positively but to a lesser degree, or negatively. This meta-process of the structuring and institutionalization of an unequal exchange system is the topic of the next section.

5. The Structuring of the International Economic System

Systemic ramifications of international economic exchange and the related power implications provide two reasons why state governments orient a considerable degree of their activities towards the structuring of the IES. First, countries will try to facilitate and develop those exchange activities of their lower-level actors which produce positive ramifications within the system in addition to the private benefits directly accruing to the exchanging actors. This means that they try to prevent or at least limit those exchange activities which would have negative or possibly only weak positive ramifications.¹³⁵ Secondly, governments will attempt to favor those exchange activities which increase the power position of the country and weaken the powers of the other countries, at least relatively speaking.¹³⁶ That is, governments will try to shape the institutional and structural context within which international economic exchange at the world market level takes place so that the resultant systemic

¹³⁵Positive and negative ramifications or positive ramifications with negative power implications for dominant groups may occur simultaneously creating dilemmas for the structuring activities of the government. This point will be illustrated in Chapter 6 with the case of the Comecon.

¹³⁶Governments and their supporting groups might be more interested in protecting their own power position within their own country than the power position of their country in the IES. The analysis of the European adaptation to the fall in the price of wheat in the late 19th century in Chapter 5 illustrates this point.

ramifications and power implications are biased in favor of their own country.¹³⁷ The structuring of such an unequal exchange system on the international level includes interventions into country internal structures and institutions in order to maximize beneficial systemic ramifications of a given international economic exchange activity.

The ability to structure the IES so as to create, maintain, and institutionalize an unequal exchange system to one's own benefit and the benefit of the lower-level actors belonging to the system is a meta-power, a higher order power. States exercising meta-power exercise relational and structural control, i.e., they influence the structures and relationships among the actors of the system and of the supra-system.¹³⁸ The exercise by governments of asymmetrical control over valuables in the different spheres -- economic, political, military, social and cultural -- and therefore their ability to

¹³⁷Keohane and Nye (1973:117) call this meta-level process "structure-level exchange", determining "the long-term political and economic incentives and constraints within which actors operate." Exchanges where the institutions are taken as given, the ceteris paribus case of international trade theory, are "process-level exchanges".

¹³⁸For this purpose, higher-level actors engage in multiplex exchange relationships where valuables in one sphere are exchanged against valuables in other spheres. For example a country might grant another one most-favored-nation treatment in exchange for a liberal emigration policy for persecuted groups which has significant cultural, social and political repercussions in the first country.

Whereas multi-dimensionality is a property of valuables, multiplexity is a property of the relationships among actors.

use meta-power to structure the IES, is in part the result of differential natural resource endowments, climatological conditions, geographic location, etc. But it is also in part the result of historical developments, of earlier uses of meta-power and structuring attempts. Today's inequalities are in particular the result of a long history of colonial and imperialistic domination of a few countries over others. This domination has left behind a legacy of uneven accumulation of productive capacities and brought forth healthy and well-educated, cohesive, disciplined and well-motivated labor forces in a few countries while preventing their development in others. It has permitted the development of cultural traits, socio-political structures, and behavior patterns flexible enough to let some societies adapt positively to changing circumstances while others fail to do so.¹³⁹ And it brought certain countries into possession of recognized ideological, spiritual, cultural and political leadership while others are supposed to follow the former.¹⁴⁰ It certainly has allowed the dominant nations to gain favorable access opportunities to important and profitable markets for their exports; their imports

¹³⁹ However, Kindleberger (1974) raises some questions about the ability of the U.S. to continue to do so. It should be pointed out that Kindleberger makes the comparison not between the U.S. or Great Britain and UDC, but between them and Germany and Japan.

¹⁴⁰ The present challenge by UDC turns exactly around this point. Decolonialization, and now the quest for a NIEPO, are attempts to break this dependency relationship and institute self-determination and equality. In this sense, today's world struggle has some similarities with the early history of labor movements.

are procured from relatively secure and cheap sources; and their financial and direct investments are profitable and protected from losses.

Today we have a structured IES where economic exchange between the industrialized, high-income countries of the 'North' and the less developed, low-income countries of the 'South' generates differential systemic ramifications which maintains uneven development on the world level. A move towards free trade, i.e., a dismanteling of the extensive systems of trade controls, will not necessarily change this bias of the IES, although over time it may be weakened. It should not be forgotten that historical attempts at free trade originated always in the most highly developed countries, Great Britain in the 19th century (List, 1971) and the U.S. in the 20th (Gardner, 1969). As Wiles (1968:555) put it, free trade "is the mercantilism of the strongest power and it leads to imperialism almost as surely as thought-out commercial policy."

The IES will always possess certain structures and institutions. Until recently at least, these were the result of relational and structural control activities by dominant DC which used their power to structure an unequal exchange system in their favor. It seems like the world has arrived at a turning point. Recent shifts in relative power have created the possibility for UDC to demand a new definition of the laws and rules which determine the distribution of the world product. We will therefore experience a period where the main efforts of international politics and actions by the countries of the world are directed towards the determination of what constitutes

a fair distribution of the world product, equitable prices and fair values for the worlds' resources (Schmidt, 1974:442).

The next three chapters will expand on this topic of the structuring of an unequal IES to illustrate in more detail the processes of such structuring attempts as well as the interaction between the elements described in the earlier sections of this chapter. The next chapter concentrates on the capacity of countries to structure and restructure internally in response to an external event in the IES, in this case the fall in the wheat price on European markets after 1870 in the wake of the opening up of new lands in North America and Russia. Chapter 5, on the other hand, takes up the process of the structuring of the IES itself. The first example traces the development of the relationship between England and Portugal in the 17th century, while the second one looks at the emergence and breakdown of the Bretton Woods institutions. The first example concentrates more on the bilateral structuring of a trade relationship. Special consideration is given to the role of the power structure internal to Portugal in this structuring process. The second example of the Bretton Woods institutions focuses more on the attempt by one dominant world power, in this case the U.S., to structure a so-called free world market system. A subsidiary topic in this example is the relationships between the power distribution implied in a given structural and institutional framework and the power implications of the operation of the system. Chapter 6 in turn amplifies this topic by looking, on one hand, at the dilemma that a dominant power may face between structuring activities which assure its

continued dominance but which may have only limited systemic ramifications in terms of economic growth. Section 2 of this chapter illustrates how an unequal exchange system, in fact the present IES, may be experiencing a turning point related to a historical shift of power towards the countries controlling oil and other raw materials. Recent events involving the countries grouped in OPEC and OECD are analysed in the terms of the framework presented here, and a possible scenario of the restructuring of today's IES is developed.¹⁴¹

¹⁴¹The examples chosen might imply a change in the character of these structuring attempts as the world economy becomes more integrated and interdependent. This implication is in part the result of methodological limitations of the present analysis insofar as the analysis concentrates on the activities of a selected number of countries. England did not only structure its relationship with Portugal but this development was part of a larger process not analysed here. The difference between the single-handed structuring attempt of the U.S. at the end of World War II and the multilateral free for all of the present situation is not necessarily the consequence of increased world interdependence but of a change in the power distribution on the world level. Power is today more diffused than at the time the Bretton Woods institutions were formed.

CHAPTER IV

INTERNAL RESTRUCTURING

The welfare analysis of international trade is based on a strictly economic analysis as outlined in Section 3 of Chapter 2. Changes in comparative advantage due to economic events in the IES or changes in trade policies induce only a reallocation of resources in response to changing relative prices. Non-economic considerations or processes are absent from these reallocation processes. Institutions remain constant and unaffected by them. On this basis, free trade, or as second-best, certain trade control policies, are suggested as welfare optimal policies for any country to follow. In Chapter 3, in contrast, I developed elements of a systems analysis of events and processes in the IES based on the inclusion of non-economic dimensions and spheres of social life, and a multi-level model structure.

In this view, events in the IES have systemic ramifications and effects on the relative power positions of interest groups. Therefore, the economic adjustment path will be affected by non-economic processes and power considerations. This leads to three propositions. Firstly, the economic end situation will most probably not be what is suggested by a comparative static, and even dynamic, economic analysis. Secondly, the classical free market adjustment and the optimal trade control policies may not produce the best economic outcome. And

thirdly, government intervention into the adjustment process is likely but dependent in its occurrence and form on the interests of the dominant groups in society and, especially, their and the government's interest in the preservation of their positions of relative power.

This means that the capacity of a social system to structure and restructure its economic system in response to a basic shift in the structure of the IES is limited by its internal organization. Below I explore the proposition that the distribution of meta-power among the social groups of a society and the interests and objectives of those with a disproportionate share of such power significantly affect the capacity of a country to respond to external events and to reorganize its internal structure, in particular, to change the system of economic activity, and therefore, its development tendencies and potentialities. Section 1 describes the institutional and structural changes in five European countries following the fall in the wheat price in European markets after 1873. Section 2 develops the proposition mentioned above about the distribution of meta-power and interests among social groups as important determinants of these different adjustment paths.

1. The Fall in the Wheat Price, 1873-1896,
and European Adjustments

Wheat and other grain prices fell on all European markets by about 50 to 60% beginning in 1873 until about 1896 in response to the arrival of large quantities of cheap grains

from the newly opened up plains of Russia and North America.¹⁴² The agricultural sectors and economic systems of Great Britain, Denmark, Germany, France and Italy underwent quite different adjustments. France and Germany chose an essentially nationalistic approach protecting existing structures, while England and Denmark restructured their agricultural sectors along lines suggested by the changed comparative advantages. Italy followed first the latter policy and switched only later to a nationalistic response with, however, altogether different consequences.

In Great Britain, the agricultural sector shrank dramatically, releasing large quantities of labor to the rapidly expanding industrial centers of the country. The farmers reacted to the falling grain prices and incomes in an individualistic manner with at most some local and regional attempts to collectively adjust land prices and rental payments. This apolitical and individualistic response of the British farmers was in part due to the fact that the real source of their trouble was masked by the general depression. Drought conditions lowered yields and thus incomes all over Europe. Recurrent

¹⁴²See Kindleberger (1951:31-32) whose study "Group Behavior and International Trade" provided the initial impetus and basis for the present analysis.

This compares with a fall of the wholesale price index (in the case of Denmark) of only 36%. The general fall in prices was the result of the severe depression in Europe from 1873 to 1896, the downswing of the long-term cycle (Kondratieff, 1935; Hansen, 1964:53-76). Bad weather conditions in Europe reduced yields and prevented even larger price falls. This tended to mask the real source of the fall in farm incomes (Kindleberger, 1951:31-32).

waves of animal disease in Britain were also seen as responsible for the falling incomes (Kindleberger, 1964:243).¹⁴³ The preceding twenty years, on the other hand, had been extremely prosperous years for the farmers and the accumulation of reserves during that time now delayed the full impact of the financial losses after 1873 (Kindleberger, 1951:32; Murphy, 1973:600).¹⁴⁴ The restructuring of the agricultural sector remained rather narrow and failed to take advantage of the rapidly increasing demand for dairy products and meat (which was instead satisfied by Denmark) as well as fruits and vegetables (Kindleberger, 1964:240-242).¹⁴⁵ However, some of the remaining farmers converted to livestock and dairy farming, a

¹⁴³The real crisis was however largely a crisis of wheat farming (Kindleberger, 1964:241) and this probably contributed to the lack of an organized response of British agriculture.

¹⁴⁴These internal events together with the fact that the repeal of the corn laws in 1846 had not led to a fall in the grain prices slowed down the perception of the problem as a foreign one and thus may have contributed to the lack of a political response.

¹⁴⁵Some natural barriers like rainfall patterns and soil conditions would have made such a restructuring difficult. But the existing laissez-fair individualism prevented the emergence of cooperatives and led to the neglect of agricultural education (in the face of a general unwillingness to learn new things) which could have overcome these barriers. The land tenure system with its specification of crops to be planted and its discouragement of capital investments increased the structural rigidity. British farms were generally land-intensive and based on wage labor. The alternatives demanded labor- and capital-intensive family-sized farms which would have demanded extensive changes in ownership patterns and heavy investments of capital. But a laissez-fair system made these institutional, higher-level changes difficult.

conversion which had already started in the 1850's in response to low priced foreign feed grains (Schlote, 1952: 139-141). Others turned to horticulture and market gardening (Kindleberger, 1951:32). At no time did British farmers consider demanding the reimposition of tariffs; the repeal of the Corn Laws in 1846 had convincingly demonstrated that the commercial and manufacturing interests were dominant (Perry, 1974). The release of labor from the agricultural sector helped in keeping wage costs low in the industrial sector which obviously helped in its rapid expansion. The falling food prices, on the other hand, made low wages possible without creating labor unrest and thus social and political difficulties.

Denmark and its agricultural sector reacted to the same economic stimulus of falling grain prices by doing what Britain could have done if the political and social situation had been different. Instead of reallocating the resources away from agriculture to industry, Denmark restructured its agriculture in order to be able to remain internationally competitive. It switched almost totally from grain farming to animal husbandry and the production of eggs, bacon, milk, butter, and cheese for the growing export markets in the industrial areas of Germany and Britain. The cheap foreign grains were used as feedstuff for the large animal herds. However, the conversion was not left to individual farmers but took place on the basis of a large cooperative movement that provided the necessary scale economies for technical information, technological innovations,

and the necessary infrastructural investments. Excellent rural schools and specialized facilities for continuing education of the farm population helped to rapidly spread the necessary new knowledge. An extensive network of credit institutions helped to finance the conversion effort. A cohesive population and a suitable farm structure of family-owned, medium-sized farms helped in bringing about this market response resembling so closely the classical comparative advantage paradigm (Kindleberger, 1951:35).¹⁴⁶

Both Germany and France took what Kindleberger (1951: 37) calls a nationalistic response compared to the internationalistic responses of Britain and Denmark. They instituted protective tariffs on wheat and other grain imports in order to preserve the size and prosperity of their agricultural sectors, or at least their most important and powerful parts. Germany enacted a nominal tariff only in 1879 after 14 years

¹⁴⁶Of course, Denmark as a small country, compared to its grain production capacity, had to restructure its agriculture one way or another. Denmark was subject to export market competition and not home market competition as was the case for Britain, France, Germany, and Italy. Only an export subsidization program could have saved Danish exports but then the pressure for structural adaptation would have come indirectly from the financial burden unless the costs could have been shifted to other countries through an OPEC like cartel or an arrangement similar to the EEC agricultural policy.

This means that a small country -- small compared to its major economic sector and its exports -- is almost forced to be structurally flexible if it wants to protect its standard of living in a changing world (Wright, 1939:3-27, 243-244). Kindleberger (1974) provides additional evidence on this point.

The task then becomes to explain why some countries are structurally flexible and others not, and secondly, why Denmark chose its particular adjustment path and not the British one, or why Britain permitted the elimination of its agricultural sector but France and Germany did not.

of free trade. Sharply higher rates were introduced in 1885 and 1887. This agricultural protection, which included a tariff on rye, a dominant product of the agriculture of eastern Germany, was coupled with protective tariffs for industrial raw materials, manufactures, as well as live animals.¹⁴⁷ This provided a protected inland market for all the major sectors of the German economy (Kindleberger, 1951:33).

The French government imposed markedly higher tariffs on grain and live animal imports in 1885 and 1887 after an initial small tariff had been levied since 1881. The political pressure for such action came from the agricultural syndicates. They in turn had earlier evolved into producer cooperatives from simple associations to further the technical advancement of agriculture after the law against associations based on economic interests had been fully repealed in 1884. Grain farming was important all over France. Grain crops occupied more than half the tilled land in 77 out of the 88 departments in 1882.¹⁴⁸ Wheat and other grain interests combined with other agricultural interest groups for wine and cattle to agitate for a generally high price level for their products. The tariffs on grain and live animals were the

¹⁴⁷The protection afforded to the different products was quite unequal. The tariffs on wheat, rye and oats, the products of eastern Germany, were twice as high as on corn and barley, the products of the western parts (Clapham, 1921:24).

¹⁴⁸Even Corsica with the smallest acreage devoted to grain used still 40% of the tilled land for it. Also, wheat was grown on almost every farm in the country (Kindleberger, 1964:27).

result of a compromise between the conflicting interests of industry and agriculture. Industry wanted low food and raw material prices but gave up on the former in order to preserve the free import of some agricultural raw materials (Kindleberger, 1951:33).

The Italian government vacillated between a policy of free trade and protection. An early laissez-faire attitude with strong exploitative tendencies towards the peasantry, especially that of southern Italy, was followed by a policy of protective tariffs on wheat but only after France and Germany had already taken similar steps. Italy had levied a small tariff on wheat since the 1860's mainly for revenue purposes. But wheat was the only agricultural product enjoying this modest level of protection and the rate was below those on manufactured goods. In 1869 an excise tax on milling of wheat was reintroduced to increase state revenues. This tax fell heavily upon the poor urban and rural classes and was kept in force until its final demise in 1884 despite vigorous opposition and protests (Clough, 1964:46-47). This political resistance may have contributed to the government's reluctance to impose higher tariffs once massive imports started. The relatively low tariff rate of 1878 was finally increased in 1887 and 1888 to a level comparable with that in France and Germany. This step was combined with a move towards increased protection for manufactures and thus did not improve the terms of trade of the agricultural sector and especially the southern peasantry. These measures did therefore not succeed in stopping the

emigration of the peasants which had begun earlier in response to the low wheat prices and farm incomes.¹⁴⁹ Continued emigration overseas was about the only solution left to the southern peasant. Internal migration to emergent centers of industrial production was impossible. The unification of the Italian territory had destroyed the small industrial sector around Naples which could have provided the core for an accelerated industrialization. A restructuring of the agricultural sector along the lines of the Danish model was impossible. The apathy of the central government and the local ruling elites would have necessitated the capability of the peasantry to self-financing a strategy of conversion. But the socio-political make-up of the South and the economic policies of previous decades had prevented the accumulation of capital by the peasants or other groups connected with the agricultural sector.

In summary, the five European countries reacted quite differently to the challenge of falling wheat prices. Britain permitted the wholesale liquidation of its wheat sector and absorbed the released agricultural labor in its expanding industrial labor force. Denmark maintained the size and prosperity of its agriculture but converted to products which were to have rapidly growing markets and in which Denmark could maintain its international competitiveness. France and Germany opted basically for the status quo in their economic and

¹⁴⁹See Kindleberger (1951:34-35), Clough (1964:107, 115) and Smith (1969:157-162). The income squeeze was increased due to the loss of the important French wine market.

social structures (Kindleberger, 1964:195). The resultant distribution of the gains of protection was however markedly more unequal in Germany than in France. Italy moved too late to protect its agriculture and therefore did not realize any benefits. While in Britain the released labor fed the expanding industrial sector, Italian migration was international migration with completely different long-term consequences for economic growth and soci-political structural transformation.¹⁵⁰

2. Power and Group Interests as Determinants of Economic Systems Adaptation

Kindleberger (1951:45-46) explains the different patterns of national adjustment described in the preceding section with variations in the social cohesion of the five countries. Social cohesion is an expression of the societal flexibility in restructuring institutions in order to maintain productive capacities under changing circumstances. Determining factors of social cohesion are the internal mobility of the factors of production, the quality of the system of communication, and the strength with which a set of common national values is held. High social cohesion will make it easier for a society to find a set of adjustment policies in the event of external

¹⁵⁰The same structural deficiencies seem to exist today. Southern labor moves north, but Italy as a whole is still exporting capital and labor. Factor emigration is therefore not the result of factor supply imbalances but of structural bottlenecks. The government is still not able to overcome them with a set of coherent reforms based on a social compact and effort. In the meantime, Italy has to import ever increasing amounts of foodstuffs (Hofmann, 1974).

change which is acceptable to the various groups and which can be realized with minimal social conflict.

In this conceptualization, social cohesion can obviously only explain the speed with which the adjustment policies are chosen and implemented and the degree to which conflicts and disruptions will hamper this implementation. It cannot, however, explain why a country chooses one adjustment path and not another. Such an explanation has to build on societal groups and their interests and the distribution of meta-power among them.¹⁵¹ The former factor determines a group's interest in an adjustment and in the form of such an adjustment. The latter factor determines the differential abilities of these diverse groups to actually participate in the determination and implementation of the adjustment policies and to make sure that the restructured societal structure and institutions remain supportive of their interests and especially of their positions of meta-power. The comparative analysis of the reaction patterns of the five countries points to two basic patterns.

Germany and France were characterized by the existence of several groups of cohesion and relatively equal positions of meta-power with which to defend their interest. The French and German solutions therefore consisted, not surprisingly, in a compromise in which each group realized its

¹⁵¹J.J. Pincus (1975) shows that the ideal industrial pressure group for tariffs in the U.S. had members all over the country and that the factors which determine organized collective action according to the analysis by Olson (1965) were less important.

strongest objectives by giving in on less important ones.¹⁵² The other pattern, represented by the cases of Great Britain, Denmark and Italy, consists of the presence of groups which have different degrees of cohesiveness and which have clearly unequal positions of meta-power in the relationships among themselves and to the governmental bureaucracy.

In Britain, the industrial-urban revolution had already progressed far at the onset of the agricultural crisis. The dominance of the industrial and urban interests had been clearly demonstrated decades earlier with the repeal of the Corn Laws in 1846. Both the capitalist and the working classes had essentially the same interest in low food prices, although the former desired to keep wage costs low and the labor supply high and the latter wished to ensure their survival at the prevailing wage rates. This interest situation explains the maintenance of free trade in agricultural products. The farmers and landowners faced their crisis essentially as individuals and had therefore only limited means available to express their demands. The ideology of laissez-faire, the belief in the sanctity of private property rights, the poor quality of the rural education system, and the general unwillingness of the farmers to learn new ways and methods led to the particular adjustment pattern described in the first section of this chapter.¹⁵³

¹⁵²This solution obviously requires that the preference orderings of the different groups have at least some concordance embedded in them and are not totally opposite to each other (Burns and Buckley, 1974; Buckley *et. al.*, 1974; Burns and Meeker, 1975).

¹⁵³The government was reluctant to intervene in the

Denmark, on the other hand, comes closest to Kindleberger's case of a country with high social cohesion. The agricultural sector was an important part of the economy and yet was closely integrated with the industrial and urban sector. Agriculture and industry were based on small-scale, owner-operated units. Cities and towns were small and evenly dispersed over the country, thus assuring a close interaction between the populations of the two sectors and their close mutual identification with the other's interests (The Economist, 1969).¹⁵⁴ The defeat in the war against Prussia in 1866 and the loss of part of the territory had increased the feeling of national unity. As already pointed out in the first section, Danish agriculture had to convert as the two options of export market protection and shrinkage and, consequently, large-scale release of labor were impossible. The importance of agriculture for the national well-being and the close integration of agriculture with the industrial and urban milieu

agricultural sector and violate the property rights of the landowners which were seen by them as the basis of individualism and personal freedoms (Kindleberger, 1964:197-198). On the other hand, the government interfered continuously with the operation of the economic system despite the official ideology of laissez-faire. But the interventions were never in favor of the agricultural workers and peasant proprietors (Kindleberger, 1964:191-192, 244). The explanation is therefore more likely to be found in the positions of meta-power.

¹⁵⁴Equal inheritance rights on the farm were the rule but the efficient rural credit system enabled farmers to pay off their siblings. This facilitated the emergence of a large middle class both in the rural and urban areas and assured a relatively equal distribution of wealth. Close family ties linked the two areas and the excellent rural education system helped prevent the emergence of differences on this dimension (Kindleberger, 1951:45).

provided the former with a position of meta-power. The smoothness and efficiency of the radical reorientation was the result of the identity between the different sectoral as well as national interests and the absence of any seriously differentiated interests within the agricultural sector itself (in contrast to Britain, for example).¹⁵⁵

Italy seemed to possess the worst characteristics of the Danish and British case. Agriculture was economically important all over Italy and predominantly so in the southern part.¹⁵⁶ National unification had been achieved just prior to the beginning of the crisis. Yet the country remained deeply divided. The North was rapidly industrializing on the basis of reasonably modern institutions and a fair network of communication. The South still possessed a semi-feudal structure. The peasants were legally emancipated but were laboring under high taxes which had replaced their former feudal duties. This forced the peasant cultivators into cash-crop production. But they could ill withstand the market price fluctuations during the 1870's and 1880's because they lacked capital. This capital shortage was in part the result of the policies of the

¹⁵⁵Kindleberger (1951:45) argues that the large degree of equality and absence of other differences enabled the farmers to build and successfully utilize the cooperative institutions which were so important for the conversion of agriculture.

¹⁵⁶Agriculture in the North was dominated by large-scale wheat growers producing for the market. Southern peasants were producing high-cost wheat and did not profit even from the high tariff rates of 1888. As growers of olives and grapes, they were net-buyers of grain and thus stood to lose from a protected inland market while the northern producers gained (Smith, 1969:158-160).

government which turned the internal terms of trade against the South and also led to a net-outflow of government funds (Lopreato, 1967:23-24). The Southern peasant suffered from the worst of both the feudal and capitalist system (D. M. Smith, 1969:40).

The Italian central government was dominated by a northern bureaucracy and interests. The electoral franchise favored the urban population and excluded the peasants from political representation.¹⁵⁷ The local governments in the South were dominated by local elites who used their power to enrich themselves (Smith, 1969:36-39). The land-owning elites regarded with contempt any practical pursuits and left the operation of their estates to managers who in turn tried to delegate this task still further (D. M. Smith, 1969:38). The peasantry itself was deeply split as the result of a long process of acculturation.¹⁵⁸

Thus the society of southern Italy had characteristics exactly opposite to those that allowed Denmark to stage such an efficient and successful conversion of its agricultural

¹⁵⁷Only 2% of the population had the franchise in 1860 and this increased to only 8% in 1872. Only .7% of the population voted in the parliamentary elections of 1870 (D. M. Smith, 1969:35, 39, 134).

¹⁵⁸The peasants had copied the socio-cultural views and habits of a strictly structured hierarchical elite. See Lopreato (1967:15) for examples.

The organization of agricultural workers and peasants started in the 1880's on a local basis and led too late, only in 1901, to the formation of a national organization (Clough, 1964:395).

base. The South possessed an extremely fragmented social structure, was politically powerless at the national level, lacked capital with which a restructuring could have been financed on a private basis (as in the case of Britain), had a seriously deficient infrastructure, an illiterate and undernourished population, and a century-old habit of traditional and inefficient farming techniques.¹⁵⁹ These factors all combined to leave emigration as the only option to the peasant when the agricultural crisis hit. The lack of political power on the national level led to tariff policies clearly damaging to the South and favorable to the politically powerful northern agricultural and industrial interests. The social structure of the South explains why the agricultural sector could not count on a unified regional support or the development of cooperative efforts. But even if the central government had intervened and pushed for an agricultural conversion, the outcome would have been hardly different. The preceding centuries of despotic and exploitative rules had nurtured in the peasants a distrust of and hatred toward state officials. Any state intervention would have been perceived not as helpful but as a new attempt at even more effective exploitation (Lopreato, 1967:26; Moss, 1974:153).

In contrast to Britain and Denmark, France and Germany were made up of a number of cohesive groups with well-defined

¹⁵⁹The Church had been a major landholder in the South for a long time and had discouraged all but the most traditional and inefficient farming methods. The resistance to fresh approaches and new methods naturally became a deeply ingrained behavioral trait of the peasantry (Lopreato, 1967:12).

but different economic and socio-political interests and which were in positions of relatively equal meta-power. No single group was capable of imposing its preferred solution if it violated the major interests of other groups. A compromise had to be sought on the basis of the partially concordant interests embedded in the general preference orderings over the different strategies and outcomes envisaged by the various groups (Buckley et. al., 1974). The compromise itself was in each case strongly supported and furthered by a powerful bureaucracy and central government. These two actors had some goals of their own, especially a desire for national strength and unity. They enforced therefore a compromise which realized the major interests of the dominant groups at relatively low costs to them and which at the same time preserved social and political stability, and therefore economic productivity, within the two countries.¹⁶⁰

This mediation by the state apparatus between almost equally strong groups with very specific and conflictive interests was especially important in the case of Germany where the coinciding group boundaries of economic, cultural, socio-political, and regional interests provided for a strong secessionist

¹⁶⁰This assumes that the state bureaucracy and central government can have goals and interests which are not in complete accord with those of the dominant socio-political groups. In this case, these two actors become interest groups themselves. They can often pursue their objectives especially effectively because they control the means of communication and the forces of coercion. Elias (1969) stresses the positions of meta-power and the action capabilities of these two actors in his analysis of the emergence of the absolutist monarchy.

potential. Both the agricultural and industrial sectors were divided into subgroups with some differences of interest. The agricultural sector consisted, on the one hand, of the large-scale, owner-operated Junker estates in the East producing wheat (and rye) with wage labor. These estates were export oriented with markets in western Germany as well as other countries. On the other hand, there existed a large sector of smaller, family-operated farms, mainly in the western parts of Germany, which concentrated on animal husbandry, and which, as net-buyers of feed-grain, were mainly interested in low grain prices. The industrial sector was similarly split between large- and small- scale industry. Industry as a whole was dominated by the regionally concentrated heavy industry which was interested in exports in order to achieve cost reductions through economies-of-scale in their capital-intensive plants. The fabricating sector on the other hand was dispersed all over western Germany and was made up of plants and firms of various sizes which used mostly labor-intensive production methods. They were very much concerned with wage costs and therefore favored low food prices, while the capital-intensive steel and coal industries did not care about this problem to the same extent. The labor movement itself was split in its views, reflecting the different positions of relative power it possessed in its relationships to the two groups of employers.

This configuration of interests and power relationships could have easily produced a power stalemate between the dominant groups in which case the Junkers would have faced disastrous consequences. A secession in order to protect their

interests was not really viable for two reasons. Their well-being depended on access to export-markets, which a secession could not produce. A Danish solution with a complete reorientation of the production structure was very unlikely because the switch out of grain production into animal husbandry would have threatened the social and political foundation of Junker power. However, at that time the German state reflected very much the alliance between the Junkers and the industrial barons as a consequence of their combined contributions to the military successes in the wars against Denmark, Austria, and France. The two groups arrived at an understanding because the solution imposed the costs of protection on the weaker subgroups on each side as well as on the working class as a whole. The solution reflected the interests of the Junkers and heavy industry because their groups were the most powerful due to their cohesion based on very narrow and uniform interests. Furthermore there was never any threat of a collective rebellion of the losers. The farmers of western Germany received some protection for their products. This made them reluctant to reject the compromise and possibly prevented them from perceiving the overall deterioration in their situation.¹⁶¹ But probably more important was the acceptance by the other groups of the leadership of the Junkers and industrial barons whose 'able' performance had been clearly demonstrated by the German military triumphs. A third and often neglected factor also

¹⁶¹Kindleberger (1951:33) following the argument of Gerschenkron.

helped to prevent the emergence of a rebellious coalition of losers. The ideological differences between the land-owning and independent farmers of the West, the small-scale capitalists with their urban orientation, and the propertyless and socialistic minded workers was too great to be transcended over the relatively minor question of grain prices.

In France the cohesion within the industrial and agricultural groups was greater than in the German case and this in turn made their differing economic interests much more pronounced. However, this opposition became muted as a consequence of the military defeat and national humiliation in the war against Germany in 1871. The need to discharge the substantial obligation of the war reparations helped to create a sense of patriotism and national unity (Kindleberger, 1968b: 326-328). Under these conditions the state could play once more its traditional role as an equitable arbiter of competing economic claims (Kindleberger, 1964:195). The state-sponsored compromise satisfied again the major interests of the strongest groups and preserved the socio-economic and political institutions and structures.¹⁶² The French policy of tariff protection

¹⁶²Kindleberger (1964:28) points out that the protective solution was facilitated by the absence of significant export interests which would have pleaded for free trade in order to avoid foreign trade retaliation. The loss of the Alsace had eliminated the textile export interest, pylloxera those of the wine producers. French society abhorred change of any kind and one task of the state was the preservation of social stability by freezing the economic and socio-political structures. This necessarily led to the protection of agriculture when its viability became threatened, and this in turn led to the protection of the mining and industrial sectors (Kindleberger, 1964:286).

preserved the backward structure of the agricultural sector. Industrial growth slowed down due to higher input cost and almost stagnant home markets. The German solution, although very much like the French one, did not have the same result because the German social and economic structures were different from the French ones. As in the case of Britain and Italy, the same policy response to the same external event led to different long-run outcomes.

The preceding analysis has shown that the economic policy choice in response to an external event can be explained -- within the limits given by general economic constraints -- by the economic and socio-political interests of the different groups and their relative positions of meta-power.¹⁶³ The different groups try to activate their positions of meta-power in order to assure that the necessary restructuring in the face of external influences will not affect them negatively in terms of economic well-being and will not reduce their positions of meta-power. It is this concern with the position in the distribution of income and wealth and with respect to other sources of power and meta-power that individuals and groups will not accept passively the Pareto optimal solution to the new economic situation suggested by trade theory based

¹⁶³Lindbeck (1973) explains the reactions of the five European countries using the concept of "endogenous politicians". The politicians in the different countries had differing preferences with respect to the exogenously induced shifts in national resource allocations and the various protectionist counter-moves possible. This, of course, does not explain why the politicians had the preferences revealed by the chosen adjustment policies. Group interests and meta-power seem to explain this choice.

on the H-O model. This concern with power and meta-power, and therefore the ability to control future restructuring to their benefit, prevents also the compensation of those groups which would lose in terms of income and wealth under the Pareto optimal outcome by those who would gain if the losers are weaker in terms of meta-power. The examples of the five countries indicated that compensatory institutional benefits were accorded to potential losers only in those circumstances where they themselves were in positions of substantial meta-power. The analysis finally suggested that essentially the same economic adjustment policies had different long-run economic consequences in terms of growth and development because of differences in the social, cultural and political make-up of the countries. This is why the optimal internal economic policy choice and recommendation cannot be made, by economists for example, without taking into account what the most likely effect of such an economic adjustment path will be on the other spheres of the social system. Nor can one neglect to ask what the most likely economic ramifications of these non-economic developments might be. These may turn out to be much more costly in terms of newly generated economic inefficiencies and squandered economic resources as the Economist (1969:67) put it so aptly in discussing agricultural modernization today in UDC:

There are thus decisions to be taken over and above the decision to modernize the farms (or to protect their present state). Even if, on strict economic analysis, East Prussia's agricultural growth rate may have had the edge over Denmark's -- which is doubtful -- the social costs in terms of Junker domination, lack of social diversification, big-city migration, and the exploitation of Slav newcomers added up to a burden of which two world wars may have been part of the price.

What has been said in this chapter with respect to the internal restructuring has also general applicability to the structuring and restructuring of external relationships among countries. The next chapter will deal with this subject.

CHAPTER V

THE STRUCTURING OF EXTERNAL ECONOMIC EXCHANGE RELATIONS

Chapter 3 presented the argument that the development of countries participating in the IES is dependent on their ability to structure and restructure in an appropriate way both their internal social system and their external relationships with the larger IES. The preceding chapter elaborated on the first point. It was suggested that the distribution of meta-power within a social system is a crucial variable -- in conjunction with the interests of those having relative meta-power -- in the choice of internal economic adjustment policies in the case of events originating in the larger IES. The present chapter takes up the second point. Two historical examples illustrate how meta-power is used to structure the IES itself through the structuring and restructuring of the institutions which determine in large part the scope for economic exchange between countries.

In the first example, the establishment of a special international economic and political relationship between Portugal and England in the 17th century, the focus is on the effect the internal structure of Portugal had on this structuring process.¹⁶⁴ It will become clear that as in the case

¹⁶⁴Methodological complexities, space limitations, and data availability are responsible for this concentration on the internal factors in Portugal and the bilateral relationship

of internal restructuring analysed in the preceding chapter, the internal distribution of meta-power and the interests of those possessing dominant meta-power determined in large part the process by which Portugal became economically and politically dependent on England. This structured relationship of inequality and dependence had negative long-run developmental consequences for Portugal because it reproduced itself through the institutionalized unequal exchange pattern. It also preserved the internal position of power of the dominant groups in Portugal and assured them at the same time of a substantial part of the economic product of Portugal and its colonies. On the other hand, England's industrial development was favorably affected by the positive economic ramifications of this unequal exchange system at the same time that England was enabled to maintain this system of dominance and exploitation.

The second case study, the negotiations leading to the establishment of the Bretton Woods institutions and the gradual change of the character of these institutions in response to changed power relationships, abstracts from country internal power processes. The focus here is on the effect of power differentials on the higher level of the IES. Of interest is the way countries use their positions of meta-power to institutionalize and structure the IES, not only to help in the realization of their economic and political goals but also to assure

between Portugal and England. A complete investigation would have to deal with the internal structure of England at that time and the interaction of England and Portugal with other countries.

them of the continued preservation of their position of international meta-power. The difference between this case and the Anglo-Portuguese one is that the power relationships implied in the structure of the Bretton Woods system as conceptualized at the end of the second World War did not coincide with the actual power relationships. The system functioned therefore in ways which were different from those envisaged by the dominant power, the U.S. The Bretton Woods institutions and especially the IMF operated as originally planned only for a short interval after 1958 when the actual power relationships had become more like those originally built into these institutions. However, the unequal exchange system formed by them continued to equalize power on the world level and ultimately made it necessary to abandon parts of the international monetary system in favor of a system which reflected a more balanced power situation. The Bretton Woods case is therefore presenting a counter point to the relationship between England and Portugal discussed in Section 1.

1. Internal Structure as a Factor in External Structuring:
The Establishment of an Unequal Exchange Relationship between England and Portugal

Adam Smith (1910:643-648) set forth his view of correct international trade behavior by criticizing the mercantilistic Methuen Treaty of 1703 between England and Portugal. Ricardo, on the other hand, used a hypothetical construct of the trade relationship between these two countries to expound his trade theory which ultimately became the basis for the modern theory

of comparative advantage (Ricardo, 1962:133-134):

Under a system of perfectly free commerce, each country naturally devotes its capital and labor to such employment as are most beneficial to each. The pursuit of individual advantage is admirably connected with the universal good of the whole. By stimulating industry, by rewarding ingenuity, and by using most efficaciously the peculiar powers bestowed by nature, it distributes labor most effectively and most economically: while by increasing the general mass of productions, it diffuses general benefit, and binds together by one common tie of interest and intercourse, the universal society of nations throughout the civilized world. It is this principle which determines that wine shall be made in France and Portugal, that corn shall be grown in America and Poland, and that hardware and other goods shall be manufactured in England.

Since Ricardo, the exchange between the manufactures of an abstract country England and the wine of an equally abstract country Portugal has served as the textbook example illustrating the virtues of free trade.¹⁶⁵ It is therefore appropriate to use the actual relationship between England and Portugal to demonstrate how the actual trade pattern and country specialization came about which has influenced the imagination of so many students of international trade. The exchange of manufactures against wine had a history of structuring. Portugal was not originally a producer and exporter of wine just because it was blessed with a sunny and warm climate. Nor did it become automatically an underdeveloped country which was unable

¹⁶⁵Portugal and England are replaced by the hypothetical countries I and II in more sophisticated textbooks. However, economists take the inspiration for their models and propositions from observing the real world. In this sense, the England/Portugal example of international trade theory cannot completely deny its parentage, nor, does it seem, are neo-classical economists above obfuscating the differences between their models drawn from reality and the real situation (Solo, 1975).

to satisfy even its own basic food requirements despite favorable conditions for the production of agricultural goods. In fact, Portugal was pushed and shoved in the direction of becoming an important wine producer and exporter at the expense of its own manufacturing development. Free trade conditions took over only after this pattern had been firmly established, but then reenforced and maintained it.

The Anglo-Portuguese relationship dates back to the 14th century. At that time, Portugal, based on her control over the oceans, was clearly the superior power. However, due to various internal conditions as well as the emergence of external rivals, Portugal had already begun to fall behind when she was annexed by Spain in 1580. (This period saw the ascendancy of the Dutch and their dominance over Southeast Asia (Sideri, 1970:19).) Spanish domination reinforced these tendencies. When Portugal regained her independence in 1640, the politically precarious relation with Spain was compounded by her weak economic position in her own overseas territories.¹⁶⁶

The new king of Portugal tried to gain recognition of his throne and to stabilize Portugal's international position by signing treaties with opponents as well as traditional friends of Portugal. Portugal, meaning predominantly her royal house and its domestic allies, in serious need of political and military support, turned to England, her most obvious hope.

¹⁶⁶This is clearly not the two-country world of the simplest H-O model. The present example, however, intimates also how limited the expansion of the two-country model to the three- or n- country model in trade theory really is.

England -- then quite friendly with Spain, Portugal's principal enemy -- was under no threat from the Portuguese. She had in general a number of options in her foreign policy, enabling her to maintain and even advance her position in European power politics through astute policies of alliance. England was therefore in a position to use Portugal as a pawn in her own power politics. Since Portuguese cooperation was not necessary for a successful defense of English interest, England could drive a hard bargain in economic matters, in return for lending her political and military support and protection to Portugal. The latter achieved her overriding (short-term) goal of protecting the rule of her dynasty at home and in the colonies at the price of granting England substantial economic concessions.¹⁶⁷ The first treaty of 1642, shortly after Portugal seceded from Spain and the Braganzas claimed the Portuguese throne, established the pattern for future Anglo-Portuguese relations: Portugal conceded significant economic advantages to England in exchange for political and military support.¹⁶⁸

Portuguese economic concessions did not generally damage the immediate economic interests of the ruling dynasty and its supporting class. The costs of the concessions fell heavily upon the non-land-owning classes, thus stifling the emergence

¹⁶⁷Imlah (1966) describes how Switzerland avoided a similar fate when relying on the protection of Britain. Portugal's situation might have been better if she had tried to develop simultaneous relationships with other countries.

¹⁶⁸Helleiner (1973) describes a similar exchange between Britain and the Austrian Empire in 1865.

of a strong merchant and capitalist class.¹⁶⁹ It also indirectly affected wage-earning workers in agriculture, manufacturing, and services. Consequently, the growth of these sectors and classes was retarded if not altogether prevented. This, in turn, inhibited the development of new political, social, and cultural interests that could have vigorously pressured for a structural change of the socio-political fabric. Portugal's economic base stagnated or even atrophied while competing countries were developing rapidly. Portugal lost her opportunities for establishing an independent economic base which would have provided the underpinning for her political and military power and for the control and development of the empire. The circle was thus complete: future threats from hostile internal or external forces would drive Portugal to seek renewal and reinforcement of the special relationship to England.¹⁷⁰ The basically weak position of Portugal and her rulers, which had been the reason for the initial request for outside support, would lead again and again to the exchange of additional economic concessions for the renewal of political and military support.

¹⁶⁹Stein and Stein (1970:26), however, argue that the merchants profited too insofar as they were able to preserve intact within the status of dependence the life-style to which they had become accustomed.

¹⁷⁰In fact, England had an interest in the continuation of political problems in Portugal. This would assure the continued dependence of her ruling class on English support. The political instability, however, was itself in part the result of the peculiar Anglo-Portuguese relationship where England exercised control without political responsibility (Maxwell, 1973: 4-5).

The treaty of 1642 set in motion such a vicious circle. In exchange for British recognition of the newly won independence, Portugal opened her ports as well as those in its African and Indian possessions to English ships, granted English merchants special privileges in Portugal (essentially allowing them their own police and judicial system), and promised to purchase all the ships needed for the Portuguese fleets in England (Sideri, 1970:20). The first concession made the Portuguese merchants vulnerable to foreign competition. The second introduced a foreign administrative body into Portuguese territory at a time when the ruling dynasty was inexperienced and weak. This provided opportunities for collecting accurate information about the health of Portugal, and created the potential for conflicts between the foreign group and the Portuguese which then in turn could be taken by the superior power as grounds to intervene in Portuguese internal political affairs.

The elevation of England to supplier of ships to Portugal illustrates well the vicious circle of political weakness and economic stagnation. At a time when European powers controlled the oceans and maintained their tenuous footholds on other continents only because of their possession of superior ships, sailing techniques, and naval guns, Portugal permitted her own shipbuilding capacity to atrophy and even to die.¹⁷¹ Portugal

¹⁷¹English ships were conspicuous in the trade even between the Portuguese mainland and its islands and possessions in the Atlantic, Mediterranean and North Africa (Fisher, 1971: 130-131). Cipolla (1966) gives a vivid description of the importance of ships for the European ability to maintain and expand its dominance on other continents.

Although at that time both Portugal and Spain had already

became locked into an exclusive supply contract for a strategic resource with a country that competed worldwide with Portugal for superiority in trade and colonization on the basis of possession of that resource.

Soon a second treaty had to be concluded between Portugal and England. In 1654, Portugal was at war with Spain, and therefore in urgent need of external support. The treaty terms however were so onerous -- reaffirming and strengthening the English position in Portugal -- that Portugal ratified the treaty only after English warships appeared in Lisbon. England received permission to trade directly with Brazil.¹⁷² Although Portugal retained some trading monopolies, she lost those over the most lucrative products of her colonies, i.e., slaves and sugar. The treaty also limited the import duties Portugal

lost their technological leadership in ocean-going ship construction to the Dutch and English shipyards, the value of a shipbuilding capacity and of some kind of know-how should not be underrated (Cipolla, 1966). The importance of a productive capability (even for inferior products and with inferior technology) can be seen in the Spanish attempts at producing modern large guns. Spain attempted several times to reduce its dependence on gun supplies from rival countries by hiring foreign experts in gun casting. The efforts at establishing production facilities and training skilled manpower proved time-consuming and costly. Such undertakings were therefore abandoned as soon as the immediate military threat had subsided. The next military crisis, however, would see Spain again unprepared, dependent on its rivals (and potential enemies) and engaged in a fruitless crash program which did not produce results when needed (Cipolla, 1966). The optimal short-run economic policy thus produced a military and political disaster which forced Spain to pay economic concessions in return for political and military considerations.

¹⁷²Portuguese settlers had already expelled the Dutch from the occupied Brazilian sugar zone. The English merchants gained therefore for awhile the possibility of supplying the lucrative Dutch market with Brazilian sugar.

could levy on English imports. On most types of cloth, the import duty was set in absolute value terms, thus reducing the effective tariff rate in times of inflationary price increases. Further more, English merchants residing in Portugal received partial tax exemptions, thus giving them a competitive advantage over Portuguese merchants.¹⁷³

The treaty of 1661 had stipulations along the same lines: Portugal received guarantees of English friendship and protection while England received preferential access to Portuguese colonies and colonial trade.¹⁷⁴ Bombay became English and a certain number of English families were allowed to settle in each one of the Brazilian capitaincies. English merchants received extraterritorial rights in Portugal whereas the Portuguese never succeeded in gaining reciprocal commercial advantages in England or her possessions.¹⁷⁵ Portuguese shipping interests suffered from the same discriminatory treatment

¹⁷³See Maxwell (1973:4) quoting contemporary evaluations of this and an earlier treaty.

¹⁷⁴Political and military guarantees by England seemed to be very important from the viewpoint of the Portuguese rulers. Spain had not yet recognized Portuguese independence and the peace negotiations with the Dutch were in progress while the Dutch maintained their occupation in Brazil and harassed Portuguese shipping. The secret English guarantee to protect all Portuguese colonies from attacks was obviously all important (Furtado, 1963:33-35).

¹⁷⁵Maxwell (1973:7) writes that the treaty privileges provided "a favorable environment for the creation of a state of semi-colonial dependency."

in English ports as the ships of other foreigners. The result was that the small Portuguese merchant marine was almost completely shut out from the England-Portugal trade (Sideri, 1970:22-23).

Indeed, England generally discriminated against all the Portuguese products in favor of her own colonial production, the friendship treaties with Portugal notwithstanding. In 1661, the same year she signed a treaty with Portugal, she also instituted a high preferential tariff in favor of sugar imports from her own colonies in the West Indies. Not only did England close her market to Brazilian sugar but proceeded to undersell the Brazilian product in third markets all over Europe. This weakened the sugar industry in Brazil, forcing it to reduce production substantially in subsequent years (Furtado, 1963:67-69). Similarly, Brazilian tobacco was forced from British markets in favor of Virginia tobacco. Thus, Portugal saw the European markets for her two most important colonial products preempted before the end of the 17th century through English mercantile tactics despite the commercial treaties with England. Obviously, the special relationship did not protect Portuguese economic interests. The sharp reduction of Portuguese exports without a simultaneous reduction in her imports of English manufactures produced, not surprisingly, severe problems in the balance of payments.

This period saw the rapid expansion of wine production and wine exports to England. At the time, England searched for alternative wine suppliers because the traditional French sup-

plies were severely curtailed as a consequence of the hostilities between England and France in the last decades of the 17th century. Therefore, Portuguese wine imports were given preferential duty treatment.¹⁷⁶ The expansion of wine production improved of course the economic situation of the landed aristocracy and the church. These groups would have a strong interest in maintaining a guaranteed access for their products to the English market and their political dominance would assure appropriate policies.

Partly spurred by a worsened economic situation in the later decades of the 17th century (as pointed up by the negative Portuguese balance of payments), but also by recognizing the harmful effects of the treaties with England which created a privileged and prominent expatriate English class, the Portuguese government made an effort from 1670 on to modernize and industrialize Portugal by introducing protectionist legislation. Since the treaties with England prevented Portugal from imposing import duties or quotas, the import of English cloth had to be reduced indirectly by prohibiting the wearing of foreign cloth. Portuguese cloth manufacturing increased dramatically (helped in part by new laws of incorporation).

¹⁷⁶However, English tastes preferred French to Portuguese wines and, for a long time, Portuguese wines were marketable in England only because the consumption of French wines was prohibited or because exorbitant tariffs priced them out of the market. Nonetheless, the actual or potential French competition and the heavy English duties kept wine prices in Portugal very low. The commercial side of the wine trade in Portugal was controlled by English merchants and the Portuguese economy did therefore profit only insubstantially from this expansion of export opportunities (Sideri, 1970:24-26).

It managed to be competitive even with English cloth at reduced prices. Initially the balance of payments improved, although subsequently, increased export proceeds were closely matched by increased imports. English cloth imports fell substantially, particularly because the Portuguese-Spanish substitutes succeeded in those categories in which England seemed to be heavily specialized (Sideri, 1970:26-28).

In spite of these initial gains, the necessary rapid transformation of the Portuguese economy and class structure was prevented by (i) the political opposition of the landed gentry and the Church who wanted to protect their extensive agricultural interests; (ii) the lack of administrative skills to follow through on initially successful new policies; and (iii) the lack of a strong indigenous merchant class, thus denying the government a substantial base of political support for the new policies. This last condition was itself the consequence of earlier Anglo-Portuguese treaties with their privileges for English competitors. The feudal interests were able to reassert themselves quickly under these circumstances once the main proponent of the reforms committed suicide.

The desire of the reactionary interests to expand the wine trade and to keep the volume of manufactured imports up (to provide customs revenue) coincided with the English determination to reestablish her dominant economic, political, and military position.¹⁷⁷ The discovery of gold in Brazil could

¹⁷⁷A Portuguese treaty in 1701 with France and Spain threatened English military interest. At this moment Portugal

finance any future trade deficit of Portugal, and at the same time alleviate the English shortage of bullion.¹⁷⁸ This consideration only intensified the English determination to conclude a new treaty (Sideri, 1970:40-41).

The Methuen Treaty of 1703 was the result of this convergence of internal and external interests. On the one hand, it helped to preserve the existing social and economic structures of Portugal, assuring non-development, and on the other hand, it reinforced Portugal's dependence on England; these structural conditions reinforced each other in such a way as to stabilize and maintain both the internal and external structural arrangements.¹⁷⁹

Although seen by many as the beginning of Portuguese dependence on England, Sideri (1970:42) views the Treaty, as

tried to broaden its options along the lines suggested in note 167. But her dependency on England had already become too great to let her persist in the face of English resistance.

¹⁷⁸The inflow of Brazilian gold via Portugal was crucial for English industrialization (Blaug, 1968:17; Supple, 1964:13-14). This is not to say that Portuguese industrialization would have been forthcoming in case the gold had increased the Portuguese money stock. The analysis of internal structuring in response to an external economic event in Chapter 4 indicated that a given development depends very much on the structure of the country itself.

¹⁷⁹Stein and Stein (1970:86) argue that the Methuen treaty solved the Portuguese crisis in the wake of the breakdown of its economic and administrative controls over Brazil. Portugal acknowledged her dependence on England in exchange for the security of her political control over the empire.

suggested above, as its conclusive reaffirmation:

.....its significance has been over-estimated by making it the source of English economic and political predominance in Portugal. Considered in a wider perspective, the Methuen Treaty proves to be no less the result of the situation created by 1642-61 treaties than it was the 'origin' of Portuguese dependence on England. In line with the policy outlined in the previous treaties, England exchanged political support and promises of territorial increases (the Alliance Treaties) for economic concessions and benefits (the commercial treaty). 'The unequal advantages of the alliancewere sadly paid for with the economic and political subjection' (Cortesaio).

The commercial treaty reopened the markets in Portugal and her colonies to English products, especially woolens. Portugal gained the concession that her wine exports would be charged a tariff two-thirds of the rate on French wine. This was essentially a codification of previous practice. It was a pseudo-benefit as it did not specify an absolute limit, nor did it prevent the giving of equal preference to non-French wine imported into England. (In fact, as soon as England reestablished its control over Portuguese and Brazilian markets, she increased the absolute level of the tariff on wine substantially and admitted competing Spanish wine under the same terms as the Portuguese ones (Sideri, 1970:43)).

For such minimal and uncertain advantages more or less enjoyed previously Portugal sacrificed her infant cloth industry. That is, she permitted the destruction of her manufacturing sector which in many countries later on developed into a leading sector of industrialization (Rostow, 1960). This stopped short a technological learning process which perpetuated

a technological gap still existing today. The agricultural specialization in wine necessitated the import of large quantities of foodstuffs (Fisher, 1971:127-128). The resultant payments deficit led to the outflow of Brazilian gold to England preventing Portuguese capital accumulation. This in turn was partly the reason for Portugal's inability to develop the colonies for her own benefit. At the same time, the expansion of the English textile industry was reinforced, contributing to cost reductions, further technological advance, and greater ability to penetrate old markets and to create new ones. This set the stage for further expansion, in a spiral of development, leaving a stagnant Portugal further and further behind.

The treaty and its outcome locked a weak Portugal into a bilateral relationship with a strong England which had multilateral contracts with the entire world. Portugal specialized in wine, England in the production of "hardware and other goods", fitting neatly the model of comparative advantage of international trade theory. Portugal's actual situation corresponded to a trade structure that maximizes the power of the trading partner (Hirschman, 1945). The outcome resulted from a long process in which England used an initial power advantage to structure her exchange relations with Portugal in such a way that the resultant unequal exchange system continued to increase her power advantage and ultimate economic gains. Sideri's analysis shows that the sixty year period of Anglo-Portuguese history reviewed here was to repeat itself again and again for the next 250 years.

2. World Power and External Restructuring:
The Bretton Woods Agreements

In 1940 and 1941, before the U.S. entry into the war, Britain reached the limit of her ability to pay for the large quantities of imported armaments, raw materials, foodstuffs, and consumption goods necessary to sustain the war effort. In the spring of 1941, her foreign exchange reserves reached a low of \$12 million (Gardner, 1969:55; Brian Johnson, 1970:105-106). The U.S. Congress had passed legislation prohibiting credit sales of military armaments and supplies to any belligerent nation. The answer to the problem this created was lend-lease, providing help without violating the letter of the law. A post-war reconstitution of these deliveries was unthinkable, and a conversion into normal debt was similarly undesirable (due to the experience with war debts after 1918). Therefore, the idea emerged that Britain should discharge her obligation from lend-lease "by cooperating with the Americans in certain lines of policies favored by them" (Harrod, 1972:10).

Leading officials in the U.S. were concerned at the time about the shape of the post-war international order. In their view, the emergence of trading blocs and bilateral regulation of international economic exchange in the wake of World War I and the Depression had been leading causes of World War II. They aimed, therefore, for economic, financial, and monetary post-war institutions that would outlaw discrimination and would prevent the emergence of narrow nationalistic interests through the neutral regulation of exchange in 'multilateral' free markets (Brian Johnson, 1970:108-110). The

preferential tariff system of the Commonwealth and the tight British control over the foreign exchange reserves of the Sterling bloc were, in this view, major obstacles to the realization of such institutional plans. The U.S. suggested, therefore, that the promise of a future elimination of the British Imperial Preferences would be compensation enough for the lend-lease program. The British government refused to enter into such a clear obligation, partly because of internal political reasons, partly because of the realization that reconstruction demanded special safeguards to protect her balance of payments and internal full employment. However, in view of the desperate situation in which Britain found herself at the time, she finally agreed to a watered down 'consideration', Article 7 of the Mutual Aid Agreement of February 1942 (Harrod, 1972:11; see also Gardner, 1969:54-68):

In the final determination of the benefits to be provided to the United States of America by the Government of the United Kingdom in return for Lend-Lease aid, the terms and conditions thereof shall be such as not to burden commerce between the two countries, but to promote mutually advantageous economic relations between them and the betterment of world-wide economic relations. To that end, they shall include provision for agreed action by the United States of America and the United Kingdom, open to participation by all other countries of like mind, directed to the expansion by appropriate international and domestic measures of production, employment, and the exchange and consumption of goods, which are the material foundations of the liberty and welfare of all the peoples; to the elimination of all forms of discriminatory treatment in international commerce, and to the reduction of tariffs and other trade barriers; and, in general, to the attainment of all the economic objectives set forth in the Atlantic Charter.

The lend-lease agreement illustrates a point made in Chapter 3 and illustrated by the development of the relationship

between Portugal and England in the preceding section. Structuring processes on the basis of differences in meta-power involve normally higher level multiplex exchanges where the country in a relatively weak position gives away concessions and valuables with long-term potential, especially with long-term power implications, in return for the satisfaction of short-term needs.¹⁸⁰ The Mutual Aid Agreement is exactly of this type. For the receipt of badly needed war supplies of an initially undetermined quantity, price and value, Britain essentially accepted to concur with the U.S. conception of the future world order. This agreement entailed the exchange of economic valuables (goods and services) against economic concessions of an institutional and structural nature, i.e., a promise to eliminate future barriers to international

¹⁸⁰Leading figures in the U.S. State Department and the Treasury were reluctant to agree to a final settlement of the lend-lease issue later on because they wanted to use their bargaining power on this open question to force Britain into embracing a policy of multilateral trade (Gardner, 1969:172). Promptly, at the end of the war, it was argued, in a report to the House of Representatives that the "advantages afforded by U.S. loans and other settlements are our best bargaining assets securing political and economic concessions in the interest of world stability". Again the Administration was urged to extract commitments on multilateral policies before writing off lend-lease debts (Gardner, 1969:198).

In the initial discussion in the U.S. on the ratification of the Mutual Aid Agreement in 1942 and later on again in 1945, many voices demanded that Britain should give guaranteed access to the U.S. to British raw materials in the form of a U.S. lien on the rubber and tin resources of the British Empire; or that the U.S. should claim tangible and intangible assets like rights to control raw materials, bases, aviation rights, sites and buildings for embassies, etc. (Gardner, 1969:172).

trade.¹⁸¹ Moreover, the meta-level economic concessions (determining future interaction possibilities in world markets) had profound political, social, and cultural implications (Gardner, 1969:1, quoting from *The Economist* of 1942):

Let there be no mistake about it. The policy put forward by the American Administration is revolutionary. It is a genuinely new conception of world order. It is an inspiring attempt to restate democracy in terms of the twentieth century situation, and to extend its meaning in the economic and social sphere.¹⁸²

The lend-lease agreement had immediate results that were more than just economic. Besides the increase in military

¹⁸¹The agreement included the exchange of political valuables. The large U.S. commitment expressed the political agreement of the U.S. with the British war aims and it also strengthened the determination of the British people to sustain the war effort and the resultant deprivations.

¹⁸²The whole American concept of a peaceful post-war world order was based on the recognition of the multi-dimensionality of economic valuables exchanged internationally (Gardner, 1969:14-15):

The case for multilateralism (i.e., restrictions on trade and capital flows only of moderate degree and applied non-discriminatorily) also has its non-economic aspects. The economic benefits of multilateralism can be said to promote, in a general way, the cause of peace. Human beings whose economic circumstances are improving will be less likely, everything else being equal, to challenge the internal or external order. It can be argued also that multilateralism, by insuring equal access to markets and raw materials, avoids the grievances felt by the victims of discrimination. Finally, as a very rough rule of thumb, it is probably true that the cause of peace is assisted by the reduction of government interference in international economic life.

The Roosevelt Administration, and especially the policy-makers in the State Department before, during, and after World War II believed essentially that economic magnanimity in international relations would bring about a peaceful world order (Gardner, 1969:7-11). Gardner calls this view 'economism' and thinks it was utopian because it neglected the existence of nationalistic political interests (Gardner, 1969:11).

fighting capability, the deal facilitated the purchase of consumer goods with foreign exchange that did not have to be spent on the purchase of weapons and other military articles. This permitted the maintenance of an acceptable standard of living in Great Britain and thus clearly helped maintain support for the government's policy of total resistance. The ability to sustain the war in turn can be seen as having contributed to Britain's preservation of her cultural, social and political values and beliefs. Again, this points up the non-economic aspects of purely economic goods.

Thus, although Article 7 might not have made sense from a 'rational' economic viewpoint, the total threat to British national survival shifted her value ordering of the various options to a predominantly non-economic basis.

The elimination of discriminatory tariffs and other trading restrictions would, if realized, change the relative access opportunities to world markets of the corporate units of the contracting parties as compared to the situation during the interwar period. In fact, in light of the extensive war damage and the deterioration of civilian productive capacity (and the problem of reconversion) in most countries, the end of tariff discrimination and other trade barriers implied the creation of favorable business opportunities for American corporations.¹⁸³

¹⁸³The strong American desire to end preferential trading areas, and the additional desire to do away with exchange controls and quantitative trading restrictions had very strong ideological motives. U.S. demands were not motivated so much

Furthermore, it must have been clear from the beginning to both the U.S. and Britain that the British agreement to consider the U.S. plans for the future international trade order would have significant implications for the institutional organization of the monetary and financial aspects of international exchange and relations. In fact, both governments began to draft plans for institutions in this area which would be able to support the envisaged open, non-discriminatory world-trading system.¹⁸⁴ The British government signed the Mutual

by a desire to see free trade enacted, than to preserve the role of the market and price mechanism in international economic exchange (Gardner, 1972:22):

Thus tariffs were permissible, but not direct controls. The concept was practical as well as ideological. The U.S. wanted an environment in which American trade could expand -- in which the comparative advantage of the U.S. in key sectors could make its impact, free from unreasonable burdens and restrictions.

The planned organization of the institutions governing future international economic transactions implied certain specific political and social institutions in the participating countries themselves. It seems impossible that a country participating in such a scheme could conceivably choose a socialist framework. Gardner, (1969:lxxxviii) describes the planning for these multilateral international institutions as not making "very many concessions to the special problems of communist participation." The subsequent withdrawal of the Soviet Union and other Eastern European countries in the years immediately after the war bears this out (although other arguments for their withdrawal are also valid).

The entire planning leading up to and including the negotiations at Bretton Woods in 1944 were clearly dominated by the U.S., Great Britain, and Canada. The eventual solutions may have been facilitated by their common ideological and institutional background. Not surprisingly, the special problems of the developing countries were not recognized at the time and no special provisions were made for them (Rasminsky *et. al.*, 1972:44-45; 47).

¹⁸⁴The British tried to solve three problems which would necessarily arise if such a liberal trading regime was superimposed on a world coming out of the war. For one, the monetary

Aid Agreement containing Article 7 only after it had reached an understanding with the American Administration about a trade-off between commercial and financial considerations: Britain would essentially accept the ideas of the U.S. about the features of a common commercial policy as outlined in Article 7 if the U.S. would accept the establishment of an international monetary institution that would be able to issue gold notes (i.e., international credit facilities) on a generous scale with the intent of helping countries with a deficit in their balance of payments due to their reconstruction effort.¹⁸⁵

The preparation for, and the actual negotiations at Bretton Woods in 1944 -- out of which emerged the statutes of the major international institutions: the IMF, the World Bank (IBRD), the unsuccessful ITO (International Trade Organization) and its substitute, GATT (the General Agreement on Trade and Tariffs) -- proceeded with the U.S. believing that Britain had entered into a contract to abolish restrictive policies.¹⁸⁶

arrangements had to cope with expected large balance of payments deficits. Secondly, large amounts of finance capital would be needed to rehabilitate and reconstruct civilian productive capacities. And thirdly, raw material buffer stocks would have to be financed to stabilize payments deficits and surpluses and thus minimize the need for reserves. Only the U.S. had the necessary resources to accomplish these goals and it is no surprise that the final solution reflected the restrictive U.S. and not the generous British viewpoint.

¹⁸⁵Harrod (1972:12) mentions that only Keynes' persuasive powers and the overwhelming power position of the U.S. convinced Britain to accept this trade-off.

¹⁸⁶In fact some in the U.S. wanted to use their tactical

Of course, the U.S. had its way. She was in a dominant position partly because the important economic powers on the enemy's side were absent from the negotiations.

France was represented only by a government-in-exile and the Soviet Union participated only reluctantly and remained a passive participant. The allies had just landed in the Normandy when the actual conference began and it was still unclear how and when the war would be won. Only the U.S. had the resources to ensure a rapid end of the war and then to make the planned post-war institutions work. The U.S. was therefore in a position of military, political, and economic dominance and so her role at the conference was decisive. Gardner (1969: 21) notes that the U.S. will most probably never find herself again participating in a world conference where her power is as preponderant as at that moment. The British recognized their complete dependence on the U.S. and their lack of any equivalent leverage they could exert. Britain cooperated therefore with the U.S. in the construction of the post-war institutions in order to ensure the pursuit by the U.S. of a successful end of the war and her help in the reconstruction effort (Gardner, 1969:24-25).¹⁸⁷

advantage created by the lend-lease obligations to defeat once and for all British imperialism (Gardner, 1969:xcix).

¹⁸⁷Gardner (1969:xxxix) argues that only the war situation enforced Anglo-American cooperation. The common war effort provided a framework of mutual orientation which was translated into economic and political cooperation. This mutual understanding dissipated rapidly with the end of the war.

In this situation, the compromise bringing about the formal results of the Bretton Woods Conference and the following negotiations seemed to be overshadowed by the reality of continuous U.S. dominance. Both the Anglo-American Loan Agreement of December 1945 settling the lend-lease issue and the inaugural meeting of the IMF and IBRD at the Savannah Conference in March 1946 bear the stamp of American power (Gardner, 1969:267):¹⁸⁸

The Savannah Conference revealed a serious division between the United States and Britain on the character of the financial institutions they had constructed in the war. The British, led by Keynes, inclined towards the view that the Fund and Bank should be purely financial institutions, directed mainly by a staff of international civil servants. The Americans, led by Vinson, sought to subject the institutions to close control by national governments. The political and economic circumstances of the transition period made it virtually inevitable that the American view point should finally prevail.

The Bretton Woods compromise itself appeared as a trade-off between U.S. and British aims. The U.S. managed to scuttle

¹⁸⁸The U.S. made increasingly sure that the IMF and World Bank lending policies did not contradict U.S. foreign policy once the tensions with the Soviet Union began to increase (Gardner, 1969:196):

In the case of the Bretton Woods institutions....American resources had already been put under international control. But it was not too late to ensure that the resources of the Fund and Bank were employed in conformity with American political interests. The powerful voice which the U.S. had in the operation of these institutions soon began to make itself felt. The political question came up most directly in the case of the Bank. Although the Articles required it to be non-political in its lending policy, the Bank made it clear almost from the very beginning of its operations that it would take account of political factors in considering requests from members of the Soviet bloc. See Hayter (1971) and Payer (1974) on the use of these institutions to pursue U.S. objectives in UDC.

the far-reaching institutional proposals of the British government. In turn Britain gained recognition for many exceptions and safeguards which were deemed necessary, as a second best solution, under the general American framework. The U.S. succeeded in obtaining a general commitment to liberal trade rules. Preferential tariffs were to be reduced in the course of a general tariff reduction. Non-tariff barriers (e.g. quotas) were ruled out in principle. They would be tolerated for a unspecified transition period in order to support similarly transitional capital controls under IMF rules. After the necessary adjustment to peace time, such barriers would be allowed only in support of protective agricultural policies (of the American type) and in case of certain persistent payments deficits (Gardner, 1969:148-153).¹⁸⁹

Britain gained a general commitment from the U.S. to full employment policies, although the guarantees were far from iron-clad. Britain had hoped for a rule that would prevent deflationary internal policies spreading unemployment to the world at large as was the case in the Depression. Britain herself was determined to insure full employment at home in order to protect her internal order even if in the course of such policies the balance of payments would go into a deep deficit. However, the general rule adopted stated that such policies were only in conformity with the principles of Bretton Woods if they were compatible with the "international under-

¹⁸⁹ But even then quotas would have to be applied in a non-discriminatory way.

takings designed to promote an expanding volume of international trade and investment in accordance with comparative efficiencies of production" (Gardner, 1969:147).

In the financial sphere, the U.S. succeeded in incorporating most of its restrictive views into the articles of the IMF and IBRD. Both the Fund and the Bank would have only limited means available. The Fund was not to finance fundamental deficits. Britain did not realize her goal of establishing an institution that could grant the large and unrestricted credits necessary to finance the payments deficits that would surely arise in the course of British reconstruction and full employment policies. Gardner (1969:110-144) shows convincingly how in the course of the negotiations the burden of adjustment was shifted from the creditor to the debtor country. Britain was expected to be the latter, the U.S. the former. The second-best solution to the adjustment problem in the form of exchange rate changes gave the IMF the right to criticize the national policies producing the need for a devaluation. This gave the U.S., which dominated the Fund, substantial moral and political influence over other countries' internal policies. Capital controls were to be abolished after a transition period; however, the problem of the Sterling balances was left undecided. Britain had accumulated extensive Sterling obligations during the war and had no way to redeem them with foreign currencies. For one, Britain did not want to give up the reserve currency status of Sterling as this was viewed as an important mainstay of the British imperial and commonwealth policy. On

the other hand, the U.S. was quite aware that the proposed solution prevented the holders of Sterling balances to fulfill their needs on the American market (Gardner, 1969:112-121; 213-221).

The financial compromise seemed without any real benefit for Britain. Brian Johnson (1970:120) sees the outcome as a victory of U.S. conservatism over Keynesian liberalism:

The achievement of getting 44 nations embracing the opposite poles of political ideology together to hammer out a new world monetary order was certainly impressive. The spirit of Bretton Woods seemed to give real grounds for hope; but the Fund had a pathetically small 'kitty' in relation to the adjustment task at hand, while the Bank idea had also been hobbled by inadequate capital. Indeed, the yawning gap between these institutions' objectives and their substance was so curtailed by the forces of conservatism as to invite dangerous delusion.

Both the governments of the U.S. and Britain presented diametrically opposed interpretations of the agreements to their respective parliaments during the ratification process. But since the U.S. had emerged from the war as the dominant political, military, and economic power and controlled the world currency, its views and demands prevailed. The history of the Bretton Woods agreements and the years after the war showed clearly that the U.S. was quite willing to use her dominance to push her ideas on the appropriate economic institutions, and, indirectly, on decolonialization, free market institutions, and other ideological viewpoints (Gardner, 1969: 224-253).

The legal framework of the Bretton Woods institutions reflected the power situation among the Allies at the time of 1944. Or rather, it reflected the conception of relative power

relations that the major powers, essentially Britain and the U.S., possessed. The two were not exactly the same. Britain was one of the two countries carrying the major burden of the war. She still headed a far-flung empire and Commonwealth. She perceived herself as victor and therefore as rightful possessor of a role in world leadership. She did not accept an inferior position in the post-war world and was willing to enter into sizable obligations to underscore this leadership role. The U.S. was well aware of the historic shift in relative power that had taken place over the last decades and especially during the few years of World War II. As the dominant country, she took a leading role in planning a post-war world order reflecting her interests. She succeeded in pushing through the major features of her grand design not without accepting certain British claims that were granted in view of Britain's historical position.

However, both governments underestimated the serious consequences the war effort had wrought on the British economy, and especially the time required to overcome the basic imbalances created in British productive capacity due to the total war mobilization. Keynes and others were probably aware of the exhaustion of British productive capacity and the seriousness of the shift in British indebtedness. Keynes suggestion for a Clearing Union, which would have granted unlimited credits for British reconstruction and maintenance of full employment at home was, in British eyes, the vehicle to reconcile these needs and the actual impoverished situation of Britain. However, the unwillingness of the U.S. to accept such a generous

scheme, as well as her inability to see the problem in such stark terms, led to the scuttling of this idea. On the other hand, the British, unwilling to openly recognize the decline in their power, opted for the incorporation of numerous safeguards and escape clauses that would essentially guarantee an independent British policy in the face of the adopted market institutions unfavorable to British interests. The resultant compromise was interpreted in the two countries in divergent ways.

The U.S., as the dominant power, could enforce her view of what Bretton Woods was all about. The British were forced to embrace the American plans. The result was the collapse of Sterling, British default on the American loan, and the rapid introduction of bilateral control mechanisms by all the European nations bringing about a world Bretton Woods was supposed to prevent. And in the end, the U.S. had to pour \$30 billion of Marshall Aid grants into Europe, doing essentially what Keynes' Clearing Union was supposed to do (with the difference that Marshall Aid would not have to be repaid, which had major implications 25 years later). In order to make the aid more effective, the U.S. accepted to support the creation of a European multilateral regionalism that discriminated against American commercial interests, something U.S. policy was determined to prevent when she made the end of imperial preferences one of the central demands during and immediately after World War II. Bretton Woods was essentially suspended; it had been created for a world of greater equality than existed at the end of the war.

In 1958, the reconstruction of Europe ended. The pre-war power relationships (at least on the economic level) were more or less reestablished. The formation of the European Economic Community created a market comparable in size to the American one. The dismantling of the controls on currency as well as on capital transactions created for the first time the climate in which the International Monetary Fund and its rules could play the role planned at Bretton Woods. World power relations and the institutional framework were basically compatible, at least temporarily (but see Boyer, 1974:3). However, the continuous rapid growth in Europe and Japan, and the worldwide military and political involvement of the U.S. altered the relative power relationships in the economic and political spheres in favor of Europe and Japan. Bretton Woods, in contrast, was basically a system compatible with a world where one country, in this case the U.S., was dominant although not completely so (as in the years immediately after the war). As the relative power of the U.S. relative to Europe and Japan declined even more, the system of Bretton Woods and the structure of international relationships it assumed were once more out of step with the real world (Rolfe and Burtle, 1973:60). The early warning signals of the Sterling devaluation of 1967 and the establishment of the two-tier gold market in 1968 did not produce a fundamental alteration of the Bretton Woods institutional framework: above all, the pivotal role of the dollar and the U.S. was not reduced. The collapse of the international monetary system in 1971 and the continuous instability

since then exposed this underlying contradiction between changing power relationships and an institutional framework predicated on the assumption of a particular, fixed power structure.

CHAPTER VI

STRUCTURING AND RESTRUCTURING: DILEMMAS AND TURNING POINTS

The preceding chapter looked at two structuring processes with respect to the IES. In both cases, the dominant power succeeded to a substantial degree in creating international structural and institutional conditions favorable to its interests and those of its actors. The unequal exchange system between England and Portugal was characterized by a compatibility between the power relationships with Portugal and those characterizing the IES. The output of the system itself maintained and strengthened this structure of inequality for several centuries. The post World War II system, in contrast, underwent considerable change over the relatively short period of thirty years as exemplified by the modifications of the institutions decided upon at the Bretton Woods Conference in 1944. These modifications and transformations were the result, as argued at the end of the preceding chapter, of contradictions between the actual power relationships among the participating countries, those power relationships implied by the created institutions, and the unequal exchange outcome of the structured IES which favored the countries of Western Europe and Japan.

In Chapter 3 it had already been pointed out in abstract terms that dominant actors may be unable to assure their continued power dominance over a system for two reasons.

For one, the systemic ramifications of economic exchange and relational control activities may have contradictory characteristics to the extent that they affect positively (negatively) the growth and development of the system but have negative (positive) consequences for the power position of the dominant actors. In this case, the dominant actors face the dilemma of having to choose between continued domination and retarded growth and development of the system. This dilemma is illustrated in Section 1 on hand of the development of the Comecon -- the Council of Mutual Economic Assistance (CMEA) -- and the related policies of the Soviet Union.

Secondly, power reversals are possible in an unequal exchange system because hitherto powerless actors may experience an improvement in their power position in the course of the operation of the system itself or due to interventions in their favor by external actors. The relatively powerless actors can then use their improved power position to engage in a struggle to restructure the system into one more favorable to their interests and power positions. The events connected with the oil crisis, the struggle between the countries joined in OPEC and OECD, and the current negotiations for a NIEPO provide an excellent illustration of the origins, and possibly early phases, of such a process of power reversal. Section 2 will therefore deal with the recent history of the relationship between OPEC and OECD and try to discern a scenario for the future.

1. The Dilemma between Domination and Development:
The Case of Comecon

A. Divide and Rule as a Strategy of Relational Control

Divide and rule strategies are a subset of relational control strategies used by dominant actors to ensure their continued dominance.¹⁹⁰ Burns and Buckley (1974) have investigated a number of instances where higher-level actors exercise relational control, i.e., control over social relationships and structures, by manipulating and managing interaction conditions and processes with the goal of producing non-cooperative, competitive and conflictive, or cooperative and harmonious socio-economic relationships and structures.¹⁹¹

Any ongoing social system, like e.g. the IES, entails a system of exchange and interaction within a structure of power differences based on the unequal control over economic, political, social, cultural and other bases of power. Such an interaction system, involving actors A, B, C,....can be conceptualized as consisting of at least three systems components

¹⁹⁰The study by Galtung (1973) of the EEC is an exception to the relative neglect of the study of divide and rule strategies in social systems. However, Galtung is not specifically concerned with the socio-economic consequences of the use of such strategies and the dilemmas dominant actors may face when using them. Nonetheless, his treatment of divide and rule strategies is much broader and more analytical than that of other contemporary students of the subject like Gluckman (1967), Caplow (1968) and Gamson (1968).

¹⁹¹Braun (1975) used recently the term "institutional engineering" in connection with her discussion of mechanisms for modern incomes policies.

whose states determine the behavioral outcomes of the interaction system made up of the lower-level actors B, C,....:(i) the interaction situation, i.e., the action possibilities of the actors; (ii) the interaction payoffs, i.e., the outcome structure associated with all possible combinations of actions; and (iii) the attitudes and orientations of the actors towards one another.

In divide and rule strategies, a dominant actor A, e.g., an elite, power group, or institutionalized authority system, manipulates one or more of these components so as to ensure conflictive and competitive social relationships and actions among the lower-level actors B, C,.....¹⁹² The dominant actor A uses his power to structure such non-cooperative relationships in order to strengthen his dominance over actors B, C,.... and to increase the likelihood of his remaining in a position of dominance and power compared to the case of cooperative relationships among B, C,.... This means that A uses his power to socially segment ("divide") the lower-level actors B, C,.... from one another in order to achieve and maintain dominance ("rule") over them.

In many instances, A's main interest is to weaken B and C, not to organize them for any particularly useful purpose. For example, the rulers of China (as well as rulers of other ancient empires) played barbarians on her borders off against

¹⁹²Baumgartner et. al. (1975a) examine the structuring of cooperative relationships in the case of management-labor interaction.

one another with no other purpose than weakening them. On the other hand, A may seek to promote a certain degree or type of cooperation between B and C for his own purposes.¹⁹³ Thus, in order to exploit their subordinates more effectively for productive or defense purposes, rulers bring about or maintain a social and political organization among the subordinates; but this organization, potentially, can be used by them to oppose their rulers. Therefore, A typically tries to form or structure associations between B and C that are under

¹⁹³While it might be possible for rulers to foster conflict, it is likely to impede the performance of intricate administrative or productive operations. The dilemma is pointed up nicely by an example from Russian history (Hill, 1947). During the 1st World War, when the President of the Duma wished to hold a meeting with various mayors and industrialists to accelerate the supply of boots to the army, the Minister of the Interior forbade it, suspecting that they were only meeting to formulate plans to agitate for a broader constitution.

Yet, because of the potentiality of cooperative linkages and structures being used for political purposes, rulers develop strategies such as cooptation, offering mobility opportunities in productive enterprises or in national bureaucracies (including the educational system) and creating status and reward differentiation. Certainly, the ideology of a 'classless society', equal opportunity, and upward mobility for hard working, 'meritorious' individuals gives persons a sense of being on their own, and hence maximal social fragmentation. At the same time, they must, for purposes of advancement, realize some minimal degree of cooperation with others, especially at their work place. Other ideologies which contribute to social fragmentation are those asserting that social rewards should be -- need to be -- distributed on the basis of individual achievement thus emphasizing individual career orientations and status competition.

Such diffuse fragmentation may be more efficient, when combined with the ideological and motivational beliefs and institutions mentioned above, in insuring power-reducing divisions than if the fragmentation entails simply a few large aggregates, even if the latter are clearly separated on grounds of ideology, distribution of income, status, or power.

his control.¹⁹⁴ That is, he attempts to establish a supervised association or limited cooperation between B and C, in which they relate to one another cooperatively either under A's direct supervision or according to rules or conditions A sets down. He encourages association for productive purposes at the same time that he works to prevent the association (its 'cooperative power') from being used to challenge his dominant position.

B. Domination and Development in the Case of Comecon

This dilemma facing a dominant power is well illustrated by the policy problems within Comecon. For control purposes,

¹⁹⁴Louis XIV's policy of assembling all the important nobles at Versailles under his close surveillance, making them dependent on him (for life style, consumption, settlement of debts, etc.), and controlling their visits to their palaces was a strategy of reducing their unsupervised association, particularly of those who could be potential leaders of a rebellion or whose estates could serve as meeting places to organize challenges to the king's power (Elias, 1969:272).

Obviously the court of Versailles provided considerable opportunity for interactions among the nobles. However, court life was a succession of public events (demanding the presence of the nobles) where conspiratorial conversations and the making of plans were difficult, if not impossible. Furthermore, Louis XIV had a number of Swiss in his direct employ whose only task was to patrol all the hallways and passages of the palace day and night in order to observe, follow, and listen to the people of the court and to report back to him (Elias, 1969:273).

Similarly, interaction between conspiratorial lords and the masses or their bourgeois leaders in Paris was made difficult because of the isolation of Versailles.

In any event, increased density and interaction opportunities in and of themselves are not sufficient conditions for group formation among subordinates in opposition to superiors. As suggested here, the rulers may control the interactions by obtaining information and regulating them in a variety of ways. Indeed, association under conditions controlled by rulers may serve as a reliable prophylactic against associations outside of their control.

the Soviet Union wants to keep the socialist countries of Eastern Europe divided and dependent on herself. At the same time, the need to compete economically with a rapidly developing Western Europe forces the Soviet Union and Comecon to encourage intra-Comecon trade and cooperation in order to reap the benefits of an international (socialist) division of labor.¹⁹⁵

Comecon was established in 1948 to allow for a systematic economic cooperation among European socialist countries. Originally, cooperation was limited to coordination of trade. But since the mid 1950's, economic integration was systematically furthered through coordination of investment plans, product specialization, joint undertakings, and financial, scientific and technical cooperation (Wilczinsky, 1970:195). The implementation of such cooperation has followed a seesaw pattern, partly due to the inherent difficulties in coordinating planned economies, but mostly due to the conflicting goals of the member countries which were at different stages of development and the inherent dilemma between fostering cooperation and maintaining dominance (Kaser, 1967). In the beginning, the Soviet Union was able to exert close control over the economic development of the whole area through the yearly coordination of plans and the conclusion of bilaterally balanced trade contracts. The Soviet Union possessed both the raw materials,

¹⁹⁵This example raises questions about the general argument of Galtung (1973) which strongly emphasizes the interest of the dominant power in simply maintaining its power through divide and rule strategies to the neglect of other interests.

technology and investment goods needed by the other countries. The Comecon headquarters was located in Moscow; the headquarters served essentially as a clearing-house. The dominance of the Soviet Union as the center was reinforced by the development of rubel imbalances in the bilateral trade relationships and the rule that positive balances from trade with one country were not allowed to be used to pay for a negative balance with another country. Therefore, planned clearing through Comecon action was essential if such imbalances were to be resolved. Moreover, to strengthen Comecon and therefore the leading role of the Soviet Union, stress had been placed on mutual trade relations rather than on relations with the outside which might lead to linkages and access to power resources to challenge the center or to counterbalance its power.

Economic development, while reinforcing peripheral dependency on the Soviet Union based on growing raw-material needs, generated at the same time increasing dependence of the Soviet Union on the productive output of the peripheral countries. The diminishing benefits of early forced industrialization increased pressures for an international division of labor as a device to accelerate growth. In order to keep the bilateral dependency structure intact at the same time that the overall level of multilateral coordination increased, the concept of horizontal specialization was proposed. Each country was supposed to specialize in a number of industries and serve as the chief supplier of these products to the entire Comecon area. The Soviet Union, due to its size, would have

been the least specialized at the same time that it would have been host to the largest number of bureaucratic agencies performing integrative functions. On the basis of this structure of interaction, the Soviet Union seemed willing to push for a supra-national identity of Comecon in the early sixties.

Rumania, the least developed Eastern European country, was anxious about becoming locked into the position of raw material producer. At the same time, it was the country least dependent upon the Soviet Union due to its own oil supplies and significant trade relations with Western countries. The other Socialist countries seemed willing enough to forego political and ideological independence in order to gain economically, but Rumania refused to participate in this economic scheme, fearing that economic supra-nationality would be a tool to ensure political and ideological dominance by the Soviet Union (Schaefer, 1972:22; Kaser, 1967:92-129).

Following the failure of the Soviet Union's plans in 1962, further economic development, combined with the attractiveness of trade with Common Market countries and the reduction of cold war hostilities, led to a rapid increase of trade between the countries of East and West Europe (Kaser, 1967: 142-143; Schaefer, 1972:6). This shift from the dependency mechanism of intra-Comecon trade to an increased involvement with the capitalist economies began to threaten the Comecon system of center and periphery. The Soviet Union was squarely faced with the dilemma of 'divide and rule', especially in the

years 1968 and 1969 (Schaefer, 1972:6-7):¹⁹⁶

It apparently didn't want economic relations among Eastern European members to become significantly closer unless the Soviet Union was also included. It didn't want Comecon members to become too economically involved with the Western Countries or to develop relations to the EEC. Perhaps most significantly, it did not want Comecon reform to lead to domestic reform movements or to help provide its members with the means to slip out from under the Comecon yoke.

At the same time, despite its growing complaints about the economic burden of Eastern Europe, the USSR had no clear idea of the sort of institutional forms really needed to solve Comecon's problems and thereby bolster the East European economies and reduce the economic burden on itself.

In the aftermath of the Czechoslovakian crisis of August 1968, the problems of continuing the balancing act between maintaining control and increasing productive cooperation

¹⁹⁶The delicate balancing act of the Soviet Union to satisfy the competing objectives of dominance -- political and ideological leadership -- and rapid economic expansion becomes quite clear in this description of the Soviet position before the Comecon anniversary meeting in January 1969 (Schaefer, 1972:35):

However, whatever its supposed rationale, Soviet commitment to the sort of integrated regional grouping that would include some sacrifice of Soviet sovereignty and increasing dependence of the East European countries on each other -- particularly in new industrial fields and for advanced technology -- had to be ambiguous at most. What was frequently interpreted as an almost self-evident Soviet interest in a strengthened, centralist Comecon was often simply the much more self-evident Soviet interest in bilaterally binding these states to itself. Moreover, the supranational threat to Western Europe posed by the EEC was a very popular theme at this time, as was the plan for an international Communist conference, and a drive for a supranational Comecon would hardly have served Soviet interests either in developing an alternative design for Europe or within the Communist movement. Although Eastern Europe might be an increasingly costly burden to the USSR and although it was clear that, for the long-run economic viability of the Comecon area, a more sophisticated approach had to be found than in the past, the way out had not yet been determined.

increased drastically. In particular, the Soviet Union was faced more and more with the dilemma between maintaining existing socio-economic arrangements and social control mechanisms on the one hand and introducing risky reforms in the institutional and ideological basis of Eastern Europe in order to increase cooperation among periphery countries, on the other. Political and military tightening up combined with the scrapping of risky economic reforms continued to fetter the possibilities for economic development at the same time that it entailed considerable political costs, internally and internationally, as well as an increased level of military expenditures.

Of course, the dilemma for the Soviet Union arises because she is not solely concerned with her continued dominance but has to ensure a certain level of economic growth both for herself and the other member countries of the Comecon. This need to perform arises for one because of the ideological claim that socialist economies perform better than capitalist ones. Secondly, the Soviet Union finds herself in a general competition and conflict with the Western countries for world leadership and dominance. Continuation of the conflict and maintenance of the already achieved position of world leadership demand continued economic development, at least as long as the industrialized countries of the West avoid long-run stagnation and recessions.

2. A Turning Point for the International Economic System: The Oil Crisis

A. Origins of the Power Reversal

It has been pointed out in Chapter 3 that a structured system of inequality is generally reproduced and maintained because it generates unequal exchange. However, internal and external events and processes can reverse such a process of systems reproduction and set in motion a process of restructuring of the system which brings about greater equality.¹⁹⁷ The redistribution of meta-power in favor of hitherto relatively powerless actors, the starting point for such processes of systems transformation, can come about for three reasons: (i) The multi-dimensionality of valuables and action outcomes generates positive and negative ramifications for the maintenance of the structured system of inequality. In part, these ramifications are unanticipated and unintended by the dominant actors. (ii) The operation of the system changes resource availabilities and distributions as well as their strategic importance for structuring activities. (iii) Actors external to the system may intervene and provide subordinate and dependent actors with additional power resources, new relationships, and different conceptions of acceptable

¹⁹⁷Of course, such a process of systems transformation may end with the elite being replaced by formerly subordinate, relatively powerless actors, without a change in the degree of inequality and dependency patterns.

institutions and structured action possibilities.¹⁹⁸

Restructuring activities and systems transformations can be based on or generated by a combination of these factors.¹⁹⁹ The reasons why such initial meta-power shifts go unchallenged by the dominant actors in the system while there might still be time to intervene successfully and stop the emergent process of restructuring lie in the fact that often the long-term significance of such meta-power redistributions may be unknown, misjudged, and disregarded (especially by those in relatively powerful positions). Several of the specific reasons for this are: (i) Those in dominant positions are distracted by wars, internal crisis, and problems, so that others not affected adversely by these events gain opportunities to develop themselves. (ii) As a result of previous commitments, and the institutionalized system with which their position is identified, those in a dominant position allocate fewer resources to newer, developing areas than competitors. (iii) Cultural and social constraints, e.g., concern with matters of 'status', may inhibit or constrain those in a dominant position from getting into areas having development potential, even though they have the possibility to do so. (iv) Those in a dominant position may be more conservative in

¹⁹⁸The external actors may not necessarily act selflessly but hope to establish a dependent relationship with those actors of the system which were helped by their actions.

¹⁹⁹See Baumgartner *et. al.* (1976a) for a wide range of illustrations of power shifts and systems transformations.

outlook, subject to commitments and constraints associated with their position and way of doing things, and less disposed than those in more marginal positions to take advantage of new power resources or action opportunities that avail themselves as a result of technological innovations, differential diffusion of education and skills, rise in the level of consciousness and self-organization of previously less organized, subordinate groups, emergence of new political coalitions, and other socio-structural changes.²⁰⁰

The history of the oil crisis, which now has resulted in renewed demands for a NIEPO, a transformation of the IES for the benefit of UDC, illustrates well some of the points made with respect to power reversals. The formation of OPEC, one source of the recent power shift, is one of the unintended outcomes of the operation of the IES and of the multi-dimensional nature of oil production in UDC. Since the beginning of international oil exploration and production, UDC with proven and potential oil reserves had been pawns in the power plays of DC and their integrated major oil corporations (Tanzer, 1967). Until recently, it was the UDC which tried to attract oil corporations to explore for oil and hopefully produce it when found. Although the major oil corporations and their governments often intrigued against each other and

²⁰⁰The preceding section has suggested that such a power reversal may be accepted by dominant actors if their commitment to systems development is greater than their desire to maintain their own position of dominance in case they are faced with the dilemma between choosing to rule and letting the system develop.

competed for the same concessions, the countries granting them did not benefit. The formation of OPEC was a direct response to the unilateral reduction of posted prices, and thus of the royalty and tax revenues of the producer countries, decreed by the major oil corporations in 1959 and 1960 in response to the glut of oil in world markets (Tugendhat, 1968:159-160):²⁰¹

This was not a large (price) fall, but to the governments basing their entire budgets on their revenues from oil it was an extremely serious matter. Moreover, to add insult to injury, the companies did not consult them beforehand. The cuts were thus a blow to their pride as well as their profits. All their latent resentments against 'foreign exploitation' came rushing to the surface in a storm of emotion, and for once they were able to sink their political differences to the point where they could act together.

OPEC was the tool "to make unilateral action impossible in (the) future, and to ensure that the companies always kept the producer governments' interests rather than those of anybody else in the forefront of their minds" (Tugendhat, 1968: 160). The most effective way to prevent the divide and rule tactics, used by the oil companies and their governments to play the producer countries off against one another during the Abadan crisis in 1952, was the formation of a united front like OPEC.

The creation of OPEC did not immediately produce success. Efforts on the part of the Arab oil-producing countries to organize an embargo immediately following the Israeli victory in

²⁰¹This reassertion of self determination has to be seen in the context of decolonialization and the beginnings of the organization of non-aligned nations.

1967 failed, and confirmed the viewpoint of many, that the producing countries were essentially in a weak position. However, OPEC and its Arab sister organization OAPEC provided an organizational focus for discussion, the exercise of cooperation, exchange and evaluation of information, and the learning of trust, factors which in itself affect relative power. The military defeat in 1967 spurred the desire for Arab cohesiveness (Safran, 1974). The formation of OPEC and the increased cohesiveness of the producer countries were important factors in shifting relative power in their favor. More important, however, were the shifts in the demand and supply conditions for oil, a result of the successful operation of the capitalist IES of the post World War II period.

In the late fifties and early sixties, most countries in Western Europe drastically reduced their reliance on coal as a major source of energy. All of the DC experienced rapid economic growth based on energy intensive modes of production (Commoner, 1976).²⁰² Oil satisfied a high proportion of these additional energy needs. Demand projections assumed continued rapid motorization, increased use of synthetic materials, and a dramatic rise in the use of fertilizers in conjunction with the Green Revolution. These demand projections, especially if they assumed rapid economic growth and development in UDC based on the same economic structure as in DC, suggested a rapidly

²⁰²Cipolla (1970) contains several papers showing how shifts in demand changed the power positions of countries.

worsening supply situation.²⁰³ In addition, significant imbalances between loci of demand and supply started to emerge in the late sixties. Oil and gas production in the U.S. and Western Europe stagnated or even declined beginning in the late sixties, suggesting that any additional oil supplies would have to come predominantly from the oil fields of the Middle East (Helbling, 1975).

This long-run shift in power in favor of the Middle East oil producing countries was reenforced by several factors which affected the short-run supply situation in the years after 1967. The closing of the Suez Canal in 1967 and the simultaneous interruption of the TAP pipeline connecting the rich Saudi fields with ports in the Mediterranean sea increased market uneasiness as long as tanker tonnage remained scarce. Also, the market structure of the world oil industry had changed over the years. Smaller, independent companies succeeded in gaining concessions. However, their supplies originated mostly in just one country, making them vulnerable to threats against their right to continue producing oil.²⁰⁴

This shift in relative power was first utilized by individual countries and then OPEC collectively to improve the

²⁰³M. Adelman (1972b) contends that there was never any basis for this view about a worsening supply situation. He maintains that official and corporate statements were propagating this view until the public ultimately believed it, maybe helped by the beginning discussion on the limits to growth.

²⁰⁴It was Libya which perfected this technique at the beginning of 1970 and realized the first significant improvements in the terms of its concessions.

terms of their concessions. 1970 saw increases of the posted price by up to 25%. This together with a rise in the tax rate on profits to 55% increased the projected oil revenues of the OPEC countries by \$10 billion. The Teheran meeting at the beginning of 1971 produced another major setback for the oil companies and set OPEC firmly on its way of escalating demands and ultimately unilateral decisions culminating in the oil embargo at the end of 1973 and the quadrupling of oil prices within a period of about 16 months in 1973 and 1974.^{205,206}

B. The Transformation of the International Economic System

The immediate result of the power shift in favor of the countries organized in OPEC and their actions in 1973 and 1974 was a dramatic increase in present and predicted future

²⁰⁵The Shah of Iran apparently felt up to the time of the Teheran meeting that the slightest failure of OPEC to realize its maximal demands would shatter OPEC unity and cooperation (M. Adelman, 1972b:81). M. Adelman (1972b:90-92) mentions that U.S. obstruction, or at least inaction, prevented OECD from developing a common strategy of the consumer countries in the crucial years 1970 to 1972. Also, the constant talk by U.S. officials about the danger of higher oil prices and limited production levels for the well-being of DC, as well as the admission of OECD that contingency plans were non-existent, actually encouraged OPEC to up its demands and escalate the threats in case of their non-acceptance.

²⁰⁶While the successes strengthened the cohesion, and therefore the power of OPEC, the differential impact of increased oil prices on the OECD countries as well as their different political, military and cultural interests in the Middle East led to increased divisions and distrust among them (M. Adelman, 1972a).

These divisions were very cleverly encouraged by the various producer countries in a reverse divide and rule strategy. The administration of the embargo and production cutbacks were a prime example of the use of this tactic (Field, 1975).

state revenues, and for some countries, in foreign exchange reserves. A World Bank Study in June 1974 predicted accumulated foreign exchange reserves by all the OPEC countries together of \$650 billion by 1980 with yearly additions thereafter of \$100 billion until 1990. Later studies were more optimistic assuming a total accumulation of reserves of \$300 billion (in 1974 dollars) by 1980 with net reductions beginning in 1990 (Chenery, 1975).²⁰⁷

Some voices called for a serious consideration of a U.S. military intervention in the Middle East to destroy OPEC and save the DC from economic strangulation and political blackmail (Kissinger, 1975a; Tucker, 1975a).²⁰⁸ Others pleaded for a collective search for a compromise between the conflicting interests of OPEC and OECD countries instead of the dangerous and destabilizing scramble to conclude bilateral deals or to seek individual solutions (Farmanfarmaian *et. al.*, 1975). In this situation, Chenery (1975) took the position that the oil-price and recycling problem was likely to remain a short-run one. Substantial financial net flows to the OPEC countries would exist only up to 1985. The only required response was therefore the creation of institutions capable of

²⁰⁷All these forecasts are based on highly conjectural assumptions about economic growth rates, future rates of energy growth, the development of alternative energy resources, OPEC pricing policies and the absorptive capacity of the OPEC countries. The latter is very much subject to political decisions on foreign aid and the stockpiling of weapons (Tucker, 1975b: 49-51).

²⁰⁸Fried and Schultze (1975) conclude that the economic policies chosen in response to the oil price increases worsened their recessionary effect in the OECD countries.

recycling the funds accruing in the treasuries of the OPEC countries and a step-up in foreign aid to finance the increased payments deficits of the non oil-exporting UDC. Chenery arrived at this optimistic view by comparing the magnitudes of the financial flows of the Marshall aid program and the OPEC-OECD case.

For Chenery, the major difference between the two cases is that Marshall aid was largely grant aid while a substantial portion of OPEC revenues will be invested in stocks, bonds and real estate in DC. Consequently, Chenery corrects the Marshall aid example for hypothetical debt services in the form of interest and dividend payments at 5% as well as a repayment of the principal over six years. Chenery's calculations show that the present problem is in fact no problem as long as the DC keep their growth rate at their historical level (Chenery, 1975:256-287):

When put in these terms, the adjustment to higher oil prices that is now required is shown to be of somewhat lesser magnitude than the postwar adjustment process. The proportion of imports to be financed by external capital in the first five years is only half as great, and it will not be necessary to limit the growth of non-oil imports in order to close the trade gap with OPEC. Although there was little repayment of the actual postwar debt, the growth of exports and GNP after 1950 was rapid enough to have permitted such repayment with little effect on continued growth. The important lesson of the postwar period is that such a large restructuring was accomplished with relative ease because economic growth was sustained at a high rate.

This reassuring analysis is misleading because of its purely economic focus and reasoning. The oil price problem is merely one facet of a multi-dimensional problem which includes the Arab-Israeli conflict and has at its root a struggle

over the distribution of control and power within the world system. The OPEC countries are now in a position to demand a greater influence in the determination of the form and content of this system. They seek to utilize their increased power to increase their power and control in other spheres, for purposes of structuring a world system which would allow them to realize more effectively their own aspirations for self-determination, economic development, and political importance (Hoveida, 1975).

Seen in this light, the difference between the flow of Marshall aid and petro-dollar recycling is not just a formal one. The former took the form of grants, the latter will be based mostly on commercial financial transactions according to capitalist rules applicable to consumers who produce less than they want to consume, and who then have either to sign future claims on their productive capacity or to transfer property rights. It is therefore inappropriate to proceed in the analysis, as Chenery does, simply by adjusting for debt amortization in order to make the Marshall aid case comparable to the present one. Rather, the various power and control aspects of international relations in the Marshall aid situation and the current oil crisis, must be taken into account in a systems analysis. From such a perspective, several comments can be made about specific limitations of Chenery's analysis as well as about the likely scenario for the restructuring of the world system.

In arguing that the problem of recycling may not be as acute as first appearances would have suggested, Chenery shows

that the debt service on the funds accruing to OPEC will require only half as much of GNP or exports of the OECD countries in 1985 as the Marshall aid countries would have had to pay in 1955 had their grants in fact been loans. In this hypothetical case, the industrialized countries of Western Europe would have had to use maximal 3.1% of their GNP or 13% of their export revenues, to service their debts. However, these countries did not have to do this. To argue, therefore, that the OECD countries could easily manage the predicted indebtedness to OPEC because it would require, in 1985, at most half as large a debt service charge as one never paid in the first place for Marshall aid is a non sequitur. Since Europe did not undergo the type of experience which she will now go through, Chenery's calculations cannot provide us with a reliable yardstick against which to assess the future.

The reparation payments and massive capital flows in the wake of wars in recent history give clear evidence of the problems related to such financial flows and the attendant transfer of real resources. The disaster in connection with the German reparation question after World War I illustrates dramatically enough the serious socio-political consequences such a transfer can entail if the appropriate conditions are not met (Kindleberger, 1968b). One has instead to ask oneself what the consequences for the growth rate in per capita consumption would have been if the Western European countries would have had to repay the aid received under the Marshall Plan. The outcome of such an inquiry depends on the assumptions made about what would have been the maximum feasible

growth rate of investment in these countries where the debt service charges would have reduced the GDP by approximately 3% below their GNP (in countries that were major aid recipients, this percentage would have been substantially higher). It is obvious that the living standard of the European countries would have recovered much more slowly and would have been substantially lower in 1958 than was actually the case. At a time when internal political conflicts and social disruptions were frequent, even a marginal decrease in standards of living might have negatively affected the political and social stability in many European countries, with likely adverse effects on economic performance.²⁰⁹ In particular, it would have certainly undermined the claim, so crucial at that time, of superior performance of capitalist economies as compared to socialist ones.

One can wonder how such reduced economic recovery in the years 1948-1960 would have affected France's reaction to the trauma of the military defeat in Indochina, the loss of Algeria, and the dramatic ascent to power by de Gaulle which brought France close to a civil war, even under more favorable conditions. Similarly in Germany, the adoption of the Bad Godesberg program by the Social Democratic Party and thus its ultimate transformation into an acceptable governmental party might never have occurred, with altogether different consequences for political development in Europe. And Great Britain

²⁰⁹M. D. Wallace (1974) shows that continuous economic expansion and growth in real wages contribute to the maintenance of political stability.

would have been forced into even more disruptive 'stop and go' policies in an attempt to reconcile an even larger deficit in her balance of payments with the need to dampen class antagonism through a satisfactory level of consumption growth. The international implications of such developments in Europe might have been an earlier decolonization and withdrawal from East of the Suez with all the ramifications that would have had in the Third World.

One cannot be as sanguine as Chenery about the socio-economic and political stability of some of the European countries. To subscribe to an a priori assumption that these countries could give up part of their GNP growth increment to service their debts to OPEC in the years to come without substantial non-economic consequences is a questionable basis for prognosis. The dubious nature of Chenery's assumption is reinforced by the likelihood that most European countries will not be able to achieve the growth rates experienced during the fifties and sixties, for reasons unrelated to the oil crisis but related to the deep structural misallocations of resources in most advanced capitalist countries (Tucker, 1975a:50-51; Barraclough, 1974).

A global and systematic analysis of world restructuring has to be based upon a careful and extensive examination of international economics and politics and their interrelationships. One should not forget that at any one moment, a country's position as either an international net-lender or net-borrower can determine its options in international politics. Great Britain used her foreign assets (held by government and citizens) to acquire the foreign exchange necessary to finance

her military efforts both in World War I and in the beginning of World War II. When she began to run out of foreign exchange reserves shortly before the U.S. entrance into World War II, her need for U.S. financing of her continued war effort (which ultimately occurred through the lend-lease program) led throughout the war to attempts by the U.S. to use the leverage thus gained. The U.S. used her position to pressure Britain into acceptance of her grand design for a post-war world order as illustrated in Section 2 of Chapter 5. The U.S. found herself similarly restricted in her freedom to pursue her interests in the sixties when the unwanted dollar accumulation in European hands forced the U.S. government to restrict capital exports as well as revise the Vietnam strategy. If the Marshall Plan had been based on loans instead of grants, this dollar overhang would never have occurred, since the European countries would have had to use their dollar earnings to repay their debts to the U.S.

Not only does Chenery disregard these economic and non-economic differences between grant aid and straight forward lending and borrowing as in the OPEC - OECD relationship, but he fails to consider the essential nature of debt financing. Financial flows are always balanced by a flow of property rights in the opposite direction. Either the property rights take the form of direct ownership of productive assets as in the case of the purchase of corporate stock and real estate, or they represent indirect claims on productive assets or future production through the acquisition of government and private securities, and monetary claims in the form of foreign exchange

reserves. In any case, such property rights are multidimensional in a capitalist system. Their holders are, explicitly or implicitly empowered to ensure the safety and profitability of their investments. They have the right to use the property thus controlled commensurate with their overall objectives, not just their economic goals (Friedman, 1962). The property owner in the capitalist system has the right to influence, or to try to influence, social, cultural and political processes by using the economic resources under his control. This includes the right to try to secure a political regime amenable to his own ideological and political views. Many historical examples show that foreign investors used their own and their government's resources to put pressures on the governments of the country in which their property interests lay if they felt these interests threatened.²¹⁰

The members of OPEC as well as LDC's in general have a vision of a world order where there is less material inequity and where countries can participate on a more equal basis in international affairs. This vision is fundamentally incompatible with the present system in which the industrialized countries consume most of the world's resources and, until recently, imposed their views and interests on international organizations and the world community as a whole. The member

²¹⁰Chenery argues that even at the height of OECD indebtedness to OPEC, at most 2% of total OECD assets would be owned by OPEC members and that this amount would not be sufficient to exercise any influence on government policies of OECD countries. Such an aggregate assessment neglects the fact that certain countries will find themselves in debt to OPEC to a much larger extent than 2%.

countries of OPEC are utilizing their newly gained power to try to restructure the present world system into one more compatible with their desires and aspirations.²¹¹

Therefore, we would expect that official and private investors from OPEC countries will sooner or later exercise all their property rights, acquired in the process of investing their surplus revenues, to the fullest extent possible.²¹² One can already see how those OPEC members with surplus funds use them to begin restructuring international relationships and institutional forms along lines of their vision. This includes attempts to bring about conditions and policies in other countries as well as in international agencies which are more supportive to their interests or at least

²¹¹Reference has already been made to the statement by the Iranian premier Hoveida (1975) in the New York Times. The resolutions and action programs passed by the two special sessions of the UN General Assembly in May 1974 and September 1975 (reprinted in the UN Monthly Chronicle of May 1974 and the UN Chronicle of October 1975) leave no doubt about this.

²¹²This is widely realized and feared in the DC. Hence, the entreaties to OPEC investors to behave 'rationally' and limit the use of their investments to simply receiving an appropriate rate of return without in any way influencing corporate policies; and hence, also the increasingly obvious attempts to scrutinize OPEC investments and to refuse their direct investments, if not indirect acquisition of control over assets, in areas, sectors, and corporations deemed to be of strategic importance or to be related in some way to national security interests. However, one important implication of the present analysis is that it would be naive to believe that the OPEC countries will remain satisfied with the suggested role of emasculated capitalists. Their reluctance so far to actively participate in the management of their investments is much more the result of their inexperience than their unwillingness to do so (Field, 1975).

not detrimental to them. Already before the 1973 war in the Mid-east, oil revenues were the basis of foreign aid to several African states in exchange for their break of diplomatic and economic relations with Israel. The first important political results of this new alliance have emerged during the 1974 General Assembly of the United Nations with the suspension of South Africa, the invitation to the Palestinian Liberation Organization to present their viewpoint, and the exclusion of Israel from UNESCO regional activities. The U.S. denounced the recent majority votes in the 1974 General Assembly, which went against its own interests, as a dangerous dictate by countries possessing only nominal voting power. However, these majorities are significantly different from those that used past UNCTAD conferences to demand new international trade and finance relationships, demands which were simply ignored by the industrial countries when they went against their own interests.²¹³

Of course, there remain questions as to the extent that OPEC members can transform oil wealth into military and industrial power. There is also a question as to how solid money power can be if it is based largely on foreign currency reserves which have ultimately to be kept in the banks of the industrialized countries (Mikdashi, 1974:29-30; Bergsten, 1974a).

²¹³The present majority obviously possesses more than purely nominal votes. The Middle East countries have demonstrated their ability to realize a transfer of wealth of extraordinary proportions -- enabling them to buy industries and arms -- as well as to threaten the stability of the world financial system, which is still of greater importance to the well-being of the industrialized nations than to their own.

However, the reserves provide the tool to exercise power now and to protect those reserves in the future. The OPEC countries, together with other UDC, have already used their newly won leverage to demand and obtain an increase in their IMF quotas (McDonald, 1975). They have also carefully limited the role of the IMF and the World Bank in the oil revenue recycling. The IMF oil facility has not been renewed for 1976, and most countries in the Middle East seem to prefer to allocate their surplus funds to their own development funds and regional development banks under their control (Field, 1975). However, an increase in OPEC lending to the World Bank and the IMF will provide these countries generally with the subtle policy influences in borrowing countries which the U.S. and other DC have enjoyed in the past.²¹⁴ And while the OPEC countries do not yet possess the military power necessary to protect their interests in case some major industrial countries default on their loans, the threat of a selective boycott, which will be easier to enforce once oil supplies are arranged directly between state-controlled oil corporations in the producing and

²¹⁴The discussion by the OECD countries about the establishment of a recycling and credit facility was a repetition of the negotiations in Bretton Woods (see Chapter 5). The European countries tried to establish a credit facility under IMF control where they possess a collective veto. The U.S., however, proposed and succeeded in gaining approval of a relatively large emergency credit facility under the auspices of OECD. This would have ensured U.S. control. Kissinger (1975a) indicated that European countries in need of credits would have to adopt policies in line with American views on energy conservation, a common front of oil-consuming countries, and appropriate monetary and fiscal policies. France's opposition to this plan was essentially based on its reluctance to accept reestablishment of U.S. hegemony.

consuming countries, will suffice to extract appropriate compensation.

Although some assurances have been given by Mid-East investors that they do not intend to exert management control over the corporations in which they have invested, they nonetheless acquire a base from which to isolate Israel commercially and, in general, to lobby in other countries for pro-Arab policies. In early 1975, we already witnessed the first attempts to boycott Western investment banks doing substantial business with Israel. It also seems that most manufacturing corporations and large trading firms participate in the Arab League's economic boycott against Israel.

The Middle East oil countries and OPEC clearly intend to use their newly acquired power to the fullest in order to remodel the world system, particularly its institutional structure, in a way that would guarantee their long-run economic development and their leverage in world politics. Under present conditions, they have a unique opportunity to reverse the long trend of uneven development that was imposed on them by the DC. Of course, it is too early to tell if they will succeed in this endeavor, even if they participate in a close alliance with other UDC. However, it is clear that the DC have already lost their freedom to act unilaterally and that they have to at least discuss with some seriousness together with all the UDC the shape of the future NIEPO.

CHAPTER VII

CONCLUSION

The five case studies in the preceding chapters illustrated and elaborated on the concept of the structuring and restructuring of various aspects of the past and the present IES. They have illustrated in a preliminary way the usefulness and fruitfulness of the systems approach to the political economy of the IES advocated in the beginning chapters.

This particular approach is clearly applicable to the type of problems which involves changes in the institutional and structural conditions of a system. This is the case, of course, with the development of new economic institutions itself. We are not lacking examples in the IES of today: New international monetary rules, rules governing foreign direct investments, the issues discussed at the UN conferences on the Law-of-the-Sea, or the discussions at a wide range of forums concerned with the realization of a NIEPO itself.

Another area of economics where the systems approach is fully justified is in the analysis and modelling of development and the economic activities related to it. Economic development is not possible without development in other spheres of a system. It is a multi-spheric process and therefore involves the multi-dimensional qualities of valuables in an essential way. Development also means changes in traditional forms of behavior, the adaptation of institutions to changing

economic forces, and the structural transformation of relationships among actors and of actors to forms of property. Development, therefore, involves necessarily the redistribution of relative, if not absolute, shares of income and wealth. It also changes the strategic importance for further development of resources, skills, knowledge and capabilities, of status and positions in networks of relationships. Consequently, development affects the positions of power and meta-power of the actors in the developing system. It is therefore by necessity a process full of conflicts and struggle and will involve structuring and restructuring processes. That is, development is a social process which builds on the basic elements and concepts of the systems approach advocated here. To the extent that one wants to derive policy implications, for example for international trade, finance and investment, in the context of development, the systems approach developed and illustrated here is necessarily the correct one.

In general, one can say that the study of any economic problem or topic should be based on the systems approach the longer the time period is over which the problem is to be modelled, studied, and analyzed. Increasing lengths of time imply greater probabilities that institutional and structural changes and transformations may occur and introduce changes in the values of the structural parameters of an economic model. This means that the investigator has to be open to the possible occurrence of such systems transformations and breakpoints in the behavioral patterns to be modelled. The choice between the traditional ceteris paribus short-run approach where

systems stability is assumed, and a long-run systems approach where systems transformation is possible, cannot, however, be based on an a priori and rather arbitrary judgement by the researcher himself. Rather, the decision has to be made after the situation has already been assessed in a preliminary way with the help of such a multi-level systems approach itself (Baumgartner et. al., 1976b).

Such a procedure and the actual formal modelling of systems transformations demand the availability of a multi-level methodology which can determine the presence of and evaluate the nature of such transformations. Unfortunately, this methodology is not yet available and we are still stuck with the ad hoc techniques used in econometrics to deal with breakpoints and transformations: A judicious choice of the time period for which the data is analyzed, the introduction of dummy variables, and the re-estimation of the structural variables of a model whenever its predictive power diminishes (Baumgartner et. al., 1976b).²¹⁵ The lack of such a methodology as well as the early stage at which the systems analysis of economic problems finds itself have limited the present inquiry to the use of historical case studies in support of the arguments and propositions advanced. It is clear that further systematic research and a formalization of the, often implicit,

²¹⁵These econometric techniques indicate that economists frequently encounter economic systems which exhibit feedback patterns linking the operation of the systems and their structural and institutional constraints. Economists, however, seem to be reluctant to accept the consequences and struggle openly with the theoretical and methodological problems involved in the modelling of the complete systems.

propositions contained in this inquiry are necessary in order to fully exploit the richness of the systems approach.

Of course, the particular systems approach to the political economy of the IES presented here is only the beginning of a longer-term research effort. It is therefore somewhat premature to develop specific policy implications with respect to international economic exchange problems and future forms of the IES. The research reported here is primarily designed to propagate the systems approach to problems of the IES and to alert researchers to the possibility of break-points and the importance of modelling economic problems in the way it has been attempted here for problems of the IES.

Future research should give some priority to the further investigation and development of three concepts introduced here. For one, it is essential to clarify the concept of systemic ramifications. This includes the concrete specification of (i) the decision models used by the different actors in the hierarchy of actors, (ii) the multiple dimensions of the valuables used by actors in a system, and (iii) the spin-off and spill-over effects that occur because of economic actions in specific socio-economic contexts. Secondly and related to the first topic, it is important to fully develop a theory of power. This includes the determination of the valuables which give actors power and meta-power, and under which circumstances and to what degree. It also involves the development of a complete model of the processes through which power is translated into actual systems states. And thirdly, the multi-dimensionality of valuables, the concept of systemic ramifications, and their

power implications imply a theory of value different than the ones commonly implied by neo-classical and marxist economic theories. But this problem raises a whole series of philosophical and scientific questions which it is difficult to treat so early in this research effort.

BIBLIOGRAPHY

- Adelman, I. 1975 "Development Economics - A Reassessment of Goals." American Economic Review, 65(May):302-309.
- Adelman, I. and C. T. Morris 1973 Economic Growth and Social Equity in Developing Countries. Stanford: Stanford University Press.
- Adelman, M. 1972a The World Petroleum Market. Baltimore: The Johns Hopkins University Press.
- _____ 1972b "Is the Oil Shortage Real?" Foreign Policy, Winter, pp. 69-107.
- Akamatsu, K. 1961 "A Theory of Unbalanced Growth in the World Economy." Welwirtschaftliches Archiv, 86(II):196-217.
- Aldrich, H. 1972 "Technology and Organizational Structure: A Re-examination of the Findings of the Ashton Group." Administrative Science Quarterly, 17:26-43.
- Alker, H. R., Jr. 1973 "On Political Capabilities in a Schedule Sense: Measuring Power, Integration and Development." In H. R. Alker, Jr., K. W. Deutsch and A. H. Stoetzel (eds.), Mathematical Approaches to Politics. San Francisco: Jossey-Bass, pp. 307-373.
- Amin, S. 1971 L'Accumulation à l'Echelle Mondiale. 2nd ed. Paris: Editions Anthropos.
- _____ 1973 Le Développement Inégal. Paris: Editions de Minuit.
- Arpan, J. S. 1971 International Intracorporate Pricing. New York: Praeger.
- Arrow, K. J. 1970 "Political and Economic Evaluation of Social Effects and Externalities." In M. D. Intriligator (ed.), Frontiers of Quantitative Economics. Amsterdam: North Holland, pp. 3-25.
- Askari, H. and G. Weil 1974 "Stability of Export Earnings of Developing Nations." Journal of Development Studies 11:86-90.
- Balassa, B. 1965 "Tariff Protection in Industrial Countries: An Evaluation." Journal of Political Economy, 73:573-594.
- _____ 1967a The Structure of Protection in the Industrial Countries and its Effects on the Exports of Processed Goods from Developing Countries. New York: UNCTAD, TD/B/C.2/36.

- Balassa, B. 1967b "The Impact of the Industrial Countries' Tariff Structures on their Imports of Manufactures from Less-Developed Areas." Economica, 34:372-383.
- _____ 1968 "Tariff Protection in Industrial Nations and its Effects on the Exports of Processed Goods from Developing Countries." Canadian Journal of Economics, 1:583-594.
- Baldwin, R. E. 1963 "Export Technology and Development from a Subsistence Level." Economic Journal, 73:80-92.
- _____ 1969 "The Case against Infant Industry Tariff Protection." Journal of Political Economy, 77:295-305.
- _____ 1970 Nontariff Distortions of International Trade. Washington, D. C.: Brookings.
- _____ 1971a "Nontariff Distortions of International Trade." In Commission on International Trade and Investment Policy, United States International Economic Policy in an Interdependent World. Washington, D. C.: Government Printing Office, vol. I, pp. 641-662.
- _____ 1971b "Determinants of the Commodity Structure of U. S. Trade." American Economic Review, 61:126-146.
- Ball, G. 1970 "Cosmocorp: The Importance of Being Stateless." In C. Brown (ed.), World Business. New York: Macmillan, pp. 330-338.
- Balogh, T. 1963 Unequal Partners. 2 vols. Oxford: Basil Blackwell.
- _____ 1973 Fact and Fancy in International Economic Relations. Oxford: Pergamon Press.
- Bardhan, P. K. 1970 Economic Growth, Development, and Foreign Trade. New York: Wiley-Interscience.
- Barnet, R. J. and R. E. Mueller 1974 Global Reach: The Power of the Multinational Corporations. New York: Simon and Schuster.
- Barnett, T. 1975 "The Gezira Scheme: Production of Cotton and the Reproduction of Underdevelopment." In I. Oxall, T. Barnett and D. Booth (eds.), Beyond the Sociology of Development. London: Routledge and Kegan Paul.
- Barraclough, G. 1974 "The End of an Era." New York Review of Books, June 27.
- Bartlett, R. 1973 Economic Foundations of Political Power. New York: Free Press.

- Basevi, G. 1966 "The United States Tariff Structure: Estimates of Effective Rates of Protection of United States Industries and Industrial Labor." Review of Economics and Statistics, 48:147-160.
- Bator, F. M. 1958 "The Anatomy of Market Failure." Quarterly Journal of Economics, 72:351-379.
- Bauer, P. T. 1968 "Some Aspects and Problems of Trade in Africa." In R. Moyer and S. C. Hollander (eds.), Markets and Marketing in Developing Economies. Homewood, Ill.: Irwin.
- Baumgartner, T. and T. R. Burns 1974 "Socio-economic Power, Market Prices, and the Distribution of Income." Mimeo, University of New Hampshire.
- Baumgartner, T., W. Buckley and T. R. Burns 1975a "Relational Control: The Human Structuring of Cooperation and Conflict." Journal of Conflict Resolution, 19:417-440.
-
- 1975b "Meta-power and Relational Control in Social Life." Social Science Information, 14(6):49-78.
- Baumgartner, T., T. R. Burns, P. DeVille and L. D. Meeker 1975c "A Systems Model of Conflict and Change in Planning Systems with Multi-level, Multiple Objective Evaluation and Decision-making." General Systems, 20:167-183.
- Baumgartner, T., W. Buckley, T. R. Burns and P. Schuster 1976a "Meta-power and the Structuring of Social Hierarchies." In T. R. Burns and W. Buckley (eds.), Power and Control: Social Structures and their Transformation. London: Sage, pp. 215-288.
- Baumgartner, T., T. R. Burns, L. D. Meeker and B. Wild 1976b "Open Systems and Multi-level Processes: Implications for Social Research." International Journal of General Systems, 3:25-42.
- Beckerman, W. 1972 "Environmental Policy and the Challenge to Economic Theory." Social Science Information, 11 (1): 7-16.
- Bergsten, C. F. 1973 "The Threat from the Third World." Foreign Policy, Summer, pp. 102-124.
-
- 1974a "Oil and Cash Flow." New York Times, June 3, p. 31.
-
- 1974b "Coming Investment Wars?" Foreign Affairs, 52:135-152.
-
- 1975 Towards a New International Economic Order: Selected Papers of C. Fred Bergsten. Lexington, Mass.: Heath.

- Bhagwati, J. N. 1969a Trade, Tariffs, and Growth. London: Weidenfeld and Nicolson.
- _____ 1969b "Optimal Policies and Immiserizing Growth." American Economic Review, 59:967-970.
- _____ 1971 "The Generalized Theory of Distortions and Welfare." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 69-90.
- _____ (ed.) 1972a Economics and the World Order: From the 1970's to the 1990's. New York: Macmillan.
- _____ 1972b "The Heckscher-Ohlin Theorem in the Multi-commodity Case." Journal of Political Economy, 80: 1052-1055.
- Bharadwaj, R. and J. N. Bhagwati 1967 "Human Capital and the Patterns of Foreign Trade: The Indian Case." Indian Economic Review, 2 (October).
- Blaug, M. 1968 Economic Theory in Retrospect. Rev. ed. Homewood, Ill.: Irwin.
- Boulding, K. E. 1969 "Economics as a Moral Science." American Economic Review, 59:1-12.
- Bowles, S. 1972 "Schooling and Inequality from Generation to Generation." Journal of Political Economy, 80 (May, Supplement):219-251.
- Boyer de la Giroday, F. 1974 Myths and Reality in the Development of International Monetary Affairs. Essays in International Finance No. 105. Princeton: Princeton University, Department of Economics.
- Braun, A. R. 1975 "What is Incomes Policy and what can it do?" Finance and Development, 12(March):34-37.
- Breton, A. 1974 The Economic Theory of Representative Government. Chicago: Aldine.
- Britto, R. 1973 "Some Recent Developments in the Theory of Economic Growth: An Interpretation." Journal of Economic Literature, 11:1343-1366.
- Brown, L. R. 1972 World without Borders. New York: Random House.
- Buchanan, J. M. 1968 The Demand and Supply of Public Goods. Chicago: Rand McNally.
- Buchanan, J. M. and G. Tullock 1962 The Calculus of Consent. Ann Arbor: University of Michigan Press.

- Buckley, W. 1967 Sociology and Modern Systems Theory. Englewood Cliffs, N. J.: Prentice-Hall.
- Buckley, W., T. R. Burns and L. D. Meeker 1974 "Structural Resolutions of Collective Action Problems." Behavioral Science, 19:277-297.
- Burns, T. R. 1973 "A Structural Theory of Social Exchange." Acta Sociologica, 16:188-208.
- _____ 1974 The Dialectics of Social Behavior. A Preliminary Formulation. Mimeo, University of New Hampshire.
- Burns, T. R. and W. Buckley 1974 "The Prisoners' Dilemma Game as a System of Social Domination." Journal of Peace Research, 11:221-228.
- Burns, T. R. and L. D. Meeker 1975 "A Multi-level, Structural Theory of Social Behavior." Quality and Quantity, 9:51-89.
- Caplow, T. 1968 Two against One. Englewood Cliffs, N. J.: Prentice-Hall.
- Caves, R. E. 1960 Trade and Economic Structure. Cambridge: Harvard University Press.
- _____ 1971 "International Corporations: The Industrial Economics of Foreign Investment." Economica, 38:1-27.
- _____ 1974 International Trade, International Investment, and Imperfect Markets. Special Papers in International Economics No. 10. Princeton: Princeton University, Department of Economics.
- Chacholiades, M. 1973 The Pure Theory of International Trade. Chicago: Aldine.
- Chandler, A. D. and F. Redlich 1961 "Recent Developments in American Business Administration and their Conceptualization." Business History Review, 35:1-27.
- Chenery, H. B. 1953 "The Application of Investment Criteria." Quarterly Journal of Economics, 67:76-96.
- _____ 1961 "Comparative Advantage and Development Policy." American Economic Review, 51:18-51.
- _____ 1975 "Restructuring the World Economy." Foreign Affairs, 53:242-263.
- Child, J. 1969 The Business Enterprise in Modern Industrial Society. London: Collier McMillan.

- Chipman, J. S. 1965a "A Survey of the Theory of International Trade. Part I: The Classical Theory." Econometrica, 33:477-519.
- _____ 1965b "A Survey of the Theory of International Trade. Part II: The Neo-Classical Theory." Econometrica, 33:685-760.
- _____ 1966 "A Survey of the Theory of International Trade. Part III: The Modern Theory." Econometrica, 34:18-76.
- _____ 1971 "International Trade with Capital Mobility: A Substitution Theorem." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 201-237.
- _____ 1972 "The Theory of Exploitative Trade and Investment Policies: A Reformulation and Synthesis." In L. E. DiMarco (ed.), International Economics and Development. New York: Academic Press, pp. 209-244.
- Chodak, S. 1973 Societal Development. New York: Oxford University Press.
- Cipolla, C. M. 1966 Guns, Sails, and Empires: Technological Innovation and the Early Phases of European Expansion, 1400-1700. New York: Pantheon.
- _____ 1967 Money, Prices, and Civilization in the Mediterranean World. New York: Gordian Press.
- _____ (ed.) 1970 The Economic Decline of Empires. London: Methuen.
- Clapham, J. H. 1921 The Economic Development of France and Germany, 1815-1914. Cambridge: University Press.
- Clement, M. O., R. L. Pfister and K. J. Rothwell 1967 Theoretical Issues in International Economics. Boston: Houghton Mifflin.
- Clough, S. B. 1964 The Economic History of Modern Italy. New York: Columbia University Press.
- Coase, R. H. 1952 "The Nature of the Firm." In American Economic Association, Readings in Price Theory. Homewood, Ill.: Irwin, pp. 331-351.
- _____ 1960 "The Problem of Social Cost." Journal of Law and Economics, 3:1-44.
- Coleman, J. S. 1974 Power and the Structure of Society. New York: Norton.

- Commission on International Trade and Investment Policy 1971 United States International Economic Policy in an Interdependent World. 2 vols. Washington, D. C.: Government Printing Office.
- Commoner, B. 1976 The Poverty of Power. New York: Knopf.
- Cooper, C. A. and B. F. Massell 1965a "Towards a General Theory of Customs Unions for Developing Countries." Journal of Political Economy. 73:461-476.
- _____ 1965b "A New Look at Customs Union Theory." Economic Journal. 75:742-747.
- Cooper, R. N. 1968 The Economics of Interdependence: Economic Policy in the Atlantic Community. New York: McGraw-Hill.
- _____ 1970 "International Economics in the International Encyclopedia of the Social Sciences." Journal of Economic Literature, 8:435-439.
- _____ 1972a "Economic Interdependence and Foreign Policies in the Seventies." World Politics, 24:159-181.
- _____ 1972b "The European Community's System of Generalized Tariff Preferences: A Critique." Journal of Development Studies, 8:379-394.
- _____ 1975 "Economic Assumptions for the Case of Liberal Trade." In C. F. Bergsten (ed.), Towards a New World Trade Policy: The Maidenhead Papers. Lexington, Mass.: Heath, pp. 19-31.
- Coppock, J. 1962 International Economic Instability. New York: McGraw-Hill.
- Corden, W. M. 1971 The Theory of Protection. Oxford: Clarendon Press.
- _____ 1974 Trade Policy and Economic Welfare. Oxford: Clarendon Press.
- Dean, G. C. 1972 "Science, Technology and Development: China as a 'Case Study'." China Quarterly, No. 51. pp. 520-534.
- Desai, P. 1972 The Bokaro Steel Plant. Amsterdam: North Holland.
- DeVille, P. and T. Burns 1976 "Institutional Responses to Crisis in Capitalist Development." Paper presented at the Third European Meeting on Cybernetics and Systems Research, Vienna.

- Downs, A. 1957 An Economic Theory of Democracy. New York: Harper and Row.
- Dubin, R. 1958 Working Union-Management Relations: The Sociology of Industrial Relations. Englewood Cliffs, N. J.: Prentice-Hall.
- Duchêne, F., K. Mushakoji and H. D. Owen 1974 The Crisis of International Cooperation. New York: The Trilateral Commission.
- Eckstein, O. 1957 "Investment Criteria for Economic Development and the Theory of Intertemporal Welfare Economics." Quarterly Journal of Economics, 71: 56-85.
- Economist 1969 "Stemming the Flood." December 6, pp. 67-70.
- Eels, R. 1972 Global Corporations, The Emerging System of World Economic Power. New York: Interbook Inc.
- Elias, N. 1969 Ueber den Prozess der Civilisation. 2nd vol. Bern: Francke Verlag.
- Emmanuel, A. 1972 Unequal Exchange. A Study of Imperialism and Trade. New York: Monthly Review Press.
- Erb, G. F. and S. Schiavo-Campo 1969 "Export Instability, Level of Development, and Economic Size of Less Developed Countries." Bulletin of the Oxford University Institute of Statistics and Economics, 31: 263-283.
- Evans, P. 1972 "National Autonomy and Economic Development: Critical Perspectives on Multinational Corporations in Poor Countries." In R. Keohane and J. Nye (eds.), Transnational Relations and World Politics. Cambridge: Harvard University Press.
- Farmanfarmanian, K., A. Gutowski, S. Okita, R. Roosa and C. Wilson 1975 "How can the World survive OPEC Oil?" Foreign Affairs, 53:201-222.
- Feld, W. J. 1972 Nongovernmental Forces in World Politics. New York: Praeger.
- Field, M. 1975 A Hundred Million Dollars a Day. London: Sidgwick and Jackson.
- Finger, J. M. 1975a "Trade Overlap and Intra-Industry Trade." Economic Inquiry, 13:581-589.
- _____ 1975b "A New View of the Product Cycle Theory." Weltwirtschaftliches Archiv, 111:79-99.

- Fisher, H. E. S. 1971 The Portugal Trade. London: Methuen.
- Frey, F. W. 1973 "Communications in Developing Societies."
In I. de Sola Pool et. al. (eds.), Handbook of Communication. New York: Rand McNally, pp. 337-461.
- Fried, E. R. and C. L. Schultze (eds.) 1975 Higher Oil Prices and the World Economy: An Appraisal of Adjustment. Washington, D. C.: Brookings.
- Friedman, M. 1953 Essays in Positive Economics. Chicago: University of Chicago Press.
- _____ 1962 Capitalism and Freedom. Chicago: University of Chicago Press.
- Friedmann, J. 1972 "A General Theory of Polarized Development."
In N. M. Hansen (ed.), Growth Centers in Regional Economic Development. New York: The Free Press, pp. 82-107.
- Furtado, C. 1963 The Economic Growth of Brazil. Berkeley: University of California Press.
- Galbraith, J. K. 1968 The New Industrial State. New York: The New American Library.
- _____ 1973 "Power and the Useful Economist." American Economic Review, 63:1-11.
- Galenson, W. and H. Leibenstein 1955 "Investment Criteria, Productivity and Economic Development." Quarterly Journal of Economics, 69:343-370.
- Galtung, J. 1971 "A Structural Theory of Imperialism." Journal of Peace Research, 8:81-117.
- _____ 1973 The European Community: A Superpower in the Making. Oslo: Universitetsforlaget.
- Gamson, W. A. 1968 Power and Discontent. Homewood, Ill.: Dorsey.
- Gardner, R. N. 1969 Sterling-Dollar Diplomacy. 2nd ed. New York: McGraw-Hill.
- Gardner, R. N., S. Okita and B. J. Udink 1974 A Turning Point in North-South Economic Relations. New York: The Trilateral Commission.
- Georgescu-Roegen, N. 1966 Analytical Economics. Cambridge: Harvard University Press.

- Gergen, K. J. and M. M. Gergen 1974 "Foreign Aid that Works: What other Nations hear when the Eagle screams." Psychology Today, 7(June):53-58.
- Glezakos, C. 1973 "Export Instability & Economic Growth: A Statistical Verification." Economic Development & Cultural Change, 21:670-678.
- Gluckman, M. 1967 Custom and Conflict in Africa. New York: Barnes and Noble.
- Goodhart, C. A. E. and R. J. Bhansali 1970 "Political Economy." Political Studies, 18:43-106.
- Gray, H. 1972 Foreign Direct Investment in Canada. Ottawa: Information Canada.
- Grow, R. F. 1975 "The Diffusion of Soviet Industrial Technology and Regionalism in China." Paper presented at the International Studies Association Meeting, Washington, D. C.
- Grubel, H. G. 1966 "The Anatomy of Classical and Modern Infant Industry Protection." Weltwirtschaftliches Archiv, 97(2):325-342.
- Grubel, W., D. Mehta and R. Vernon 1967 "The R&D Factor in International Investment of U. S. Industries." Journal of Political Economy, 75:20-37.
- Gruchy, A. G. 1947 Modern Economic Thought. The American Contribution. New York: Prentice-Hall.
- _____ 1972 Contemporary Economic Thought. The Contribution of Neo-Institutional Economics. Clifford, N. J.: Augustus M. Kelley.
- Haberler, G. 1961 A Survey of International Trade Theory. Special Papers in International Economics No. 1. Princeton: Princeton University, Department of Economics.
- Hansen, A. H. 1964 Business Cycles and National Income. Exp. ed. New York: Norton.
- Harrod, R. F. 1957 International Economics. 4th ed. Cambridge: University Press.
- _____ 1972 "Problems Perceived in the International Financial System." In A. L. K. Acheson, J. F. Chant and M. F. J. Prachowny (eds.), Bretton Woods Revisited. Toronto: Toronto University Press, pp. 5-29.

- Hawkins, E. K. 1970 The Principles of Development Aid. Baltimore: Penguin.
- Hayter, T. 1971 Aid as Imperialism. Baltimore: Penguin.
- Healey, D. T. 1972 "Development Policy: New Thinking about an Interpretation." Journal of Economic Literature, 10:757-797.
- Helbling, H. H. 1975 "International Trade and Finance under the Influence of Oil -- 1974 and early 1975." Federal Reserve Bank of St. Louis Review, 57(May): 11-15.
- Helleiner, K. F. 1973 Free Trade and Frustration: Anglo-Austrian Negotiations, 1860-1870. Toronto: University of Toronto Press.
- Higgins, B. 1968 Economic Development. Principles, Problems and Policies. Rev. ed. New York: Norton.
- Hill, C. 1947 Lenin and the Russian Revolution. London: English Universities Press.
- Hirsch, Seev 1967 Location of Industry and International Competitiveness. London: Oxford University Press.
- _____ 1971 The Export Performance of Six Manufacturing Industries. New York: Praeger.
- Hirsch, Werner Z. 1973 Urban Economic Analysis. New York: McGraw-Hill.
- Hirschman, A. O. 1945 National Power and the Structure of Foreign Trade. Berkeley: University of California Press.
- _____ 1958 The Strategy of Economic Development. New Haven: Yale University Press.
- _____ 1967 Development Projects Observed. Washington, D. C.: Brookings.
- _____ 1969 How to Disinvest in Latin America and why. Essays in International Finance No. 76. Princeton: Princeton University, Department of Economics.
- Hochmuth, M. S. 1974 Organizing the Transnational. Leiden: A. W. Sijthoff.
- Hofmann, P. 1974 "Troubled Italy-Back from the Brink?" New York Times, May 12.

- Hollis, M. and E. J. Nell 1975 Rational Economic Man. London: Cambridge University Press.
- Hoselitz, B. F. 1953 "The Role of Cities in the Economic Growth of Underdeveloped Countries." Journal of Political Economy, 61:195-208.
- Hoveida, A. A. 1975 "The View from Iran: World Reconstruction." New York Times, February 5, p. 33.
- Hsu, R. C. 1972 "Changing Domestic Demand and Ability to Export." Journal of Political Economy, 80:198-202.
- Hufbauer, G. C. 1966 Synthetic Materials and the Theory of International Trade. London: Gerald Duckworth & Co.
- _____ 1970 "The Impact of National Characteristics and Technology on the Commodity Composition of Trade in Manufactured Goods." In R. Vernon (ed.), The Technology Factor in International Trade. New York: Columbia University Press, pp. 145-232.
- Hymer, S. 1970 "The Efficiency (Contradictions) of Multinational Corporations." American Economic Review. 60(May): 441-448.
- _____ 1972 "The Multinational Corporation and the Law of Uneven Development." In J. N. Bhagwati (ed.), Economics and the World Order: From the 1970's to the 1990's. New York: Macmillan, pp. 113-140.
- Hymer, S. and R. Rowthorn 1970 "Multinational Corporations and International Oligopoly: The Non-American Challenge." In C. P. Kindleberger (ed.), The International Corporation. Cambridge: MIT Press, pp. 57-91.
- Illich, I. 1971 "Outwitting the 'Developed' Nations." In R. H. Elling (ed.), National Health Care. Chicago: Aldine-Atherton, pp. 263-276.
- Imlah, A. G. 1966 Britain and Switzerland, 1845-1860. Hamden, Conn.: Archon Books.
- International Labor Organization 1970 Towards Full Employment. Geneva: ILO.
- Johnson, Brian 1970 The Politics of Money. New York: McGraw-Hill.
- Johnson, Harry G. 1951-52 "Optimum Welfare and Maximum Revenue Tariffs." Review of Economic Studies, 19:28-35.
- _____ 1953-54 "Optimum Tariffs and Retaliation." Review of Economic Studies, 21:142-153.

- Johnson, Harry G. 1958 International Trade and Economic Growth. London: George Allen and Unwin.
- _____ 1960 "The Cost of Protection and the Scientific Tariff." Journal of Political Economy, 42: 327-345.
- _____ 1964 "Tariffs and Economic Development: Some Theoretical Issues." Journal of Development Studies, 1:3-30.
- _____ 1965a "An Economic Theory of Protectionism, Tariff Bargaining, and the Formation of Customs Unions." Journal of Political Economy, 73:256-283.
- _____ 1965b "Optimal Trade Intervention in the Presence of Domestic Distortions." In R. E. Baldwin (ed.), Trade, Growth, and the Balance of Payments. Chicago: Rand McNally, pp. 3-34.
- _____ 1967a Economic Policies towards Less Developed Countries. Washington, D. C.: Brookings.
- _____ 1967b "The Possibility of Income Losses from Increased Efficiency or Factor Accumulation in the Presence of Tariffs." Economic Journal, 77:151-154.
- _____ 1968a "International Trade: Theory." In D. L. Sills (ed.), International Encyclopedia of the Social Sciences. Vol. 8. New York: Macmillan and The Free Press, pp. 83-96.
- _____ 1968b "An 'Internationalist' Model." In W. Adams (ed.), The Brain Drain. New York: Macmillan, pp. 69-91.
- _____ 1968c "The Gains from Exploiting Monopoly or Monopsony Power in International Trade." Economica, 35:151-156.
- _____ 1968d Comparative Cost and Commercial Policy. Theory for a Developing Economy. Stockholm: Almqvist and Wicksell.
- _____ 1969 "The Theory of International Trade." In P. A. Samuelson (ed.), International Economic Relations. London: MacMillan, pp. 55-66.
- _____ 1970a "Theory in Relation to Empirical Analysis." In R. Vernon (ed.), The Technology Factor in International Trade. New York: Columbia University Press, pp. 9-21.

- Johnson, Harry G. 1970b "A New View of the Infant Industry Argument." In I. A. McDougall and R. H. Snape (eds.), Studies in International Economics. Amsterdam: North Holland, pp. 59-76.
- _____ 1970c "The Efficiency and Welfare Implications of the International Corporation." In C. P. Kindleberger (ed.), The International Corporation. Cambridge: MIT Press, pp. 35-56.
- _____ 1971 "A Word to the Third World." Encounter, 37 (October):3-10.
- _____ 1974 "Mercantilism. Past, Present, Future." In H. G. Johnson (ed.), The New Mercantilism. Oxford: Basil Blackwell, pp. 1-19.
- _____ 1975 "The Probable Effects of Freer Trade on Individual Countries." In C. F. Bergsten (ed.), Towards a New World Trade Policy: The Maidenhead Papers. Lexington, Mass.: Heath, pp. 35-47.
- Jolly, R. 1975 Annual Report, 1974. University of Sussex, Institute of Development Studies.
- Jones, R. W. 1956-57 "Factor Proportions and the Heckscher-Ohlin Theorem." Review of Economic Studies, 24:1-10.
- _____ 1970 "The Role of Technology in the Theory of International Trade." In R. Vernon (ed.), The Technology Factor in International Trade. New York: Columbia University Press, pp. 73-92.
- _____ 1971 "A Three-factor Model in Theory, Trade and History." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 3-21.
- Kahn, A. E. 1951 "Investment Criteria in Development Programmes." Quarterly Journal of Economics, 65:38-61.
- Kaldor, N. 1970 "The Case for Regional Policies." Scottish Journal of Political Economy, 17:337-348.
- _____ 1972 "The Irrelevance of Equilibrium Economics." Economic Journal. 82:1237-1252.
- Knapp, K. W. 1970 "Environmental Disruption and Social Costs: A Challenge to Economics." Kyklos, 23:833-847.
- _____ 1972 "Social Costs, Neoclassical Economics, Environmental Planning: A Reply." Social Science Information, 11(1):17-28.

- Kaser, M. 1967 COMECON. Integration Problems of the Planned Economies. 2nd. ed. London: Oxford University Press.
- Keesing, D. B. 1965 "Labor Skills and International Trade: Evaluating many Trade Flows with a Single Measurement." Review of Economics and Statistics, 47:287-293.
- _____ 1967 "The Impact of Research and Development on United States Trade." Journal of Political Economy, 75:38-45.
- Kenen, P. B. 1965a "Nature, Capital, and Trade." Journal of Political Economy, 73:437-460.
- _____ 1965b "Growth Theory, Trade Theory, and International Investment." In H. G. Johnson and P. B. Kenen, Trade and Development. Geneva: Librairie Droz.
- _____ 1970 "Skills, Human Capital, and Comparative Advantage." In W. C. Hansen (ed.), Education, Income, and Human Capital. New York: Columbia University Press, pp. 195-230.
- _____ 1971 "Migration, the Terms of Trade, and Economic Welfare in the Source Country." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 238-260.
- Keohane, R. D. and J. S. Nye 1972 Transnational Relations and World Politics. Cambridge: Harvard University Press.
- _____ 1973 "World Politics and the International Economic System." In C. F. Bergsten (ed.), The Future of the International Economic Order: An Agenda for Research. Lexington, Mass.: Heath, pp. 115-179.
- Khalaf, N. G. 1974 "Country Size and Trade Concentration." Journal of Development Studies, 11(October):81-85.
- Kindleberger, C. P. 1951 "Group Behavior and International Trade." Journal of Political Economy, 59:30-46.
- _____ 1956 The Terms of Trade. A European Case Study. Cambridge: MIT Press.
- _____ 1962 Foreign Trade and the National Economy. New Haven: Yale University Press.
- _____ 1964 Economic Growth in France and Britain, 1851-1950. Cambridge: Harvard University Press.

- Kindleberger, C. P. 1968a "Disequilibrium System of Foreign Trade and the Developing Countries." In J. D. Theberge (ed.), Economics of Trade and Development. New York: Wiley, pp. 490-505.
- _____ 1968b International Economics. 4th ed. Homewood, Ill.: Irwin.
- _____ 1969 American Business Abroad. New Haven: Yale University Press.
- _____ 1972 "Direct Investment in Less Developed Countries: Historical Wrongs and Present Values." In L. E. DiMarco (ed.), International Economics and Development. New York: Academic Press, pp. 387-402.
- _____ 1974 "An American Economic Climacteric?" Challenge, 16 (January/February):35-44.
- Kirchner, D. P. 1964 "Now the Transnational Enterprise." Harvard Business Review, 42(March/April):6-10, 172-176.
- Kissinger, H. 1975a Interview with Business Week. Business Week, January 13, pp. 67-76.
- _____ 1975b Address to the 7th Special Session of the United Nations General Assembly, September 1.
- Knorr, P. 1973 Power and Wealth. New York: Basic Books.
- Kojima, K. 1971 Japan and the Pacific Free Trade Area. Berkeley: University of California Press.
- _____ 1975 "A Macroeconomic Theory of Foreign Direct Investment." In C. F. Bergsten (ed.), Towards a New World Trade Policy: The Maidenhead Papers. Lexington, Mass.: Heath, pp. 75-100.
- Kolm, S. C. 1975 "A quoi sert la Science Economique?" Annales, 30(January/February):123-136.
- Kondratieff, N. D. 1935 "The Long Waves in Economic Life." Review of Economic Statistics, 17:105-115.
- Kornai, J. 1971 Anti-Equilibrium. Amsterdam: North Holland.
- Krauss, M. B. 1972 "Recent Developments in Customs Union Theory: An Interpretative Survey." Journal of Economic Literature, 10:413-436.
- Kravis, I. 1956 "Availability and other Influences on the Commodity Composition of Trade." Journal of Political Economy, 64:143-155.

- Kujawa, D. (ed.) 1973 American Labor and the Multinational Corporation. New York: Praeger.
- Kuznets, S. 1955 "Economic Growth and Income Inequality." American Economic Review, 45:1-28.
- _____ 1966 Modern Economic Growth. New Haven: Yale University Press.
- Lary, H. G. 1968 Imports of Manufactures from Less Developed Countries. New York: Columbia University Press.
- Leontief, W. 1954 "Domestic Production and Foreign Trade: The American Capital Position Reexamined." Repr. in J. N. Bhagwati (ed.), International Trade. Baltimore: Penguin, 1969, pp. 93-139.
- _____ 1956 "Factor Proportions and the Structure of American Trade: Further Theoretical and Empirical Analysis." Review of Economics and Statistics, 38:386-407.
- Lerner, D. 1958 The Passing of Traditional Society. Glencoe, Ill.: The Free Press.
- Lindbeck, A. 1973 "Endogenous Politicians and the Theory of Economic Policy." Seminar Paper Nr. 35. Stockholm: University of Stockholm, Institute for International Economic Studies.
- Linder, S. B. 1961 An Essay on Trade and Transformation. New York: Wiley.
- _____ 1967 Trade and Trade Policy for Development. New York: Praeger.
- _____ 1971 "Trade and Technical Efficiency." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 495-505.
- Linneman, H. 1966 An Econometric Study of Trade Flows. Amsterdam: North Holland.
- _____ 1969 "Trade Flows and Geographic Distance." In H. C. Bos (ed.), Towards Balanced International Growth. Amsterdam: North Holland.
- List, F. 1971 Das Nationale System der Politischen Oekonomie. Vol. 6 in A. Sommer (ed.), Friedrich List, Schriften, Reden, Briefe. Aalen: Scientia Verlag.
- Little, I., T. Scitovsky and M. Scott 1970 Industry and Trade in Some Developing Countries. London: Oxford University Press.

- Lloyd, P. J. 1968 International Trade. Problems of Small Nations. Durham, N. C.: Duke University Press.
- Lopreato, J. 1967 Peasants No More. San Francisco: Chandler.
- Lowinger, T. C. 1975 "The Technology Factor and the Export Performance of U.S. Manufacturing Industry." Economic Inquiry, 13:221-236.
- MacBean, A. I. 1966 Export Instability and Economic Development. London: Allen and Unwin.
- McClelland, D. C. 1961 The Achieving Society. Princeton: Van Nostrand.
- McCrone, D. J. and C. F. Cnudde 1967 "Towards a Communication Theory of Democratic Political Development: A Causal Model." American Political Science Review, 61 (March):72-79.
- McDonald, I. 1975 "Measures taken to alleviate the Present Economic Difficulties of Member States." Finance and Development, 12(March):8-10.
- Machlup, F. 1967 Essays in Economic Semantics. New York: Norton.
- MacLuhan, M. 1964 Understanding Media. New York: The New American Library.
- Maddison, A. 1970 Economic Progress and Policy in Developing Countries. New York: Norton.
- Mansfield, E. 1975 "International Technology Transfer: Forms, Resource Requirements, and Policies." American Economic Review, 65(May):372-376.
- March, J. G. and H. A. Simon 1958 Organizations. New York: Wiley.
- Maslow, A. H. 1954 Motivation and Personality. New York: Harper and Row.
- Massell, B. F. 1964 "Export Concentration and Fluctuations in Export Earnings: A Cross Section Analysis." American Economic Review, 54:47-63.
- _____ 1970 "Export Instability and Economic Structure." American Economic Review, 60:618-630.
- Maxwell, K. R. 1973 Conflicts and Conspiracies: Brazil and Portugal, 1750-1808. Cambridge: University Press.
- May, H. K. 1970 The Effects of United States and other Foreign Investments in Latin America. New York: Council for Latin America.

- Meade, J. E. 1955 Trade and Welfare. Oxford: Oxford University Press.
- Meade, J. E. and others 1961 The Economic and Social Structure of Mauritius. London: Methuen.
- Meadows, D. H., D. L. Meadows et. al. 1972 The Limits to Growth. Washington, D.C.: Potomac Associates.
- Means, G. C. 1972 "Foreword." In J. M. Blair, Economic Concentration. New York: Harcourt, Brace, Jovanovich, pp. v-xi.
- Melvin, R. R. 1969 "Demand Conditions and Immiserizing Growth." American Economic Review, 59:604-606.
- Mendlovitz, S. H. (ed.) 1975 On the Creation of a Just World Order. New York: The Free Press.
- Mesarovic, M. and E. Pestel 1974 Mankind at the Turning Point. New York: Dutton.
- Michaely, M. 1962 Concentration in International Trade. Amsterdam: North Holland.
- _____ 1968 "International Trade: Patterns of Trade." In D. L. Sills (ed.), International Encyclopedia of the Social Sciences. Vol. 8. New York: Macmillan and The Free Press, pp. 108-113.
- Mikdashi, Z. 1974 "The Community of Oil Exporting Countries with Special Reference to Arab Countries: A Political Economy Analysis." International Organization, 26:1-30.
- _____ 1975 "Transnational Enterprises, Exporter Countries, and Importer Countries: Their Strategies and Relationships in the World Oil Industry." Paper presented at the 2nd International Symposium on Petroleum Economics, Quebec City.
- Mills, E. S. 1972 Urban Economics. Glenview, Ill.: Scott, Foresman and Co.
- Minhas, B. S. 1962 "The Homohypallagic Production Function, Factor Intensity Reversals, and the Heckscher-Ohlin Theorem." Journal of Political Economy, 70:138-156.
- Mini, P. V. 1974 Philosophy and Economics. Gainesville: The University Presses of Florida.
- Model, L. 1967 "The Politics of Private Foreign Investment." Foreign Affairs, 45:639-651.

- Moran, T. H. 1973 "Transnational Strategy of Protection and Defense by Multinational Corporations: Spreading the Risk and Raising the Cost for Nationalization in Natural Resources." International Organization, 27:273-287.
- Moss, L. W. 1974 "The Passing of Traditional Peasant Society in the South." In E. R. Tannenbaum and E. P. Noether (eds.), Modern Italy. New York: New York University Press, pp. 147-170.
- Moynihan, D. P. 1975 "The United States in Opposition." Commentary, 59(March):31-44.
- Mueller, R. E. 1973 "The Multinational Corporation and the Underdevelopment of the Third World." In C. K. Wilber (ed.), The Political Economy of Development and Underdevelopment. New York: Random House, pp. 124-151.
- Mundell, R. A. 1957 "International Trade and Factor Mobility." American Economic Review, 47:321-335.
- Murphy, B. 1973 A History of the British Economy, 1740-1970. London: Longman.
- Myint, H. 1954 "An Interpretation of Economic Backwardness." Oxford Economic Papers, N. S., 6:132-163.
- _____ 1968 "The Underdeveloped Countries: A Less Alarmist View." In W. Adams (ed.), The Brain Drain. New York: Macmillan, pp. 233-246.
- Myrdal, G. 1958 Rich Lands and Poor: The Road to World Prosperity. New York: Harper and Row.
- _____ 1968 Asian Drama. New York: Twentieth Century Fund.
- _____ 1972 "The Place of Values in Social Policy." Journal of Social Policy, 1:1-14.
- Navarro, V. 1974 "The Underdevelopment of Health or the Health of Underdevelopment: An Analysis of the Distribution of Human Health Resources in Latin America." International Journal of Health Services, 4:5-27.
- Naya, S. 1973 "Fluctuations in Export Earnings and Economic Patterns in Asian Countries." Economic Development and Cultural Change, 21:629-641.
- Ng, Y. K. 1975 "Activities, Indirect Benefits, and Third Best Policies." Kyklos, 28:507-525.
- O'Connor, J. 1973 The Fiscal Crisis of the State. New York: St. Martin's Press.

- Ohlin, Bertil 1970 "Model Construction in International Trade Theory." In W. A. Eltis, M. F. G. Scott and J. N. Wolfe (eds.), Induction, Growth, and Trade. Oxford: Clarendon Press, pp. 323-333.
- Ohlin, Goeran 1969 "Trade in a non-laissez-faire World." In P. A. Samuelson (ed.), International Economic Relations. London: MacMillan, pp. 157-175.
- _____ 1975 "National Industrial Policies and International Trade." In C. F. Bergsten (ed.), Towards a New World Trade Policy: The Maidenhead Papers. Lexington, Mass.: Heath, pp. 173-182.
- Ohmae, K. 1975 "Yokkakari: The Cycle of Dependence in the Japanese Corporation." Technology Review, 77(January): 40-47.
- Okita, S. 1970 "Virtuous Circle of Accelerated Growth; the Case of Japan and Possibilities in some Developing Countries." In OECD, Essays in Honour of Thorkil Kristensen. OECD: Paris, pp. 71-90.
- Olson, M. 1965 The Logic of Collective Action. Cambridge: Harvard University Press.
- Paauw, D. S. and J. C. H. Fei 1973 The Transition in Open Dualistic Economies. New Haven: Yale University Press.
- Panchamukhi, V. R. 1975 "Linkages in Industrialization; a Study of Selected Developing Countries in Asia." Journal of Development Planning, No. 8, pp. 121-166.
- Parsons, T. and N. J. Smelser 1956 Economy and Society: A Study in the Integration of Social and Economic Theory. Glencoe, Ill.: The Free Press.
- Patinkin, D. 1968 "A 'Nationalist' Model." In W. Adams (ed.), The Brain Drain. New York: Macmillan, pp. 92-108.
- Payer, C. 1974 The Debt Trap: The International Monetary Fund and the Third World. New York: Monthly Review Press.
- Pearson, L. B. 1969 Partners in Development. New York: Praeger.
- Penrose, E. T. 1968 The Large International Firm in Developing Countries (The Petroleum Industry). Cambridge: MIT Press.
- _____ 1971 "The State and Multinational Enterprises in Less-Developed Countries." In J. H. Dunning (ed.), The Multinational Enterprise. New York: Praeger, pp. 221-239.

- Perlmutter, H. V. 1969 "The Tortuous Evaluation of the Multi-national Corporation." The Columbia Journal of World Business, 4(January/February):9-18.
- Perroux, F. 1964 L'Economie du XX^e Siècle. 2nd exp. ed. Paris: Presses Universitaires de France.
- Perry, P. J. 1974 British Farming in the Great Depression, 1870-1914. Newton Abbot: David and Charles.
- Pincus, J. A. 1968 Trade, Aid, and Development: The Rich and Poor Nations. New York: McGraw-Hill.
- Pincus, J. J. 1975 "Pressure Groups and the Pattern of Tariffs." Journal of Political Economy, 83:757-778.
- Pinelo, A. 1973 The Multinational Corporation as a Force in Latin America. New York: Praeger.
- Pomfret, R. 1975 "Some Interrelationships between Import Substitution and Export Promotion in a Small Economy." Weltwirtschaftliches Archiv, 111:714-727.
- Pool, I. de Sola 1973 "Research on International Communications and American National Needs." In National Science Foundation, Priority Research Needs on Transnational and Global Technology-related Policy Problems. Mimeo, Washington, D.C.: National Science Foundation.
- Posner, M. V. 1961 "International Trade and Technical Change." Oxford Economic Papers, N. S., 13:323-341.
- Pye, L. W. (ed.) Communications and Political Development. Princeton: Princeton University Press.
- Raj, K. N. 1975 "Linkages in Industrialization and Development Strategy: Some Basic Issues." Journal of Development Planning, No. 8, pp. 105-120.
- Rasminsky, L., W. A. Mackintosh, A. F. W. Plumtre and J. J. Deutsch 1972 "Canadian Views." In A. L. K. Acheson, J. F. Chant and M. F. J. Prachowny (eds.), Bretton Woods Revisited. Toronto: University of Toronto Press, pp. 34-47.
- Ricardo, D. 1962 The Principles of Political Economy and Taxation. Vol. 1 of P. Sraffa (ed.), The Works and Correspondence of David Ricardo. Cambridge: University Press.
- Robinson, J. 1962 Essays in the Theory of Economic Growth. London: MacMillan.
- Rodney, W. 1972 How Europe Underdeveloped Africa. London: Bogle - L'Ouverture Publications.

- Rogers, E. M. 1962 Modernization among Peasants: The Impact of Communication. New York: The Free Press.
- Rolfe, S. E. and J. L. Burtle 1973 The Great Wheel. New York: Quadrangle.
- Rosen, R. 1974 "Planning, Management, Policies, and Strategies: Four Fuzzy Concepts." International Journal of General Systems, 1:245-252.
- Rosenberg, N. 1964 "Neglected Dimensions in the Analysis of Economic Change." Bulletin of the Oxford University Institute of Economics and Statistics, 26:59-77.
- Roskamp, K. and G. McMeekin 1968 "Factor Proportions, Human Capital, and Foreign Trade: The Case of West Germany Reconsidered." Quarterly Journal of Economics, 82: 152-160.
- Rostow, W. W. 1960 The Stages of Economic Growth. Cambridge: University Press.
- Rothschild, K. W. 1975 "Export Structure, Export Flexibility, and Competitiveness." Weltwirtschaftliches Archiv, 111:222-242.
- Safran, N. 1974 "The War and the Future of the Arab-Israeli Conflict." Foreign Affairs, 52:215-236.
- Sampson, A. 1973 The Sovereign State of ITT. New York: Stein and Day.
- Samuelson, P. A. 1948 "International Trade and the Equalisation of Factor Prices." Economic Journal, 58:163-184.
- _____ 1949 "International Factor Price Equalization once again." Economic Journal, 59:181-197.
- _____ 1953-54 "Prices of Factors and Goods in General Equilibrium." Review of Economic Studies, 21: 1-20.
- _____ 1956 "Social Indifference Curves." Quarterly Journal of Economics, 70:1-22.
- _____ 1971 "Ohlin was right." Swedish Journal of Economics, 73:365-384.
- Samuelson, P. A. and A. Scott 1975 Economics. 4th Canadian ed. Toronto: McGraw-Hill Ryerson.
- Schaefer, H. W. 1972 Comecon and the Politics of Integration. New York: Praeger.

- Schlote, W. 1952 British Overseas Trade from 1700 to the 1930's. Oxford: Basil Blackwell.
- Schmidt, H. 1974 "Struggle for the World Product." Foreign Affairs, 52:437-451.
- Schmookler, J. 1966 Invention and Economic Growth. Cambridge: Harvard University Press.
- Seers, D. 1963 "Big Companies and Small Countries: A Practical Proposal." Kyklos, 16:599-608.
- Senghaas, D. 1975 "Friedrich List und die Neue Internationale Oekonomische Ordnung." Leviathan, 3:292-300.
- Showler, B. 1974 "Social Economics: A Branch or New Roots." International Journal of Social Economics, 1:4-12.
- Shubik, M. 1970 "A Curmudgeon's Guide to Microeconomics." Journal of Economic Literature, 8:405-434.
- Sideri, S. 1970 Trade and Power. Rotterdam: Rotterdam University Press.
- Singer, H. W. 1950 "The Distribution of Gains between Investing and Borrowing Countries." American Economic Review, 40(May):473-485.
- Soedersten, B. 1969 A Study of Economic Growth and Trade. Stockholm: Almqvist and Wicksell.
- Solo, R. A. 1975 "Neoclassical Economics in Perspective." Journal of Economic Issues, 9:627-644.
- Smith, A. 1910 The Wealth of Nations. 2 vols. London: Dent.
- Smith, D. M. 1969 Italy. A Modern History. Ann Arbor: University of Michigan Press.
- Stein, S. J. and B. H. Stein 1970 The Colonial Heritage of Latin America. New York: Oxford University Press.
- Stern, R. M. 1973 "Tariffs and other Measures of Trade Control: A Survey of Recent Developments." Journal of Economic Literature, 11:857-888.
- Steuer, M. D. and J. Gennard 1971 "Industrial Relations and Labor Utilization in Foreign-Owned Firms in the United Kingdom." In J. H. Dunning (ed.), The Multinational Enterprise. New York: Praeger, pp. 89-144.
- Stiglitz, J. E. 1970 "Factor Price Equalization in a Dynamic Economy." Journal of Political Economy, 78:456-488.

- Stobaugh, R. B. 1971 "The Neotechnology Account of International Trade." Journal of International Business Studies, 2(Fall):41-60.
- Streeten, P. 1972 The Frontiers of Development Studies. London: MacMillan.
- Streeten, P. and D. Elson 1971 Diversification and Development: The Case of Coffee. New York: Praeger.
- Supple, B. E. 1964 Commercial Crisis and Change in England, 1600-1642. Cambridge: University Press.
- Tanzer, M. 1967 The Political Economy of International Oil and the Underdeveloped Countries. Boston: Beacon Press.
- Tatemoto, M. and S. Ichimura 1959 "Factor Proportions and Foreign Trade: The Case of Japan." Review of Economics and Statistics, 41:442-446.
- Tehrani, M. 1974 Toward a Systemic Theory of National Development. Teheran: Industrial Management Institute.
- Temin, P. 1966 "The Relative Decline of the British Steel Industry, 1880-1913." In H. Rosovsky (ed.), Industrialization in Two Systems. New York: Wiley, pp. 140-155.
- Terkel, S. 1974 Working. New York: Pantheon Books.
- Theil, H. 1967 Economics and Information Theory. Amsterdam: North Holland.
- Tinbergen, J. 1965 "International, National, Regional and Local Industries." In R. E. Baldwin (ed.), Trade, Growth and Balance of Payments. Chicago: Rand McNally, pp. 116-125.
- Travis, W. P. 1964 The Theory of Trade and Protection. Cambridge: Harvard University Press.
- Tucker, R. W. 1975a "Oil: The Issue of American Intervention." Commentary, 59(January):21-31.
- _____ 1975b "Further Reflections on Oil and Force." Commentary, 59(March):45-56.
- Tugendhat, C. 1968 Oil, the Biggest Business. New York: G. P. Putnam's Sons.
- Udy, S. 1970 Work in Traditional and Modern Society. Englewood Cliffs, N. J.: Prentice-Hall.
- United Nations 1974 The Impact of Multinational Corporations on Development and International Relations. New York: United Nations, Doc. E/5500/Rev. 1ST/ESA/6.

- U. S. Department of Commerce 1972 The Multinational Corporation. Studies on U. S. Foreign Investment. Vol. 1. Washington, D. C.: Government Printing Office.
- U. S. Tariff Commission 1973 Implications of Multinational Firms for World Trade and Investment and for U. S. Trade and Labor. Washington, D. C.: Government Printing Office.
- Uphoff, N. T. and W. F. Ilchman (eds.) 1972 The Political Economy of Development. Berkeley: University of California Press.
- Vanek, J. 1963 The Natural Resource Content of U. S. Foreign Trade, 1870-1955. Cambridge: MIT Press.
- _____ 1968 "The Factor Proportions Theory: The n-Factor Case." Kyklos, 21:749-756.
- Vanek, J. and T. J. Bertrand 1971 "Trade and Factor Prices in a Multi-Commodity World." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 49-65.
- van Nieuwenhuijze, C. A. O. 1969 Development. A Challenge to Whom? The Hague: Mouton.
- Vernon, R. 1966 "International Investment and International Trade in the Product Cycle." Quarterly Journal of Economics, 80:190-207.
- _____ (ed.) 1970 The Technology Factor in International Trade. New York: Columbia University Press.
- _____ 1971 Sovereignty at Bay. New York: Basic Books.
- _____ 1972 The Economic and Political Consequences of Multinational Enterprise. Boston: Harvard University, Graduate School of Business Administration, Division of Research.
- _____ 1973 "A Program of Research on Foreign Direct Investment." In C. F. Bergsten (ed.), The Future of the International Economic Order: An Agenda for Research. Lexington, Mass.: Heath.
- Wallace, D., Jr. (ed.) 1973 International Control of Investment. New York: Praeger.
- Wallace, M. D. 1974 "Resources and International Conflict: The Onrushing Crisis." General Systems, 19:173-178.
- Wallerstein, I. 1974 The Modern World System. New York: Academic Press.

- Walter, I. 1969 "Nontariff Barriers and the Free Trade Area Option." Banca Nazionale del Lavoro Quarterly Review, Nr. 88, pp. 16-45.
- _____ 1971 "Nontariff Barriers and the Export Performance of Developing Economies." American Economic Review, 61(May):195-205.
- Waltz, K. N. 1970 "The Myth of National Interdependence." In C. P. Kindleberger (ed.), The International Corporation. Cambridge: MIT Press, pp. 205-222.
- Wan, H. Y., Jr. 1971 "A Simultaneous Variational Model of International Capital Movement." In J. N. Bhagwati, R. W. Jones, R. A. Mundell and J. Vanek (eds.), Trade, Balance of Payments, and Growth. Amsterdam: North Holland, pp. 261-287.
- Ward, Benjamin N. 1972 What's wrong with Economics? London: MacMillan.
- Weigel, D. R. 1974 "Multinational Approaches to Multinational Corporations." Finance and Development, 11(September):27-29, 42.
- Wells, L. (ed.) 1972 The Product Life and International Trade. Boston: Harvard University, Graduate School of Business Administration, Division of Research.
- Wheelwright, E. L. and B. McFarlane 1970 The Chinese Road to Socialism. New York: Monthly Review Press.
- Wilber, C. K. and J. D. Wisman 1975 "The Chicago School: Positivism or Ideal Type." Journal of Economic Issues, 9:665-680.
- Wilczynski, J. 1970 The Economics of Socialism. Chicago: Aldine.
- Wiles, P. J. D. 1968 Communist International Economics. Oxford: Basil Blackwell.
- Wilkins, M. 1974 The Maturing of Multinational Enterprise. Cambridge: Harvard University Press.
- Wolff, R. D. 1974 The Economics of Colonialism. Britain and Kenya, 1870-1930. New Haven: Yale University Press.
- Woodward, J. 1965 Industrial Organization: Theory and Practice. New York: Oxford University Press.
- Wright, C. M. 1939 Economic Adaptation to a Changing World Market. Copenhagen: Munksgaard.

- Yudin, E. B. 1968 "Americans Abroad: The Transfer of Capital."
In P. B. Kenen and R. Lawrence (eds.), The Open
Economy. New York: Columbia University Press, pp.
40-69.
- Zandano, G. 1969 "The Heckscher-Ohlin Model and the Tariff
Structures of the Industrial Countries." Banca
Nazionale del Lavoro Quarterly Review, Nr.88, pp.
46-65.
- Zenoff, D. and J. Zwick 1969 International Financial Management.
Englewood Cliffs, N. J.: Prentice-Hall.