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*Markets and Transactions in Developing Countries*

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It has been widely observed that markets in developing countries tend to be more segmented than in developed countries. Various concepts have been used in the literature to describe this phenomenon such as parallel, curb, segmented, fragmented, black and informal markets. The above terms are used to explain the persistence of different price levels and multiple market settings for similar goods and factors. This study attempts to understand the underlying causes of the various forms of segmentation above. The approach which is followed is to trace distinct markets back to their building blocks, i.e. to the specific combination of elements which jointly shape a given market configuration and corresponding transaction. An analytical framework capable of identifying distinct markets on the basis of their respective constituting element is developed. It is postulated that there are three sets of elements, which in different combinations, shape distinct markets and help explain their operation: 1) the item exchanged; 2) the market actors engaged in the decisions related to the item being exchanged; and 3) the environment in which actors operate. These elements are discussed in detail in Chapter before proposing a general analytical scheme for distinguishing market configurations. This scheme is applied in Chapter 3 in deriving typologies of market configurations for products, labor, credit, land and foreign exchange, respectively. Specific examples of typical markets in each one of the above five sets are analyzed in some detail before focusing on a) their key elements and characteristics; b) the endogenous determination of transactions; and c) the operation and performance of the market.

## CHAPTER 1 INTRODUCTION AND OVERVIEW<sup>1</sup>

### 1.1 Why Consider Markets

Recent history has witnessed an unparalleled affirmation of the relative efficiency of markets as compared to other forms of economic structure. The command economies of Eastern Europe and the Soviet Union are implementing market reforms. China has moved to market systems in certain key production and consumer areas, including the provision of urban housing. The remarkable success of Taiwan, Korea, Hong Kong, and Singapore rests heavily on market forces. The World Bank and International Monetary Fund continue to emphasize privatization and market reforms to promote growth and efficiency in its advice to developing countries. All told, particularly from the perspective of a developing country, an understanding of markets, how they operate, and what functions they serve, is crucial.

### 1.2 Markets and Their Function

What is a market? In the economics literature of the last few decades one can find literally dozens of different definitions of markets. At first thought, it appears rather curious that as fundamental a concept lacks a widely accepted definition.<sup>2</sup> A likely reason for the proliferation of definitions is that different groups addressing different issues use the same term. Three examples suffice to illustrate this point. In the field of marketing, the market describes the geographical area in which transactions involving a product and its substitutes occur. In the anti-trust literature, the market stands for the domain where collusion with respect

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<sup>1</sup>This paper owes much to the excellent research assistance of Linda Van Gelder.

<sup>2</sup>The New Palgrave Dictionary of Economics (1987) does not contain an entry under "market". Instead it refers readers to "market structure". Tirole (1991, p. 13), in the most recent treatise on the theory of industrial organization, states that "the notion of a market is by no means simple." After discussing different definitions, he concludes that "For purposes of this book the empirical difficulty of defining a market will be ignored. It will be assumed that the market is well defined...."

to buying and selling decisions has a maximum effect. In particular, the focus is on the behavior of market actors vis-à-vis the law. Finally, the word "market" can be used, in an analytical sense, as a collective term to indicate institutions (or rules of the game) harboring a specific type of exchange occurring under a specific set of conditions. This is the general sense in which this term is used in this study. A more precise definition is given subsequently.

Exchange is a necessary characteristic of a market. Without exchange, individuals needs must be met solely through own production. Similarly, a producer of goods, or services, in a Robinson Crusoe setting, must rely on own consumption as the only outlet for that production. Such a system of self-reliance places a strong constraint on the individual's utility maximization set as well as on society's bid to increase social welfare, however it may be defined. Exchange provides a means of relaxing these constraints. Even hunting and gathering societies, and, of course, families, at the more micro level, have means for allowing for transactions among members. For example, some members specialize in the production of tools in exchange for a share of the food collected by others in the group. This is a relatively simple type of transaction. Market mechanisms are needed to provide the means for engaging in more complex transactions. The more sophisticated and developed market mechanisms are, the greater the role markets play in the areas of encouraging 1) specialization and a greater division of labor; 2) the exchange and transmission of information; and, 3) the transmission of innovations.

First, as mentioned above, markets provide a means of obtaining goods and services other than through own production and, similarly, provide outlets for goods and services other than own use. This function is crucial as it brings within reach the high degree of specialization on which the production potential of market economies rests. Secondly, markets serve as the meeting point for supply and demand. The interaction between demand and supply that occurs in the market place generates information concerning

the scarcity of the items traded there. For example, the market price of a productive asset signals the opportunity cost of using that resource in production. With the help of this information, producers, consumers, lenders, borrowers, workers, employers, and all types of other market actors consider the options regarding subsequent transaction decisions. Markets provide a relatively inexpensive means of transmitting information among actors so that efficient decisions are possible. Compared to other arrangements such as command economies, the market structure yields critical information at low cost. Hayek (1945, pp. 524-27) expressed this idea very clearly when he advanced the proposition that the price system, as compared with central planning, is an extraordinarily efficient mechanism for communicating information and inducing change.

This brings us to a third function of markets in their role as channels in the transmission of innovations and technical progress. For example, the Green Revolution technology was successfully diffused in many parts of the developing world through well functioning markets for such inputs as high yielding varieties of seeds, fertilizer and credit.

### **1.3 Markets in Developing Countries**

From a macroeconomic perspective, markets play a pivotal role in issues related to economic growth, income generation, production structure, income distribution and internal and external equilibrium. Thus, for example, if staple food markets function efficiently and equitably, they can make an important contribution to meeting nutritional needs and, thereby, to poverty alleviation. In turn, factor markets fulfill crucial functions. Labor markets are the most important determinants of the income distribution among households in an economy. Credit and capital markets provide a bridge across time periods and foreign exchange markets generate a necessary link with actors in the rest of the world.

Decisions made in markets largely determine the welfare of all individuals who participate in market-oriented activities. With such far reaching influence, the operation of markets is central to economic theory; yet, particularly in developing countries, a unified and comprehensive approach to the operation of markets is lacking.

Different approaches to modelling the operation of markets and the exchange process, some more general and some more specifically directed to developing countries, are available in the literature. Neoclassical models of markets are based on full information and costless exchange. A representative firm is assumed to maximize profits in the context of unrestricted market exchange, full information, and fully defined property rights. The neoclassical paradigm, however, has limited ability to represent actual markets. For example, profit maximizing conditions result in the elimination of inefficient firms; however, inefficient firms abound in the marketplace. Observed market distortions are often the result of constraints which are not explicitly incorporated in the neoclassical model. While it is certainly possible to relax many of the neoclassical assumptions, there are still shortcomings in using such a framework to describe the operation of real markets.

Neoinstitutional Economics (NIE), provides an alternative modeling structure that moves closer to the reality of observed economic systems. The framework is basically a rational choice model where the decision maker's objective function and opportunity set are specified. However, the opportunity set is constrained because certain actions are not feasible for political or social reasons and transactions are not costless. Contractual arrangements are consequently designed over the feasible set in a manner that economizes on transaction costs.

Perfect, costless information is an unlikely scenario. It is more reasonable to assume that the acquisition of information is costly. In fact, it may not be possible, under any conditions, to obtain perfect

information. One can view transaction costs as a reflection of the scarcity of information. The prominence of positive transaction costs and institutional constraints in the NIE approach makes the assignment of ownership rights paramount, introduces the question of economic organization, and makes the structure of political institutions a key to understanding economic growth.

The strength of the NIE approach is its emphasis on the transaction costs associated with the exchange process per se. By focusing on transactions and contracts, the distinction between a firm and a market is no longer clearcut.<sup>3</sup> It will be seen later that transactions occurring within the most prevalent form of organization in the developing world, the small farm household, can be described and explained within a pseudo-market framework using the NIE approach.

Much of the development literature on markets deals with the issue of market fragmentation. From numerous case studies, it is clear that there is significantly less integration among markets in developing countries than in developed countries. Some major causes of market fragmentation in developing countries are (1) the rural-urban dichotomy and all the specific components that influence it, such as the lack of adequate transportation systems impeding interregional flow of goods and some factors; (2) producers' use of very different types (and vintages) of technologies and forms of organization even for production of similar goods; (3) the existence of pronounced cultural, social and educational differences among individuals; (4) the prevalence of a skewed income distribution among households, which combined with the preceding factors tends to polarize buyers into two groups; (5) the scarcity of capital, which often leads to market imperfections in the product markets (since lack of capital or access to capital is an insurmountable barrier to entry in many

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<sup>3</sup>As Eggertsson (1990, pp. 48-49) indicated "In Neo-institutional Economics, the firm is defined as a web or nexus of contracts. Within the firm, the continuous pricing of outputs has been suspended and the inputs are managed by the central agent. Contracts are also used in exchange across markets where outputs are measured and priced. But these two forms of contracting overlap frequently,...., which suggests that the definition of the firm in NIE is not clearcut. In fact, the dichotomy of the firm vs. the market is unlikely to be a helpful instrument in our search for better understanding of exchange."

product markets); (6) the absence of legal curbs to monopoly power and lack of stigma attached to collusive arrangements, which by raising barriers to entry seal off markets; (7) limited communication networks and an uneven distribution of information among market actors preventing effective arbitrage among buyers; and finally, 8) pervasive and selective state intervention which often favor some market actors and discriminate against others (e.g. through licensing) thereby excluding a whole set of potential actors from certain markets.

Largely because of this fragmentation and the variety of structural and institutional settings and arrangements that coexist, different stylized facts and corresponding models of the operation of specific markets have been proposed in the development literature. The literature frequently refers to parallel, curb, segmented, fragmented, black, and informal markets; however the use of these terms is ambiguous. Definitions vary and these terms are often used interchangeably. In a brave effort to define these terms and present a simple taxonomy of market structures on the basis of a number of detailed case studies, Jones, Lindauer and Roemer (1991, pp. 4) reach the following conclusion

"Specifically, we identify parallel markets as arising to evade government control; fragmented markets are not unified, even in the absence of controls, so that different participants face different prices for similar goods or services. We also consider black markets, a term that is sometimes a synonym for parallel but can also refer to different market situations, and the informal sector, a popular but more amorphous term."

In a related analysis, Lindauer (1989), attempting to distinguish among these various terms, suggests that a distinction can be drawn between parallel markets, on the one hand, and all other market forms mentioned above, on the other hand. Parallel markets occur in response to government interventions which create a situation of excess supply or demand in a particular product or factor market. In contrast, such determinants as imperfect information, technology and the structure of production costs may also contribute to a variance in prices--independently of government intervention. "If parallel markets are defined to include the outcomes generated by specific government intervention, then, perhaps, market fragmentation is the

appropriate characterization of the consequences of the alternative group of determinants." (Lindauer, 1989 p. 1873)

All the above terms are used in an attempt to explain the persistence of different price levels and multiple market settings for seemingly homogeneous goods. Understanding what causes the prevalence and persistence of price differences is crucial to effective market reform since an effective program requires a firm understanding of the underlying market structure. It has been argued convincingly that market reform and liberalization affect the operation of parallel markets without necessarily influencing other markets, where the segmentation is caused by structural rigidities rather than policy intervention. Furthermore, even in the former case, market liberalization can have perverse results (Roemer and Jones, 1991). Clearly, the impact of market reform depends heavily on the underlying market conditions.

While the literature, including the above references, makes a useful contribution to a better understanding of the physiology of markets in developing countries by tracing key market structure characteristics back to some of their constituting elements, they do not go far enough in providing a general framework. There is a need for a unified and consistent approach to market structure that can identify the diversity of factors causing market "fragmentation" and, in a more general sense, explain how different underlying structural, behavioral and policy elements can give rise to, and result in distinct market structures and transactions. Whether a market is parallel, informal, black, or segmented is not, foremost. Rather, the causes of this fragmentation, and how these causes affect the operation of markets in a differential way, are paramount in the analysis.

The prevailing body of literature dealing with markets leaves the reader asking many crucial questions. What is the root of differences between markets in developing and developed countries? What are the most important factors determining the operation of markets? Do these factors vary for different types

of markets, or is there one set of determinants that applies more or less universally? Can anything be learned about markets in one developing country from studies in other developing countries, and from studies related to developed countries? Does the firm complement or substitute for the market, and why does the organization of the firm vary so much? Why do some types of exchange, and corresponding transactions continue to occur within a firm or family (such as a farm household)? Why is there a persistence of multiple markets for the same item - such as official and unofficial (curb), and black markets for credit? This study aims to develop a framework that will address these questions and attempt to answer them.

#### **1.4 Approach to Markets Used in This Book**

The approach which is developed in this study traces distinct markets back to their building blocks, i.e. to the specific combination of elements which jointly shape a given market and the type of transaction it generates. By identifying the underlying factors shaping a given market, its actual boundaries can be delineated and the actual operation and performance of the market structure can be better explained as a function of these underlying factors. The formulation of a comprehensive framework in which all markets can be situated, organized and analyzed helps to reduce the enormous complexity of examining the functioning of markets in developing countries on a case-by-case basis. By returning to the fundamental building blocks upon which markets are built, one can begin to see consistent patterns and develop a typology of markets.

A main objective of this volume is to formulate a framework capable of identifying distinct markets on the basis of their respective constituting elements. Although, a rigorous definition of markets has to be postponed until the necessary analytical framework is developed in Chapter 2, we can already advance the proposition here that "market exchanges belong to the same market if the underlying market elements are the same and give rise to similar types of transactions."

We postulate that there are three sets of elements, which in different combinations, shape distinct markets and help explain their operation: 1) the item exchanged; 2) the market actors engaged in decisions related to the item being exchanged; and 3) the environment in which the actors operate.

The item at the heart of a transaction can be a good (intermediate or final), a service, a labor service, financial funds, land, and foreign exchange. Differences in the nature of these items influence the corresponding transactions.<sup>4</sup> Attributes of actors form the second set of elements describing the configuration. They consist of actors' preferences and objectives, on the one hand, and instruments available to them in pursuing their objectives, on the other hand. Such instruments are income, wealth, skills, education and information. There are many groups of actors, i.e. producers, consumers, traders, investors would be examples of market actors; and a branch manager of a vertically integrated firm and members of a farm-household operating within a firm and a family, respectively, are examples of non-market actors. Since objectives and instruments vary within groups (and subgroups) of actors in a reasonably systematic way, it is possible to classify the relevant and appropriate subgroups corresponding to distinct configurations, as will be shown subsequently.

Environmental elements make up the third type of elements. These elements impose various kinds of constraints on actors' decisions and the choice of transactions. For example, property rights, laws and regulations have a direct and indirect influence on actions culminating in transactions. Other examples are behavioral and cultural codes inspired by the norms and values generally accepted in a given society; restrictions relating to the physical environment encompassing among others location, soil and climate

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<sup>4</sup>In fact, a more detailed disaggregated distinction is often necessary as will be seen subsequently. For example, agricultural commodities differ in so many respects--eg. perishability, uses, continuity of production--from, say, industrial products that the exchanges involving these product (sub) groups will be influenced by different sets of product or factor characteristics. Classification criteria are presented in 2.2 which allow the specification of reasonably homogeneous configurations and corresponding transactions relating to all three groups of elements.

characteristics as well as the underlying infrastructure. These elements determine the type of goods which can be produced (e.g. what crops are suited for production), transported and marketed. Further the overall level of economic development of a region, or country, acts as a constraint on purchasing power and on volumes exchanged which, in turn, affect the degree of specialization which a market can support. Finally, the available technological shelf acts as a bound on the feasible range of market decisions. Thus, as meant here, the environment, includes political and legal, cultural, physical-geographical, technological and organizational dimensions, as well as the underlying socio-economic structure.

The item traded, actors participating in the market, and the environment in which exchange occurs are the crucial underlying building blocks (i.e. elements) of markets. In Chapter 2 these building blocks are organized into seven sets of elements. Characteristics of the item traded form one set of elements; socioeconomic attributes of the actors form another set; and characteristics of environmental elements are grouped into the following five sets: 1) physical, location, and spatial elements; 2) technology and form of organization; 3) cultural aspects; 4) policy and legal elements; and, 5) socioeconomic structure. Each individual element may have literally dozens, if not hundreds, of intrinsic characteristics. In fact, any given specific element should be considered as a vector of characteristics. Specific combinations of elements (with their intrinsic characteristics) from the above seven sets can be grouped so as to constitute and define what we call a market configuration. In turn, actors belonging to and operating within a given market configuration reach decisions which are ultimately reflected in a relatively distinct and homogeneous type of transaction. In this sense, transactions are endogenously determined within a specific market configuration.

The greater degree of market fragmentation in developing than in developed countries can, thus, be understood as stemming from the greater diversity of market configurations which, in turn, reflects the greater variance and polarity in the characteristics of the item traded, the actors and the environment.

Two problems must be overcome before market configurations can be precisely defined. These problems are the large number of potential elements and the difficulty of measuring some elements. One must be able to delineate a market configuration with the help of a manageable number of elements, if the approach is to be operational. Each of the seven sets of elements, above, contains many individual and specific elements, each with their own corresponding vectors of characteristics. It will be shown that the number of elements can be considerably reduced by making use of the observation that not all elements are independent of other elements. Certain groups of elements are, in fact, highly interrelated so that one element can serve as a proxy for other elements.

For example, there is a strong interrelation among the form of organization chosen, the type of technology used, and cultural values in the Third World. One observes that traditional cultural characteristics are associated with traditional technologies and a family type enterprise; while corporate organizational forms are more likely to employ modern technology and face fewer cultural constraints in operating decisions. Hence, selection of the element related to technological level may provide information on organizational structure as well as cultural elements. In this sense, the prevailing technology can be used as a proxy for a whole set of related organizational and cultural elements to capture some relatively homogenous features of a configuration. The dimensionality of the space which defines market configurations can, therefore, be greatly reduced by making use of this interrelation. In the chapters which follow, specific examples will be used to support the claim that elements are highly interrelated, and that selecting a handful of such elements in each set can go a long way in capturing distinct settings which together can be combined to form a market configuration.

Another problem that must be faced is that many of the elements needed to define market configurations do not lend themselves to ready quantification. This is particularly true of some of the

dimensions of the environment, such as the underlying cultural aspects, policy and legal framework, and the socioeconomic structure. This question is addressed in detail in Chapters 2 and 3, where it is argued that such elements can be expressed according to their "state", often in categorical terms. The proposition which is advanced is that many of the characteristics of elements, when expressed in quantitative or qualitative terms, follow a bimodal distribution or fall along binary lines.

These two properties, i.e. the interrelationship among groups of elements and the bimodal distribution of characteristics of many of them, suggest that a reasonably small number of elements can effectively describe the key features and characteristics of the item traded, actors participating in the market, and the environment in which the transaction takes place. Hence a given subset of elements can be used to define a specific market configuration. In turn, each market configuration gives rise to a distinctive type of transaction which embodies the terms of exchange, the actual transfer of the item traded, and payment or settlement according to the agreed terms.

Once the crucial market elements have been identified, the relationship between market elements and the functioning and performance of markets can be explored. It will be shown that the framework is applicable to all sorts of markets by demonstrating the application of the approach to product, labor, land, capital (credit), and foreign exchange markets, respectively. A typology of distinct market configurations is derived for each of the above categories of "items". As an example, consider credit transactions. It will be seen subsequently (in 3.6) that four prototypical and distinct configurations can be identified--based on a particular combination of elements and characteristics-- giving rise to different types of transactions. The key discriminating elements are the rural-urban dichotomy which is highly interrelated with cultural norms and form of organization, and certain characteristics of the market actors. More specifically, do the potential borrowers possess, or not, adequate collateral and are the potential lenders registered or unregistered, lending their own

funds directly or acting as financial intermediaries?

Using these elements as building blocks, the following configurations can be distinguished: 1) official urban; 2) official rural; 3) unofficial urban; and, 4) unofficial rural. What are the key components (elements) of this last configuration? Borrowers as actors (usually small farmers and landless workers) possess limited collateral and, typically, desire credit to meet consumption needs during the slack season or input requirements during the planting season. The lack of collateral and the purposes of the loan make them ineligible for loans from organized financial institutions. Therefore, they have to face money lenders who, given the environment (say a village community setting) have access to personal information about the reputation and credit worthiness of the potential borrowers. The transaction which emerges in this configuration will be normally highly personalized, informal, verbal; and the loan will, sometimes, be in kind. The resulting interest rate will be relatively high, in part, because of the lack of collateral and the consequent riskiness that the loan may not be repaid.

In contrast, in the official urban market configuration, the borrowers and lenders have very different attributes and characteristics. Borrowers, typically, possess collaterals and approach banks and other financial intermediaries, on the other side of the market. The latter use the collaterals provided by the borrowers as a substitute for costly information regarding the reputation of the borrowers. Loan contracts tend to be precisely written (taking a variety of legal forms)--reflecting the formal and impersonal nature of the transaction.

The approach to markets which is developed in this volume is robust in the sense that it can be extended to capture configurations which, strictly speaking, operate outside the market, such as the family farm and the family firm that are crucial institutions in the Third World. Transactions occurring within these institutions are analyzed on the basis of pseudo-market configurations, as will be seen subsequently in 3.4.2.

A further distinction which needs to be made is between "market configuration" and "market structure". These terms refer to very similar concepts and are used repeatedly and, sometimes, interchangeably in this volume. Formally, the market configuration is shaped by its constituting elements. It represents the conditions under which a specific item is being exchanged by actors in a given environment. By analogy with football, it is the arena in which the game is being played. Given the rules of the game (i.e. the item), the players (the actors) are known and waiting in a particular stadium (the environment) for the game to start. Once the actors proceed to interact within a market configuration, and by analogy, the ball game gets underway, the configuration becomes a market structure.

In this sense, the market structure, in encompassing the behavior and rules of conduct of the actors, is a more dynamic construct within which the actual performance of the market can be evaluated according to economic criteria. Efficiency and equity are two such criteria. A third criterion is the adaptability of the market structure to short run changes (as a consequence, for example, of new policies or institutional reforms) or more long-term changes in the nature of elements during the structural transformation which characterizes the development process.

If there are market distortions, the approach to understanding markets outlined in this study will help to identify those specific elements that are causing these distortions. A better understanding of which fundamental elements are the cause of market rigidity and friction will allow a policy maker to identify institutional or policy changes that could relax those constraints. Efforts to improve market performance should concentrate on those elements over which some influence can be exercised. Certain elements may be more flexible and maneuverable than others. In a period where structural adjustment and market liberalization are receiving increasing emphasis, the approach to markets as outlined in this book could prove valuable. By specifying market configurations, and key elements underlying them, it may be possible to say

which elements are constraining market performance and concentrate reform efforts in these areas. Also, the policy maker should be aware that certain forms of market reform may lead to perverse results, within a given configuration.<sup>5</sup>

## 1.5 Market Evolution

It is clear that markets evolve over time together with the process of economic and social development. As countries undergo a structural transformation from a traditional, almost exclusively agrarian, society and economy to a modern industrial and service oriented economy, the whole exchange process is drastically modified. We are interested in understanding not only the relation between changing elements and the initial movement to a market economy, but also what happens to that relationship after the outset of such an exchange system. How do market configurations continue to evolve as a function of changing elements once exchange principles have been adopted in at least part of the socioeconomic system?

The nature of exchanges that occurs in markets reflects, to a large extent, the degree of development achieved in the community or economic sector where the participants are active. In various stages of development the motives and behavior of the participants and the nature of the relationships among them can show marked differences. These differences tend to be functional in the sense that they arise from an adjustment to changes in the socioeconomic environment. It is therefore important to understand the forces that contribute to the transition from one set of market relations to another and lead to greater integration among markets. It is argued in Chapter 4 that elements move in a relatively systematic and predictable way

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<sup>5</sup>For example, Biggs (1991) in a discussion of heterogeneous firms and efficient financial intermediation in Taiwan argues that under certain circumstances the liberalization of the financial sector may lead to a reduction in total lending. Deregulation of interest rates would draw funds into the formal banking system out of the curb markets. Banks would most likely expend loans to clientele already served; hence there would be a decline in credit available to smaller, more marginal ventures. Additionally, banks are subject to reserve requirements, so, along with a redistribution of available funds, the total amount of lending would also decrease.

throughout three reasonably distinct phases of development, i.e. an early, a middle and a mature development phase.

Whereas in the short run the elements (i.e. the characteristics of items traded, attributes of actor and environment) can be considered to be given exogenously and provide the building blocks of distinct market configurations, in a dynamic and secular time frame, the direction of the influence can also run in the opposite direction. This derives, among others, from the mediating role played by markets, a role which enables them to transmit information and act as channels for innovations. As markets evolve, they affect the elements and lead to new market configurations and new transactions.

Together with socioeconomic development, markets tend to become less fragmented, as the polarity displayed by many of the characteristics of actors and the environment fall sharply. Markets tend to become larger and more integrated and interconnected.

## CHAPTER 2 MARKET ELEMENTS AND TRANSACTIONS

### 2.1 Overview

Economic activity is based and relies on transactions. Transactions can take any number of forms. They can occur within or outside markets.<sup>1</sup> For example, the sale of an automobile by a dealer to an individual and the hiring of an employee by a firm are clearly market transactions. However, a commitment within a farm household by one family member to help cultivate the farm in exchange for food and shelter, and the delivery of an intermediate product by one department of a vertically integrated firm to another, against some given accounting price are normally considered to be non-market transactions. The distinction is not, however, absolute. Proponents of the new household economics tend to treat intra-family decisions and transactions in much the same way as market decisions and transactions.<sup>2</sup> Likewise, certain contracts and transactions within vertically integrated firms take a hybrid form combining market and internal firm-specific characteristics. Thus, in some instances one could think in terms of transactions being reached within virtual or pseudo-markets.

What is the fundamental reason for observed market fragmentation in developing countries and what accounts for the occurrence of distinct markets for relatively homogeneous items with different transactions and prices obtaining? Why are different forms of exchange and corresponding transactions organized around the family, the community, the firm or the market? What determinants shape the form of economic activity, and why is there a close correspondence between certain types of activities and transactions? These are the main questions which our proposed framework attempts to answer.

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<sup>1</sup>Arrow describes firms and markets as alternative instruments for organizing economic activity (see Williamson 1985, p. 9). One could generalize by adding households and the public sector to this list.

<sup>2</sup>The strongest proponent of this view is Becker (1981).

The transaction is adopted here as the embodiment of, and basic unit of analysis characterizing alternative forms of economic activity.<sup>3</sup> It is postulated that transactions occur within given configurations. Market and non-market transactions, respectively, are determined within market and non-market configurations. The configuration is the analytical and operational framework that not only underlies the specific form of transaction, but that also explains its characteristics. Typically, there is only one type of transaction which takes place in a given configuration. In the most general sense a transaction can be defined as an actual or virtual exchange among parties occurring within either markets or virtual pseudo-markets.<sup>4</sup>

Parties to a transaction must enter into it voluntarily and agree to its terms. The freedom to decide for, or against, a transaction is, of course, of special importance in those cases where one party has little opportunity to influence the terms of the exchange. At the limit, if actors are under physical, moral or legal pressure to accept the terms of the exchange against their will, we would not call it a transaction.<sup>5</sup> Generally actors have a greater influence on the form and terms of a transaction within a market configuration, than do actors within a non-market configuration. Other differences between market and non-market transactions are discussed subsequently.

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<sup>3</sup>This is consistent with the rising influence of the transaction cost approach as developed by Williamson (1985) who "maintains that the transaction is the basic unit of analysis and insists that organization form matters" (p. 18).

<sup>4</sup>Williamson (1985), p. 1) defines transactions as follows "A transaction occurs when a good or service is transferred across a technologically separable interface. One stage of activity terminates and another begins". Although it is not entirely clear what a "technologically separable interface" means exactly, it appears that Williamson emphasizes hierarchical transactions within firms, market transactions and hybrid transactions between these two extreme forms. It is not obvious that the above definition embraces transactions within households, such as within a farm household, which in developing countries is typically both a producing and consuming unit within which many virtual transactions occur. However, in a more recent publication (Williamson 1989), Williamson adds a very short discussion on the applicability of transaction economics to the family.

<sup>5</sup>This view is consistent with, but goes even further than Bhardan (1980), who rules out imposed exchanges from the class of market exchanges. Such exchanges in our framework are ruled out as transactions altogether.

Transactions occur within specific configurations. In turn, as was seen in Chapter 1, configurations are shaped by different specific combinations of three major sets of elements: i) the object or item around which the exchange takes place; ii) the actors engaged in the exchange; and iii) the environment within which a transaction occurs.<sup>6</sup>

A first and necessary step into understanding the process of exchange, and the operation of markets in developing countries, is to identify the most important specific characteristics of elements that influence directly the environment, the behavior of actors and the items traded and, consequently, the form of the transactions. These elements can, ultimately, be combined in different ways to shape and capture a number of distinct configurations. In other words, the various elements are used to identify different combinations of environmental settings, characteristics of items and attributes of actors which together result in relatively distinct and homogenous transactions. It is the existence of a great diversity of transactions and market fragmentation in developing countries--implying very different sets of basic conditions--which has led us to develop the concept of market configuration.<sup>7</sup> From here on we shall concentrate on the identification of market configurations and a few prototypical non- (or pseudo) market configurations.<sup>8</sup>

Once a market configuration is identified, the structure, conduct and performance of the corresponding market can be analyzed through its corresponding market structure according to such features as i) size of the market; ii) degree of competition and monopoly power; iii) adjustment mechanism; and iv) degree of interconnection and integration among markets.

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<sup>6</sup>Environmental elements are broken down into physical environment, technology and form of organization, cultural environment, policy and legal environment, and socioeconomic structure.

<sup>7</sup>In contrast, basic conditions and their resulting market transactions tend to be more uniform and homogenous in developed countries.

<sup>8</sup>The approach developed here is general enough to explain the determination of non- (or pseudo) market configurations and corresponding transactions. In fact, in 3.4.2, the family farm is presented and analyzed, as an example of such a configuration.

Within limits, i.e. the bounded rationality and opportunism of the actors and other constraints inherent to specific elements shaping a given configuration, actors can be thought to converge on the type of transaction which minimizes the sum of production and transaction costs. In this sense, transactions are endogenously derived and determined within a given market structure. As will be seen subsequently, transactions can take many different forms; they may be more or less specific, uncertain and frequent. They may be explicit (e.g. expressed through a written and formal contract) or implicit (e.g. a verbal agreement between members of a family enterprise); they may be expressed in monetary or non-monetary (barter or "in kind") terms. Still other distinguishing characteristics of transactions are whether they are i) official (in accordance with prevailing laws, rules and regulations) or unofficial (in conflict with rules and regulations but not necessarily illegal),<sup>9</sup> and ii) interlocked (i.e. linking different factors such as labor, land and credit within the same transaction) or not.

A market structure in the sense we are using it here, encompasses the behavior of the actors and allows an evaluation of its performance according to economic criteria. For each market structure there corresponds one, and only one, market configuration. The market structure is the dynamic counterpart of the market configuration. In a general sense, the criteria against which the performance of a market are gauged should reflect efficiency and equity considerations. In addition, a third criterion which suggests itself is the extent to which a market adapts over time to changing circumstances, and thereby facilitates the structural transformation which characterizes the development process<sup>10</sup>. This criterion is intrinsically

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<sup>9</sup>At the limit unofficial transactions may, in fact, be illegal. A curb foreign exchange or credit transaction in many developing countries is unofficial but not per se illegal.

<sup>10</sup>Note that these criteria are relatively similar to those used in the Mason-Bain model as described in Scherer (..) i.e. productive and allocative efficiency, progress, full employment and equity. The criterion which we call "market adaptation", differs somewhat from "progress", as will be shown subsequently and the "equity" criterion becomes a more important one in the setting of a developing (poor) country than a developed one.

related to the dynamic and secular evolution of markets. This is an important, yet essentially qualitative, concept which attempts to determine whether, and, if so, how and how fast specific markets evolve so as to contribute to the development process. Not only does a combination of elements shape a market configuration and structure and thereby the conduct of the market actors and the performance of the market but, in turn, as the market structure evolves, it influences the nature of elements leading to a feedback system operating over time between markets and elements.

Figure 1 represents graphically the analytical framework underlying this study. In summary, it shows how different combinations of specific characteristics of elements relating to the environment, the item traded and the market actors, yield distinct configuration, within which transactions are generated. The specific elements constituting a market configuration have to be identified quantitatively and qualitatively as a set of state variables. Each specific configuration gives rise to corresponding distinct sets of market and transaction characteristics which are explored in detail in Chapter 3. Finally, the dynamic forces operating within a given market are likely, in turn, to influence and modify the underlying elements.<sup>11</sup> It should be reiterated that, even though, the analytical framework appearing in Figure 1 illustrates the determination of distinct market configurations and corresponding market transactions, the approach is sufficiently general to explain the determinants of non-(or pseudo) market configurations and corresponding non-market transactions.

## **2.2 Market Elements and Their Characteristics**

### **2.2.1 Introduction**

Since elements describing the item exchanged, the attributes of actors and the environment provide the building blocks which jointly define distinct market configurations, the question of which elements and,

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<sup>11</sup>This link is reflected in Figure 1 by the arrow feeding back from market performance to elements.

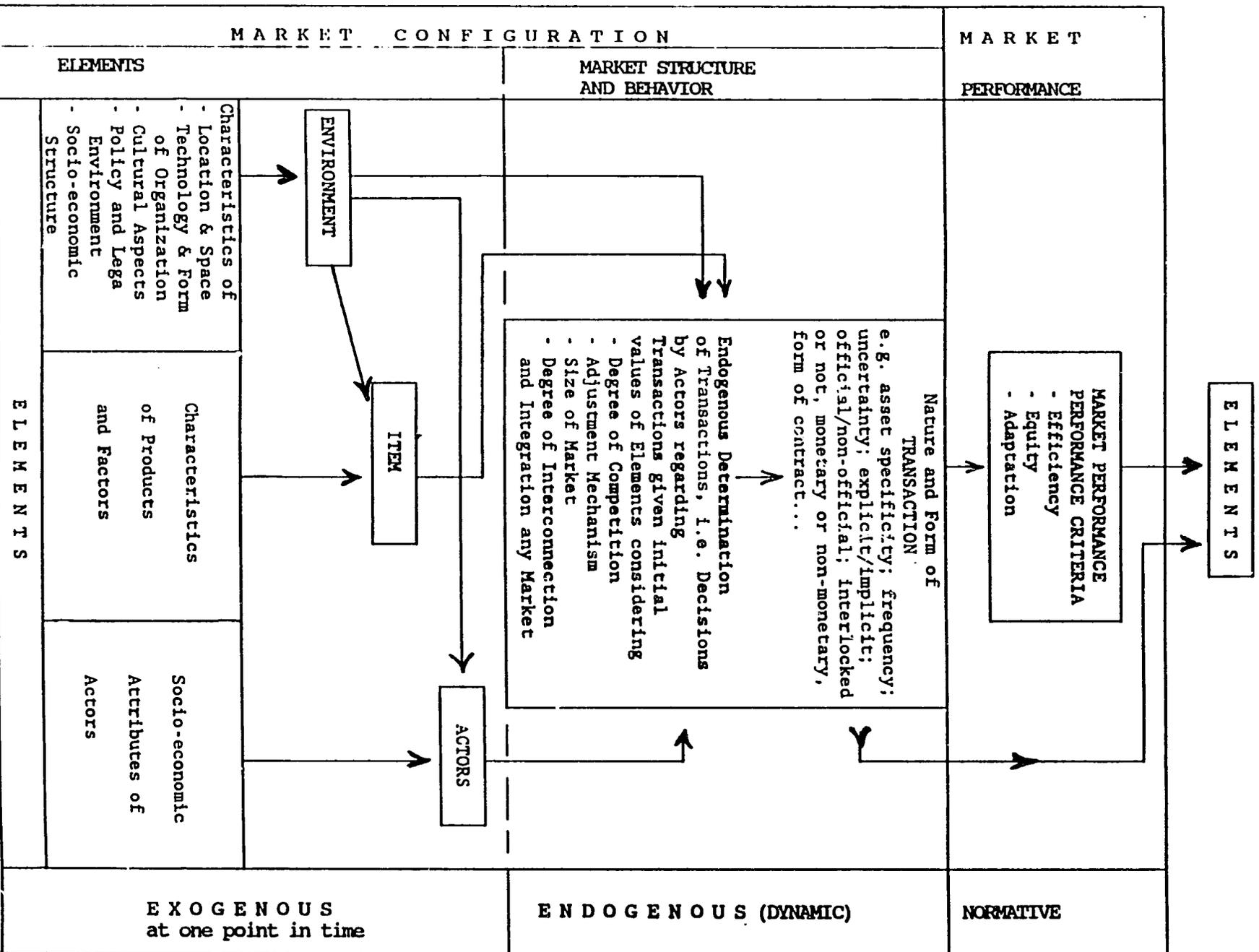


Figure 1. Determination of Market Configurations and Transactions

in turn, which of their intrinsic characteristics to focus on is a crucial one. Although the choice of which elements to retain is somewhat arbitrary, there are theoretical and empirical considerations which can help guide the selection process. In particular, preference was given to those elements which appeared to have the greatest discriminatory power in characterizing and shaping alternative and distinct market configurations.

For example, when selecting the elements which define and capture the environment within the setting of developing countries, it is essential to recognize the endemic nature of dualism in large parts of the developing world. The two most important manifestations of dualism, in large parts of the developing world, appear to be the physical and locational environment and to relate to the technology and form of organization adopted. The first manifestation captures the dichotomy between rural and urban areas, while the second reflects the gap between traditional technologies and family farms or enterprises, on the one hand, and modern technologies adopted in more complex forms of organization, on the other. This yields a dual-dual framework as illustrated in Figure 2 which can be further modified by distinguishing between agricultural and non-agricultural activities in rural areas. The resulting six-way classification identifies and delineates six broad sectors, i.e. subsistence (small-scale) agriculture; modern (large-scale, e.g. plantation) agriculture; informal rural off-farm activities; rural modern industry and services; the informal urban sector; and urban modern industry and services. When additional elements are brought to bear and grafted upon this simple scheme, a finer classification of reasonably distinct market configurations is obtained as is shown subsequently. In particular, somewhat different sets of discriminating elements have to be used in delineating market configurations for products, labor, credit and foreign exchange, respectively.

Many of the elements needed to define a market configuration do not lend themselves to ready quantification. This is particularly true of some of the dimensions of the environment such as the underlying cultural aspects, the policy and legal framework and the socio-economic structure, as will be shown shortly.

Figure 2  
 Dual-dual framework distinguishing according to  
 (a) technology and form of organization and  
 (b) physical environment (location) and type of production

		Technology and Form of Organization		
			Traditional and Informal	Modern and Informal
Physical and Locational Environment and Type of Production	R U R A L	Agri- culture	Subsistence Agriculture	Commercial, Large Scale Agriculture
		Non- Agri- culture	Informal, Rural Off-farm Activities	Rural, Modern Industry and Services
	URBAN		Informal Sector	Modern Industry and Services

When faced with essentially qualitative elements, it is important to categorize the "state" or "content" of each of these elements. This can be done by way of scales or scores, or, in some limiting instances, through quantitative values, or a binary classification (e.g. rural vs urban location, modern vs traditional technology, skilled vs unskilled workers). In fact, it will be argued that many of the elements which are used for taxonomic purposes, when expressed in quantitative or qualitative terms, follow bimodal distributions. This property facilitated greatly the structuring of the classification framework of market configurations that was ultimately adopted in this study.

Table 1 lists the main elements together with some of their major characteristics that were selected and used in generating and deriving the taxonomy of market configurations which is presented in Chapter 3. Each of these elements is discussed and analyzed in this chapter. Many of these elements and subelements are highly interrelated,<sup>12</sup> and could have been combined and analyzed under somewhat different headings. The ultimate test of the operational usefulness and relevance of the three sets of elements above is the extent to which they can 1) contribute to the identification of a meaningful typology of market configurations at both the product and factor level<sup>13</sup>, and 2) form the basis for an explanation of the operation of markets.<sup>14</sup>

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<sup>12</sup>The interrelationship among elements is explicitly discussed in 3.2.

<sup>13</sup>By this we mean that appropriate combinations of the above elements can be used in a discriminating way in identifying a reasonably small and manageable number of market (and pseudo-market) configurations, generating distinct types of transactions.

<sup>14</sup>Mervin King (as quoted by Williamson (1985 p. 28)) characterizes the Arrow-Debreu model as follows "commodities are distinguished not only by physical and spatial characteristics, but also by the "state of the world" in which it is delivered. A "state of the world" is defined by assigning values to all the uncertain variables which are relevant to the economy ... and comprises a complete list of these variables. These states of the world are mutually exclusive, and together form an exhaustive set.. commodities are now defined as contingent on the occurrence of certain events, and the market system comprises markets in all these contingent commodities" (1977, p. 128). Each of our configurations can be thought to represent a different "state of the world", within which dynamic changes occur. We are attempting to put some flesh on the theoretical skeleton of the market model.

Table 1  
Major Elements and Characteristics\* of Market Configurations

**1. ELEMENT: ITEM TRADED**

Characteristics of Item Traded

*Product*

- intrinsic characteristics e.g. weight, volume, quality, degree of homogeneity, storability, perishability, exhaustibility, tradeability, transportation costs
- according to fulfillment of consumer needs e.g. luxury goods, basic necessities
- according to degree and extent of substitutability, on the demand and supply sides
- nature of product, i.e. stage of processing (raw material, intermediate good, final good) and distinction of final demand (consumption, investment and export)
- Specificity of assets used in production

*Labor*

- skill, education and labor efficiency
- self-employment or wage employment
- sector of employment

*Credit*

- type (form) of credit
- purpose
- sector of destination
- secured or non-secured

*Land*

- location
- quality and soil fertility
- purpose

*Foreign Exchange*

**2. ELEMENT: ACTORS**

Socio-economic Attributes of Actors

- number and density
- personal and cultural characteristics
- assets and income characteristics
- objectives and preferences
- education characteristics
- information characteristics
- instruments available
- relations among actors

**ENVIRONMENTAL ELEMENTS**

3. physical, spatial and locational
4. technological and organizational
5. cultural
6. policy and legal
7. socio-economic structure

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\*The present list of characteristics of the "item traded" and "actors" is far from exhaustive. It is only meant to illustrate some of the more important characteristics. Note, also, that no characteristics of the five types of environmental elements are given here. In the text which follows, many of their characteristics are discussed in detail.

### 2.2.2. Characteristics of Item Traded

The first distinction which should be made in describing the operation of markets is between products and factors, as items traded. At the macroeconomic level this distinction is reasonably clear. The demand for factors is directly derived from the demand for products through the production process which relates the two in the circular flow of income. Thus, given the relative factor prices and the technological and organizational shelves (i.e. the alternative technologies and organizations available and the corresponding production functions), the demand for products fully determines the demand for factors. The other causal link relates factor demand and earnings via the income distributions among the institutions and households to the latter's demand for goods and services.<sup>15</sup>

In turn, the nature of the product or factor, in terms of its intrinsic characteristics, influences the form of the market. With regard to products, such physical characteristics as weight, volume, storability, perishability, tradeability and transportation costs are important determinants of a given market configuration. Another criterion for grouping different products is according to consumer needs and the wants which they tend to satisfy. More specifically, markets for luxury goods tend to differ from markets for basic necessities; these goods face very different income and price elasticities of demand.<sup>16</sup>

Economic theory indicates that it is useful to define an industry or market as embracing those firms producing close substitutes, as measured by the cross elasticity of demand between two goods. Somewhat analogously, producers can be grouped together using some measure of substitutability on the supply side

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<sup>15</sup>In fact, the distinction between products and factors is not quite as clearcut as appears at first sight. Intermediate inputs are both products and factors of production. In the latter sense they are, to some extent, substitutable for the more conventional primary inputs such as land, e.g. in wheat production fertilizer can, up to a point, be substituted for land as tractors can be substituted for labor.

<sup>16</sup>The relatively high price and income elasticities of demand for luxury goods encourage product differentiation and either monopolistic or oligopolistic competition.

(e.g. the cross elasticity of supply)--which is simply a method of discovering the degree to which producers are affected by each others' pricing behavior in their production policies. Thus, up to a point, the boundaries of a product market can be drawn on the basis of these two cross elasticities. It would consist of suppliers and buyers of close, or potentially close, substitutes.

Still another characteristic of products relates to their quality and degree of homogeneity. Products which vary significantly in terms of quality, and where knowledge and information of their true quality are not shared evenly among buyers and sellers, may belong to different market configurations and follow different rules and adjustment mechanisms than products of more homogeneous quality.<sup>17</sup>

Finally, a key product characteristic which goes a long way in explaining why the exchange process is likely to occur within firms, and thus outside the market, is asset specificity. A specific asset cannot be redeployed, it is a sunken durable investment. Contractual and organizational safeguards are required for this type of transactions which differs radically from the more familiar neo-classical (nonspecific) variety.<sup>18</sup> In Williamson's scheme firms, markets, and mixed modes are recognized as alternative instruments of governance (i.e. alternative ways by which to govern exchange interfaces) (Williamson, 1985, p. 129). The same distinction expressed in our framework would be between market, non-market and pseudo-market configurations.

Looked at within a long term dynamic context, a product market configuration is influenced by secular evolutionary changes regulating the pattern of exchange from the highly traditional, personalized and custom-

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<sup>17</sup>This issue is discussed further under information (in 2.2.3).

<sup>18</sup>The following quote which appears in Williamson (1985, pp. 55-56) is revealing in this respect "Thus whereas neoclassical transactions take place within markets where faceless buyers and sellers...meet...for an instant to exchange standardized goods at equilibrium prices" (Ben-Porath, 1980, p. 4) exchanges that are supported by transaction-specific investments are neither faceless nor instantaneous."

oriented process to the modern impersonal market place which one finds in the developed world.<sup>19</sup> In other words, the elements shaping the configuration vary over time and modify it accordingly. Within a shorter (not secular) timespan, the market configuration is affected by which particular phase of the product cycle an industry happens to go through.

Next, we turn to the major distinguishing characteristics of factor markets. Some of the characteristics of labor that help define different labor market configurations are the degree of labor skill, education, occupation, self-employment or wage employment (alternatively paid vs. unpaid employment), sector and location of employment and labor efficiency. Capital and credit can be broken down according to type of capital, purpose, and its sector of destination (e.g. agricultural credit to traditional farmers vs. industrial credit to modern enterprises). Land can be categorized according to its quality and soil fertility, as well as its purpose. Also, location in terms of proximity to an urban center, is an additional and often more important characteristic than soil fertility, as such. Finally, foreign exchange which is often considered as a crucial input in the development process serves different purposes, some legal and some illegal, resulting typically into at least two market configurations, the official foreign exchange market and the parallel or black market.

There are major differences in the constellation of forces affecting the markets for the various factors of production. In the labor markets remuneration from labor services (imputed labor income and wages and salaries) is by far the most important source of total income for households in the economy. On the labor supply side, the possession of skills and education (human capital) commands higher remunerations. Credit and capital markets, in turn, provide an intertemporal bridge. Land markets are quite distinctive in the sense that supply is fixed, and that land ownership grants certain cultural economic and political privileges to the

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<sup>19</sup>This question is addressed in Chapter 4.

owners. Furthermore, for a variety of reasons, land markets tend to operate very imperfectly--if at all. In a number of settings, there are cultural or even legal limitations on the sale of agricultural land. Finally, the foreign exchange market, by its very nature, provides the link with the rest of the world and reflects the state of the current and capital accounts of the balance of payments. It is typically subjected to a high degree of government intervention.

Because of the intrinsic differences in variables affecting the operation of markets for, respectively, product, labor, capital and credit, land, and foreign exchange, separate typologies of market configurations are derived for each of the above in Chapter 3.

### **2.2.3 Socioeconomic Characteristics and Attributes of Actors**

The major characteristics of actors which influence their (market) behavior are: 1) the number and density of actors, the institutional and organizational forms assumed by actors and their relative (bargaining) power, which jointly influence the size and the structure of the market; 2) actors' assets, resource endowments (in terms of ownership of land, other physical and financial capital, and human capital), entitlements, and incomes; 3) objectives and preferences of actors, including personal beliefs and class characteristics and constraints; 4) the relations which prevail among actors and the instruments at their disposal (which are, of course, related to their resource endowments and incomes); and 5) the level of information available to actors and their attitude towards risk and uncertainty. The modalities of the exchange process are significantly influenced by the above characteristics of the actors--as producers (suppliers) or consumers (demanders).

Market actors can consist of firms and institutions--not just individuals. Thus family farms, corporations, limited liability firms and cooperatives can operate at either end of the market. Labor unions

by controlling the terms of supply, and through their participation in collective bargaining, are major actors on the supply side of labor markets.<sup>20</sup> Finally, the government or the state can be a major actor in a variety of different settings, e.g. i) as a supplier of goods and services of (nationalized) public enterprises; ii) as a major employer of civil servants; and iii) as a purchaser of goods and services in connection with public activities; and perhaps, most important.<sup>21</sup>

The nature of the decision-making process which ultimately converges into transactions depends on who the actors are and what their characteristics are. Market structure and performance is crucially influenced by the conduct of the actors, even more so because they make the decision to enter into a transaction. The characteristics of the transactions determined within a market configuration, as well as the market mechanisms generating these transactions (such as the degree of competition and the type of market adjustment), are related to the relative bargaining power of the actors and the instruments available to them.

In particular, individuals, as actors, ultimately decide on the most efficient or appropriate form of organization within which to engage in economic activity; and form of contract, that will minimize the sum of production and transaction costs. Thus, for example, the predominance of family farms and family firms in developing countries may be attributed to the especially high transaction costs of interhousehold transaction in such countries. The main factors which lead to lower transactions costs within a family farm (a pseudo market configuration) than within other forms of market configuration (or governance structures) are the greater sharing of information, the existence of trust which lowers the cost of monitoring effort of family members and the provision of various forms of insurance--in the absence of an adequate insurance

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<sup>20</sup>Even though the form of organization which is selected by actors in their conduct of economic activity can be considered as an attribute of actors, we prefer for reasons made clear in 2.2.4.2., and related to the inter-relationship between form of organization and technology, to view it as one dimension of the environment and to discuss it jointly with technology.

<sup>21</sup>The role of the State in setting the rules of the game, and through the impact of its economic policies and reforms belongs, more properly, to the policy and legal environment and is discussed, accordingly in 2.2.4.4.

market.<sup>22</sup>

The resource endowment and entitlement of actors, as reflected by their possession of human capital, land, and other capital assets, may seal off certain market configurations entirely for certain classes of actors based on their wealth or lack of it. Thus, for instance, adequate collaterals may be a prerequisite for obtaining loans from the organized credit market; individuals without collateral are automatically excluded from consideration. Likewise, markets for consumer durables, luxuries goods and houses may be limited to households enjoying high levels of incomes and/or wealth.

Actors' preferences which are shaped by many of the above socioeconomic characteristics determine whether their behavior is maximizing, satisficing or following a combination of both, as under bounded rationality.<sup>23</sup> For example, the attitude of producers in developing countries vis-à-vis risk and uncertainty is a key determinant of the choice of technology, resource allocation and planned output.<sup>24</sup>

Elements related to the environment influence the behavior of actors. Thus, for example, the policy and legal (e.g. property rights) framework and the established "rules of the game" in such areas as anti-trust legislation, the attitude of the state vis-à-vis public as opposed to private enterprises (say a state monopoly vs. a multinational enterprise) and, in a more general sense, the underlying economic and social system shape (if they do not predetermine) the behavior of actors and thereby affect the degree of competition and

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<sup>22</sup>The family farm as a pseudo market configuration is discussed in detail in 3.4.2.

<sup>23</sup>For example, the behavior of the small traditional farm household is often described as following a lexicographic preference function. See Section 3.4.

<sup>24</sup>The traditional small farm owner or petty producer in the informal urban sector may well select a technique which yields a lower expected output outcome than an alternative (more modern) technique, because the former displays a distribution of outcomes which has a lower variance. A subsistence farmer tends to be risk averting to the extent that when he is near the survival level; his behavior could be described as minimizing the chance that he will fall below this level.

the market structure.<sup>25</sup> The cultural environment also may impose binding constraints on the behavior of actors. Membership in a lower caste may be an insurmountable barrier to entry into or exit from a product or factor market.

The nature of the relations which link and bind actors together similarly influences their behavior and ultimately the nature and form of the contract. This issue is intrinsically connected with the underlying cultural environment. At one extreme, in a highly traditional setting, the exchange process is ritualized and follows prescribed, very personalized channels. In such a setting customs geared to the survival of the community predetermine the exchange process. At the other extreme, the exchange process is totally impersonal (trade at arms' length) and based on institutional and legal arrangements. In general, these arrangements whether formalized (such as tenancy and share-cropping or fixed wage employment contracts) or not (barter transactions, task sharing within a community or farm-household enterprise) contribute to shaping distinctive markets or quasi-markets operating in corresponding configurations.

Finally, information is a crucial element influencing the behavior of market actors. In the real world, in contrast with the perfect information world of the neo-classical paradigm, actors have to operate with imperfect knowledge and information regarding the characteristics of other elements, such as the environment and socio-economic attributes of other actors. It has been emphasized that the choice of an exchange system depends significantly on the cost of requiring information about a trading partner and the cost of enforcing contracts. (Eggertsson, 1991 p. 243). Several parallel exchange systems can be found within the same economy because individuals and exchanges are heterogeneous with respect to transaction costs.<sup>26</sup>

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<sup>25</sup>In this connection see subsections on the "Policy and Legal Environment: and on the "Socio-economic Structure and System", which follow immediately.

<sup>26</sup>As Eggertsson (1990, pp. 242-44) noted "Transaction costs are associated not only with characteristics of assets and commodities and investments in brandnames but also with characteristics of individuals and the social networks in which the traders operate. A large share of all exchange, even in highly advanced industrial societies, does not depend on a specialized means of

Since market actors possess only imperfect information they behave and make decisions under uncertainty and face risks.

In particular, imperfect information regarding the quality of the product, or factor, to be exchanged can have a major, if not predetermining, impact on the form of the market configuration and structure, as well as on the performance of the market. Information about the quality of an item is often asymmetrical between buyers and sellers. Buyers tend to have less knowledge as to true quality of the item to be exchanged, in contrast with sellers who, generally, have a clear, although not necessarily perfect, idea of its quality. Under these circumstances, it has been rigorously shown that the lower quality items tend to drive out the good ones--in somewhat the same way as bad money drives out the good. If sellers know the quality of their goods or factors, while buyers only know the average quality, the sellers of higher quality items will be discriminated against compared to those offering lower quality items. This will start a cumulative process of sellers of higher than average quality items removing themselves from the market until, at the limit, the market disappears altogether.<sup>27</sup>

Thus, whenever buyers can only observe average quality there is a tendency for sellers not fully rewarded for high quality to withdraw from the market--a phenomenon which is referred to as adverse selection. A related concept on the buyers' side of the market is that of moral hazard. The classical example is provided by individuals who purchase insurance and are therefore not inclined to undertake protective or

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payment. For example, this is generally the case for transactions in the family or within monasteries, where each member of a group has a (socially) defined role specifying his rights and duties."

<sup>27</sup>The classical example used by Akerlof ( ) is the "lemon" in the used car market in the United States. Sellers of used cars which are of better than average quality will withdraw from the market continuously until ultimately no used car is offered for sale and the market collapses.

productive measures that would reduce the scale or chance of loss.<sup>28</sup>

When information is unevenly shared between buyers and sellers, there is an incentive for each group to engage in activities which convey and yield information. Thus, sellers of high quality items are likely to want to convey this information to potential buyers by way of signals. An important signal in the labor market is education which suggests productive potential, while product guarantees can tell something about quality in product markets. In an analogous way, buyers tend to use statistical and socioeconomic indicators to screen the quality of the item they want to purchase. For example, race or caste can be used as such an indicator where employers use the "average quality" of a given race or caste in a multidimensional sense (e.g. education, intelligence, discipline and reliability) to predict the quality of individuals in that race or caste.<sup>29</sup>

Another prototype example of screening by employers in the labor market is that embedded in the concept of share-cropping. There are two components to the share-croppers' input, the time devoted and the effort expended. The first component is readily observable and can be paid a fixed wage, whereas the latter can only be observed through careful supervision by the employer. Under a wage system and without supervision, the landlord would pay the individual worker a wage equal to the average effort of the average worker. This leaves no incentive to the "superior" worker who is willing to apply greater effort. Under these conditions, both the landlord and higher quality workers have an incentive to enter into a share-cropping contract under which effort and time are estimated imperfectly from another characteristic, such as the output

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<sup>28</sup>For example, within the setting of a developing country a fixed hourly wage rate paid to an agricultural worker based on the average productivity of workers may not encourage the more productive worker to put forth more effort. Sharecropping becomes a way to attract more productive workers.

<sup>29</sup>Again, Akerlof (1976) has shown that the common use of these indicators makes equilibrium income distribution and resource allocation dependent on these divisions. He has also shown that there is a tendency for the greatest returns in the market to go to those who do not break social customs. Conforming to social rules reduces uncertainty. The prevalence of groups of actors strongly influenced by cultural or subcultural elements, combined with the absence of information by some market actors about the distribution of characteristics of individuals within these groups, has a major impact on the markets and may lead the economy into a low-level equilibrium trap.

produced. In this instance, the output produced is used as a screen to hire more productive and diligent workers. This last example suggests that the resulting transaction itself, shaped within a given market configuration (i.e. share-cropping instead of wage rate employment), may be directly affected by information as a key element.

A final example of how information affects markets is obtained whenever prices are used to convey information about quality, e.g. whenever the productivity of the labor force increases with the wage paid or when the probability of default on a loan increases with the rate of interest charged. In these instances, the market may no longer clear and unemployment and credit rationing result. As Stiglitz (1984) has shown, the market adjustment mechanism will differ drastically from the standard neo-classical argument, in fact, repealing the standard law of supply and demand.<sup>30</sup>

It will be seen subsequently in Chapter 3--describing various market configurations, applying to, respectively, products, labor, credit, land, and foreign exchange--that information is a determining element in defining these configurations and shaping the characteristics of the resulting transactions and, in a more general sense, the operation of markets. Among others, the interlinkage of different factor markets that is typical of many developing countries yields interlocked transactions that are largely influenced by the distribution of information among actors. It can be argued that information as an element affecting actors' behavior is even more important in the context of a developing than a developed country for the following reasons. First, there exist large and significant cultural and subcultural differences. Secondly, there is strong evidence that quality variation--at both the product and factor level--is greater in developing countries,<sup>31</sup> and

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<sup>30</sup>The following quote from Stiglitz (1984) illustrates this point: "The standard arguments (it will be recalled) say that when supply exceeds demand, say for labor, the wage falls. An unemployed worker goes to a firm and offers to work for a wage less than it is currently paying its employees; but now the firm rejects this offer, since it believes that were it to hire this worker, his productivity would be lower than that of current employees, lower enough that its total labor costs would actually increase."

<sup>31</sup>Akerlof, (1973) gives a number of colorful examples.

that fewer screening signals of the true quality of an item (such as brandnames and technical degrees) are available. Finally, the greater incidence of poverty and more unequal distribution of wealth imply that the use of collaterals as a substitute for information is restricted.

## **2.2.4 Environment**

A large number of elements jointly affect and shape the market environment. These elements have been grouped into five sets 1) physical, locational and spatial elements; 2) technology and form of organization; 3) cultural aspects; 4) policy and legal elements; and 5) socioeconomic structure. In a sense one can consider each set as representing one--albeit broad--dimension of the overall environment.

### **2.2.4.1 Physical, locational and spatial environment.**

A number of characteristics directly related to location and space has a bearing on the functioning of the market. The first and foremost dichotomy is between rural and urban areas. This dichotomy determines to a large extent the types of products and production activities in which the various regions will specialize.

Typically, communities of different population sizes in a country can be characterized in ascending order as a hierarchy of central places--villages, towns, small cities, regional capitals and, so on, in ascending order.<sup>32</sup> This hierarchy of central places is less pronounced in developing than in developed countries and one can without much exaggeration often describe the prevailing situation as one of regional dualism. The higher population density and concomitant centralized availability of services, communications and information in urban areas leads to larger, more integrated and commercialized markets than in rural areas. Likewise,

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<sup>32</sup>See Berry and Harris, (1968); and Berry (1967). As Fox (1975) has pointed out "a village is approximately self-sufficient with respect to specified services; a town is self-sufficient with respect to village-level services and to services requiring the larger population base of a town plus several nearby villages. The successive levels can be defined in terms of the presence of certain types of retail trade, wholesale distribution, and service establishments".

the degree of enforcement of government regulations (such as minimum wage legislation) tends to be greater in the urban areas. Even though there appears to be greater administrative ease of enforcing rules in urban areas, this does not necessarily mean that there is a higher prevalence of official as opposed to unofficial transactions in the urban market. Indeed, because of the size of the urban market and the greater degree of policy intervention, unofficial activities often flourish in that environment taking the form of, for example, parallel (black) markets for foreign currency and for credit (called curb markets) and a whole set of semi-institutionalized systems of bribes.

Another essential difference between urban and rural activities is the much greater division of labor prevailing in the former. This phenomenon is responsible for the more frequent use of money in urban transactions and the closer degree of linkages and integration among urban markets as compared to rural markets.<sup>33</sup>

In most peasant and traditional societies, product markets are periodic rather than permanent and continuous. As Berry (1967, p. 93) has indicated:

"The market is not open every day, but only once every few days on a regularly scheduled basis, because the per capita demand for goods sold in the market is small, the market area is limited by primitive transport technology, and the aggregate demand is therefore insufficient to support permanent shops. Businessmen adjust by visiting several markets on a regular basis; and by accumulating the trade of several market areas, they are able to survive."

Transport costs are, of course, an essential determinant of the size of a market.<sup>34</sup> The problem of discovering the relevant geographic market is, at least, as vexing as that of discovering the relevant product

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<sup>33</sup>An important question relates to the geographical size and shape of markets. There exists a theoretical literature which defines the network of trade areas for a single good as well as for different goods. In the former case, it has been shown by Lösch (....) that under certain assumptions and particularly the minimization of transportation costs, the resulting market area is a hexagon. With higher population density and increased spatial competition (more producers and consumers per unit of land) smaller hexagonal market areas result.

<sup>34</sup>Stigler (....) assert that "Market, according to the masters, is the areas in which the price of a commodity tends to uniformity, allowance being made for transportation costs."

market. In some instances, it is possible to identify the geographical market on the basis of the maximum distance a good can travel and still be competitive.<sup>35</sup>

The more pervasive presence of the government in cities combined with a higher population density encourages the organization of a variety of pressure groups such as industrialists, labor unions, civil servants and students that, through their activities and demands, can have a major effect on many markets. In contrast, groups tend to be much more loosely organized and much less vocal in rural areas with correspondingly more limited effects on the operation of markets.<sup>36</sup>

Locational characteristics affect the functioning of markets in at least two other ways, first, through the effects of the rural-urban migration on the labor market and, secondly, through the effects on all product and factor markets of those policies which can be subsumed under the term "urban bias"--such as turning the internal terms of trade against agriculture to capture the agricultural surplus.<sup>37</sup> Clearly this last effect is influenced by the pressures that a variety of urban groups exert on the government. In particular, the convergence of interest between employers, organized workers and other urban groups for the maintenance of low food prices contributes greatly to the perceived discrimination against agriculture and rural areas. In this regard, complete theories of the development process have been centered on this "urban bias".<sup>38</sup> The existence of regional topographical differences reflected in such factors as soil fertility and rainfall patterns, combined with different transportation networks and distributions of overhead capital facilities, can have a decisive impact on the structure of production and the operation of markets. These elements lead to

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<sup>35</sup>See Horowitz ( ).

<sup>36</sup>This question is discussed under 2.4.4 in connection with collective action.

<sup>37</sup>In a more general sense, the effects of policies on the market environment are discussed in 2.2.4.4.

<sup>38</sup>See Lipton ( ).

fragmentation and distinct market configurations.

Another major difference between rural and urban areas which affects the operation of markets is related to the much greater seasonal and annual periodicity and synchronicity characterizing agricultural production and income variables, compared to non-agricultural production and income variables in urban areas. Agricultural production follows a clearcut seasonal pattern that influences product markets as well as factor markets. The periodic regularity of the various agricultural tasks from planting to harvesting generates periods of peak demand for labor (at harvest time) and credit (before planting and before the harvest, for consumption purposes) followed by periods during which the demand for these factors is very limited. Both the demand for, or the supply of products and factors, tend to move together with this cyclical seasonal production pattern. The fact that many variables follow the same cyclical pattern leads to seasonal synchronicity. In addition, the ever present possibility of crop failure resulting from the vagaries of the weather occasions a less predictable but even more pronounced synchronicity. The much lesser degree of susceptibility of urban (industrial and service) production, to either seasonal or secular fluctuations than agricultural production, is a major distinguishing characteristic affecting the functioning of markets.

In conclusion, locational and spatial factors in developing countries contribute significantly to the fragmentation of markets, interregionally. Road and other transportation networks are often very inadequate with concomitant consequences on transportation costs. The resulting geographical size of market configurations tends to be considerably smaller than in industrialized countries.

#### **2.2.4.2 Technology and Form of Organization**

These two criteria go a long way towards capturing the dualism which is endemic in the developing world. The polar contrast is between a modern vintage technology (which is usually, but not necessarily,

capital intensive) and modern form of organization (such as incorporation); and a traditional (labor-intensive) technology and traditional form of organization (such as the family farm or enterprise).<sup>39</sup> It is, of course, clear that neither technology nor form of organization can be classified strictly along dual lines. For certain products, there is a continuum of alternative technologies available from very labor intensive to very capital intensive and spanning a multitude of vintages.<sup>40</sup> Likewise, different forms of organization are possible ranging from the family farm all the way to the multinational corporation. In general, it appears that the use of modern technology tends to be highly associated with the corporate structure, and the use of traditional technologies with family farms and enterprises.<sup>41</sup>

An interesting attempt at exploring the interaction among technology, form of organization and the external environment is provided by Jensen and Meckling (1979). They postulated that producers could be thought to face an expanded production function of the following type:

$$Q = F_r(L, K, M, C, T),$$

where L, K and M stand for, respectively, labor, capital and material inputs. T is a vector representing technology and the state of knowledge relative to production. F consists of the set of all production functions that can be partitioned to systems of property rights.  $F_r$  is that specific production function which corresponds

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<sup>39</sup>At this stage it is important to indicate that the terms "modern" and "traditional" are used in this study to refer to two (dual) states of technology-cum-form of organization in the production process. This same dichotomy is, often, described in the development literature in terms of formal vs. informal production (or sectors). Even though it is not possible to be completely consistent--mainly because the concept "informal sector" has become an accepted usage--we intend to restrict the use of the informal/formal terminology to characterize the nature of transactions rather than that of the state of technology-cum-form or organization.

<sup>40</sup>By now there exists a copious literature on the various dimensions of technology in developing countries. The contributions of the Technology Branch of the World Employment Programme of the International Labor Office are particularly significant and noteworthy in this regard.

<sup>41</sup>Another way the above distinction has been drawn in many studies is between small and large establishments or, in a somewhat more realistic sense, between i) small scale establishments and households and cottage establishments, using traditional technologies; and ii) medium and large establishments relying on more modern technologies. It is in this sense that a bimodal distribution of alternative combinations of technologies and forms of organization prevails.

to property rights structure, R, where R is considered to define the external rules of the game for the firm and the alternative feasible contractual arrangements, including possible penalties for illegal or illegitimate behavior (hence R also reflects social mores). Faced with the above underlying conditions and, more particularly, the external rules of the game (R), the firm is limited to a set of internal rules of the game, C, which represents the choice set of organizational forms available to it (comparable to the technological choice set of neo-classical production theory).<sup>42</sup> The above approach demonstrates clearly and formally the relationship which exists between technology and form of organization in the context of a given external (policy and social) environment. Where capital is scarce, the scope for scale economies limited and the external environment is traditional, family farms and firms are likely to prevail. In contrast, the corporate form of organization will flourish where capital is abundant, scale economies characterize the production process and the environment is modern.

The prevalence, side-by-side, of different business organizations is partly related to the differential treatment by the state of firms and economic sectors, in terms of such policies as taxes, subsidies and direct regulations. Different forms of organization, in a given environment, entail different transaction costs. In any specific instance the form which is selected is that which can be thought to minimize transaction costs.

The impact of technology and form of organization on product markets is different from that on some factor markets. In the product markets, the combination of the two elements (technology and form of organization) has a major influence on the mode and structure of production and thereby on the supply side of the market. As pointed out previously, it is likely that producers (or potential producers) of substitute products within a given product market configuration will tend to rely on similar technologies and forms of

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<sup>42</sup>The above characterization of the approach of Jensen and Meckling (1979) follows directly the description given by Eggertsson (1990, p. 126).

organization along bimodal lines.<sup>43</sup> In contrast, market configurations for some factors of production tend to be shaped by the technology and organizational structure of the producers who, in this instance, act as users or demanders of factors. Thus, for example, in the labor market the characteristics of employers (i.e. the users of labor) may predetermine different labor markets: i.e. large firms hire more skilled, often organized and unionized workers, while small firms in the informal sector rely more on family labor. In the case of credit, lenders fall into two categories, i.e. financial intermediaries (normally registered and organized in a "modern" corporate structure) and direct lenders (typically unregistered and grouped in a more traditional form of organization). Likewise, on the credit demand side a dichotomy can be drawn between borrowers with and without collateral.

In a number of industries the existence of technologies displaying economies of large scale constitutes a major barrier to entry. Such barriers would occur if the technology had any, or all, of the following characteristics: i) the minimum optimal scale is large as a proportion of total industry output; ii) the rise in unit cost becomes steeper as scale is reduced below the minimum optimal scale; and iii) the absolute capital requirements for starting a plant of the minimum optimal size are very large. When any of these conditions prevail, it is very unlikely that segmented markets would operate. The dominant (modern) technology takes over and displaces the inferior (traditional) technology. Thus, for example, only one market configuration is likely to exist for steel whereas two or more could coexist for textile products.

It is argued in 3.2 that technology and form of organization, as elements, are highly interrelated with cultural aspects as well as with the previously discussed socioeconomic attributes of actors. Because

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<sup>43</sup>There are, of course, exceptions to this principle. For example, certain homogeneous products such as wheat may be produced by small family farms using essentially labor intensive techniques, as well as by large exploitations using mechanized technologies. The marketed surplus of wheat of the former enters the same market on the supply side as production of the large farms, and the end product (i.e. wheat) is, for all practical purposes, indistinguishable. It is more difficult to think of similar exceptions in the industrial or service sectors.

technology and form of organization are i) relatively easily measurable in quantitative and qualitative terms; and ii) closely interrelated, they provide jointly a good and representative proxy for different combinations of a larger set of interrelated elements, that, in turn, go far in shaping the boundaries of distinct market configurations.

Some forms of organization operate in different product and factor markets. For example, the large industrial house or "group"<sup>44</sup> is distinct from other forms of capitalist organizations, also prevailing in developing countries, such as the public sector corporation, the broadly held public company, the family owned company and the multinational corporation. The "group" is a multi-company firm which transacts in different markets but which does so under common entrepreneurial and financial control. Besides drawing its capital and managers from sources which transcend a single family, the "group" invests and produces in several product markets rather than a single product line.<sup>45</sup> The "group" can be conceptualized as an organizational structure for appropriating quasi rents which accrue from access to scarce and imperfectly marketed inputs. The tendency to integrate vertically is in order to alleviate risk and uncertainty. The "group" form of organization, and vertical integration owes its existence largely to the much lower transaction costs which it entails in comparison with other forms of organizations. Likewise, as mentioned earlier, the persistence of family farms and family enterprises in both developing and developed countries can be partially explained by the low transaction costs they entail.

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<sup>44</sup>For a good discussion of the "group", see Leff (...).

<sup>45</sup>In some cases it resembles the conglomerate in developed countries.

### 2.2.4.3 Cultural Aspects

It is quite evident that behavior (including economic behavior) of people depends on the culture.<sup>46</sup> Cultural factors play a particularly significant role in communities consisting of low income, essentially subsistence, households where interpersonal relations are designed to guide individual behavior in support of the common goal of survival. In developed countries, and in more affluent communities, of developing countries, higher income and resource endowment levels free people from a community oriented survival strategy and permits them a much higher degree of independence and individuality in their behavior.

Developing countries, and especially the poorest among them, contain many regions within which production is barely sufficient to fulfil the subsistence requirements. In such settings economic behavior tends to be organized within groups of people bound by kinship or tribal relations. Although this economic behavior has been studied since the 1920s when Chayanov (....) and Malinowski (....) published the results of their investigations of peasant farms in Russia and among the Tobriand islanders, respectively, it has only recently been introduced and formalized in development economics. It is only natural that in different environments people develop a variety of ways to cope with the problems they face, especially survival. Even though one may find the emphasis that some anthropologists place on the unique qualities exhibited by the cultures of different communities somewhat exaggerated, a significant variation among cultures within countries and even

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<sup>46</sup>There are literally hundreds of definitions of the concept of culture. Despite the differences, the definitions have a number of aspects in common. For example, culture is connected with ideas and acquired human behavior. The knowledge and understanding of the environment and the norms and values guiding human behavior figure prominently among the phenomena which are encompassed by culture. And, while individuals are the bearers of culture, the concept is always related to groups of people. These aspects are also represented in the following definitions. Culture stands for "regularities in the behavior, internal and external, of the members of society, excluding those regularities which are purely hereditary" (Toynbee, 1972, p. 43); and "collective programming of the mind which distinguishes the members of the human group from one another." (G. Hofstede, 1980, Chapter 1).

regions cannot be denied.<sup>47</sup> This limited degree of cultural integration has important implications for the analysis of economic behavior. For example, a finer degree of disaggregation in the classification of socioeconomic household groups is required in developing than in more industrialized countries, in order to capture their distinct characteristics as consumers and as producers.<sup>48</sup>

An even more general, and prior question, is the extent to which it is possible to deal with the impact of culture in economic analysis? Since "culture" affects economic phenomena in a number of ways, it seems useful to approach this question systematically. Let us first consider the cultural aspects which derive their functionality from economic considerations, such as the codes of behavior referred to above which enhance chances of survival in subsistence conditions. Tools of economic analysis help explain behavior in such cases. For example, in the case of the internalized pseudo-market of family labor on the peasant farm discussed in 3.4.2, it seems reasonable to assume that, through some kind of intra-family "negotiation" process, decisions will be reached regarding the allocation of available units of family labor to various tasks by comparing (subjectively) the irksomeness of additional efforts and weighing this against the expected fruits of such efforts<sup>49</sup>. Similarly, risk aversion can be taken into account by placing high discount rates on activities which have uncertain effects. In turn, the concern for self-sufficiency in food can be treated through lexicographic preference functions which gives priority to meeting food needs before other needs are considered.

On the other hand, traditional (non-economic) factors may greatly constrain the allocation of family

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<sup>47</sup>For a discussion of the low degree of cultural integration in developing countries, see Geertz (1973, p. 255 ff.). It is, of course true that there are forces which, over time, tend to reduce differences among group cultures, such as through conquest and peaceful intensification of (trade) contacts.

<sup>48</sup>Indeed, many stories circulate among development planners of gross failures of well-intended policies that failed to account for cultural factors.

<sup>49</sup>Alternatively one could assume that the head of the household takes this decision unilaterally and arbitrarily. In this case this becomes a command form of organization and the "pseudo market" disappears.

labor to different tasks. Customs or rules may differentiate sharply between tasks appropriate for men and for women, for old and for young, for the first born son and for other children and so on. Likewise, the intra-family distribution of food and other products and services may follow more or less rigid cultural patterns.

Thus, it appears that some cultural aspects have economic foundations, or at least can be rationalized on economic grounds, while others have clearly extra-economic foundations. The latter may be based on religious beliefs, customs, vested power structures or a combination of these. As such, they are exogenous to economists and should be treated as data. The impact of some of these extra-economic foundations on the market configuration, and corresponding structure, and performance can be enormous--as exemplified, for example, by the impact of such institutions as communal land, caste system and Islamic banking on, respectively, land, labor and credit markets. When these foundations affect the operation of markets, they can be incorporated as constraints on performance, or on instruments available to market actors<sup>50</sup>.

A considerable amount of research on the connection between peoples' basic attitudes and economic performance, in general, has been carried out since Weber's study of 1904 on the Protestant ethic and the spirit of capitalism. Much of this research is equally relevant for students of markets.<sup>51</sup>

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<sup>50</sup>Some cultural phenomena tend to affect the operation of markets more indirectly than the preceding set. Examples of such factors are attitudes towards birth control, customs regarding inheritance, the social organization, the ethics of inter-personal relations, which although operating indirectly, can still have a significant impact on the operation of markets.

<sup>51</sup>In his well-known study McClelland (1961) analyzed 1300 children's stories and, on this basis, established a score of the need for achievement in thirty mostly developed and semi-developed countries. Comparison of these scores with economic growth performances suggested a positive correlation; similar exercises for the concern for affiliation and for power did not produce a consistent pattern. Thus McClelland concluded that the agent of growth was the entrepreneur whose need for achievement would show full advantage in a market-type economy. In a more recent study comprising forty developed and less developed countries, however, Hofstede (1980) has identified other dimensions of work-related values in a formal business environment which are relevant in the context of economic performance and institutions. He distinguished four dimensions which are briefly described below: i) "Power distance" expresses inequality in power, prestige and wealth; ii) Uncertainty avoidance indicates lack of tolerance for various kinds of uncertainties, regarding physical environment, relations with other people and human fate in life and after-life. Technology, laws, rules and rituals and religion provide support in face of such uncertainties, but also the attitude towards planning can be seen in this light (see section 2.4.4); iii) Individualism, a virtue in some countries, is considered a dangerous, alienating property in others; iv) Masculinity comprises, amongst other things, the concern for advancement, the preference of earnings over service and the desire to dominate.

The conclusions which suggest themselves from the above discussion are, first, that cultural factors have a strong impact on preferences, instruments and behavior of market actors, especially in developing countries; and secondly, cultural patterns show wide variations among countries, but also within countries. This means that generalizations across different cultural settings may be of limited validity and that the typology of market configurations, which is ultimately proposed in our analysis of product and factor markets, should reflect and capture reasonably well distinct cultural environments.

#### **2.2.4.4 Policy and Legal Environment**

Markets tend to be more imperfect in developing than in developed countries. Market imperfections contribute to market segmentation and vice versa in an interdependent and reinforcing way. One important distinction relates to the underlying causes of market imperfections. In particular, Myint's (...) classification of market distortions, or what he interchangeably calls market imperfections, is pertinent to the issue addressed in the present section, i.e. the role of the policy and legal environment in shaping different market configurations. The first type of distortions is referred to as "spontaneous distortions" and according to Myint is caused by "the imperfect mobility and divisibility of the factors of production and imperfect knowledge which may be considered as arising naturally from the existing economic conditions". On the other hand, what Myint calls "artificial distortions" are induced by market actors and in particular, by government policies, trade unions and monopoly powers.<sup>52</sup> The distinction between these two types is relevant in the present context, since it recognizes explicitly that some market imperfections (distortions) are caused directly by the policy

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<sup>52</sup>Myint's third category, "externality distortions" caused by divergences between social and private costs may be more relevant to advanced than lesser developed countries.

maker whereas others are an intrinsic part of the underlying environment<sup>53</sup>. Lindauer (1989) draws a similar distinction by suggesting that parallel markets are directly caused by government intervention which creates an artificial condition of excess demand or excess supply, while other segmented markets owe their existence to structural and other rigidities and imperfections. This second group will generally not be, or only marginally, affected, in the short run, by changes in policies.

In the development literature, the objectives, motivations and acts of the state (i.e. the institutions consisting of the government and the administrative machinery available to execute the measures issued by the government) have often been idealized.<sup>54</sup> The government is then viewed as the caretaker of the common good whose decisions are punctually executed. The foremost, and certainly most influential, proponent of this early approach to planning is Tinbergen (1956) who developed a complete theory of quantitative economic policy based on the assumption that governments, or policy makers, possess clearcut objectives. In the Tinbergen terminology, these objectives become targets which can be influenced through specific policy measures or instruments. Policy models can then be solved for the quantitative values of the instruments which fulfil the predetermined values of the desired targets. But, in developing countries as well as elsewhere, reality is more complex and cannot be captured fully by planning models however sophisticated they might be.<sup>55</sup>

Politicians and civil servants are not only less than perfectly competent but they also use part of the

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<sup>53</sup>Furthermore, policy induced distortions can themselves be broken down into two types, 1) those designed to correct or alleviate spontaneous distortions such as, for example, the existence of monopoly powers resulting from an inappropriate marketing system and inadequate transportation network; and 2) those introduced to further government objectives (e.g. greater equity, improvement in the balance of payments and favoring certain power groups, classes or economic sectors) which might take such forms as minimum wage legislation, tariffs and price policies. Whereas the former type of measures is likely to increase efficiency, the latter could lead to a trade off between efficiency and other policy objectives such as greater equity.

<sup>54</sup>Reasons for the persisting, idealistic view of the state have been discussed in Schumpeter (1943, Chapter 21).

<sup>55</sup>In fairness to Tinbergen, his methodology allowed certain real life characteristics of the environment, and actors to be incorporated as binding constraints in his system.

power vested in them to promote their own interests and to follow a course that suits their own preferences. The bureaucracy is itself one of most powerful groups in society. This means, among other things, that official policy objectives and intentions may, at least partially, reflect the desires of the government and the bureaucracy, as power groups in society, rather than reflecting the broader national interests. Also significant differences may exist between the policy intentions, as such, and the actual policy measures which ultimately reach and affect market actors.<sup>56</sup>

The public choice and collective action literature has analyzed how interest groups can gain access to the state and impose regulations which benefit those groups.<sup>57</sup> The success of collective action depends on the ability to suppress or at least weaken the "free-rider" problem.<sup>58</sup> In those instances where the state and its agents are not neutral and passive, but tend to pursue their own selfish objectives the positive theory of "rent-seeking" applies.<sup>59</sup> Groups which control (influence) the government can capture "contrived rents" which are "artificial transfers in the sense that they result from government restrictions, such as the granting of monopoly positions, protection or any other kind of regulation or rule" (Nabli and Nugent, 1989, p. 102).<sup>60</sup>

Pressures are continuously exerted on the government. They can be internal, in that they originate with certain segments of the government (a typical example would be when a coalition is in power), or from

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<sup>56</sup>Market actors, in turn, will often operate in such a way as to dampen and limit the effectiveness of these actual policy measures often through unofficial and illegal means. This gives rise to official (illegal) transactions--an issue which is discussed in Section 5. The "rational expectations" approach emphasizes the countervailing reactions which actors adopt to undo the intended effects of policies (Lucas, ...).

<sup>57</sup>See Nabli and Nugent (1989) for a good description of this process.

<sup>58</sup>As Olson (1965, 1982) has shown, the possibility of collective action is said to be the greater a) the smaller the group; b) the more homogeneous the group; c) the longer the group has been in existence; d) the more differentiated the goals of different members of the group; e) the greater the sensitivity of the group to threatened loss arising from inaction; f) the closer the social and physical proximity among group members; and g) the more unequal the distribution of wealth or power among group members.

<sup>59</sup>See, for instance, Brennan and Buchanan (1985).

<sup>60</sup>Contrived rents contrast with profits in the sense that the latter arise naturally from the workings of dynamic competitive market processes.

the bureaucracy itself. Alternatively, pressures can be external and be exerted by foreign and organized domestic groups.<sup>61</sup> These external pressures are likely to influence the policy makers and elicit a response which renders the political and the socio-economic systems interdependent. The government issues measures that affect the socio-economic groups who, simultaneously, or in response to these, in turn, exert pressure on the former.

It can be argued that the environment within which policy makers reach decisions in developing countries is more fluid and volatile than in more developed countries.<sup>62</sup> Decisions are often made on an ad hoc and relatively arbitrary basis, and different policy measures may lack in internal consistency. The fluidity and volatility of the political environment is influenced by a number of forces. First, social and economic tensions caused by skewed income and wealth distributions and differences of religion, caste and tribe membership, language, education and regional origin tend to be significant and act as major obstacles to converging towards an acceptable consensus. Secondly, developing countries are often in transition from one type of societal and economic organization to another, with inevitable frictions and crises. Thirdly, institutions and the legal foundations tend to be weaker than in more developed countries. The relative youth of institutions in newly independent Third World countries, combined (in some cases) with an absence, or lack of experience, with democratic traditions impedes further the peaceful resolution of conflicts and adds to the overall uncertainty in the general environment within which markets have to operate.

These reasons may explain the relatively high frequency of totalitarian and centralized regimes in developing countries on either the left or the right wing of the political spectrum. One important implication of the existence of such regimes is that they tend to either 1) interfere thoroughly and comprehensively with

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<sup>61</sup>See Lindblom (1977, p. 12 ff).

<sup>62</sup>In Killick's words, the balancing acts which politicians must perform to maintain control, is generally speaking more precarious in developing countries than elsewhere. (Killick, 1976).

the operation of markets and, at the limit, replace markets with centralized planning and inflexible regulations; or 2) adopt a more laissez faire approach to markets which might, in itself, reinforce the impact of the spontaneous distortions and market imperfections.

It has been argued above that politicians and policy makers have their own preference function that may coincide only partially with that of the society at large that they are supposed to represent. The same observation applies to civil servants and bureaucrats operating in the administrative machinery. The bureaucracy is a power group in its own right, and has a vested interest in the promotion and interpretation of measures which work to their advantage in terms of employment, career opportunities, prestige or even income through the acceptance of bribes and other forms of corruption. Furthermore, civil servants, in developing countries, are subjected to a two-fold bias which can have key implications on the shaping of market configurations and their operation. One has to do with the administrative convenience of steering protective measures (such as import licenses and subsidized credit) in the direction of the modern sector of the economy where firms are easier to reach, because, in comparison with firms in the traditional sector, they are 1) larger but fewer in number; and 2) better administered. The second bias derives from the inclination of bureaucrats to avoid the antagonism of powerful groups which may result in an interpretation of the rules favorable to them. The combination of these two biases may lead to actions favoring the modern sector of the economy and the urban areas. Conversely, it is likely that the traditional sector and the rural areas may be negatively affected. The above behavior of civil servants will tend to polarize the economy along dual-dual lines as indicated previously and reinforce the "urban bias" with corresponding market configurations.

Another important issue in the evaluation of the effects of the policy environment on markets is whether the policy implementation tends to rely on measures of a discretionary or non-discretionary (automatic) type. Discretionary policy measures are much more difficult to implement. This makes it all the

more remarkable that, in comparison with developed Western countries, many developing countries (particularly in South Asia) seem to rely heavily on precisely this type of measure.<sup>63</sup>

Clearly the form that the policy measure takes influences the characteristics of the transactions and of the market within which these transactions are generated. For example, direct price controls affect the adjustment mechanism (i.e. the market has to rely on quantity rather than price adjustments) and often encourage the development of parallel and black markets relying on unofficial and illegal transactions.

In practice, the effects of policy intervention in developing countries leads often to a dichotomy between sheltered and unsheltered sectors of production. Generally speaking, the small-scale producers relying on traditional technologies and family enterprises both in the rural areas (i.e. traditional small scale agriculture) and in the urban areas (the so-called informal sector) tend to be non-sheltered. In fact, the government often discriminates overtly against these small producers. The literature on the operation of the "informal sector" in the Third World" is replete with examples of discriminatory treatment by all levels of government from municipal to central (Sutherland, 198\_, Thorbecke, 198\_). A most detailed and vivid account of this phenomenon is provided by De Soto (1986) in his description of the high--almost insurmountable--barriers to entry into the organized legal sector enacted by the Peruvian state.<sup>64</sup> The extensive and often byzantine regulations have given rise to a pervasive informal sector, primarily consisting of individual and family enterprises operating outside, or at the margin, of the law and estimated to employ

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<sup>63</sup>Myrdal (1968) offers several explanations for this phenomenon. First, the degree of intervention in the market mechanism is considered by some as a sign of concern for the people who are at the bottom of the social ladder, and who tend to have little market power and leverage. Secondly, discretionary measures can be extremely favorable to all market actors who know the rules well and who have easy access to the individuals who have to apply them. Hence, market actors who have a comparative advantage in obtaining the necessary licenses and permits advocate continuation of this system, notwithstanding complaints about government interference. The bulk of these actors are likely to be found in, if not constitute, the modern, urban sector of the economy. Thirdly, there is sometimes a cumulative tendency in the enactment of measures, as additional measures are required to correct for undesirable side effects of earlier ones.

<sup>64</sup>For example, it was estimated that it took 289 days (nearly full time) for an individual to negotiate the bureaucratic process required to obtain the right from the state to establish a small manufacturing firm in the garment industry.

half of the total population of the country. In this sense, the resulting informal markets owe their existence to government regulations in addition to structural determinants. It can be considered a hybrid form of a parallel and segmented market.

On the other hand, producers who are operating under a modern form of organization and who have adopted a modern technology may, or may not be sheltered by the government. The key distinction here is between producers of import-substitutes and of export products (or products competing against imports). Sectors producing import-substitute products, particularly consumer goods, have typically been favored by policy makers in developing countries, through a variety of measures such as high tariff rates, quantitative restrictions on competing imports, subsidized credit and fiscal benefits. In contrast, sectors facing the world market have to meet the discipline of this market. Clearly, the market structure corresponding to the import substitution case is likely to be very different from that corresponding to the export sector. The degree of competition may be severely restricted and production efficiency negatively affected in the former case as compared to the latter. It will be seen subsequently that the distinction between sheltered and unsheltered sectors provides a good basis for defining market configurations, particularly at the product level, but also for some of the factors of production.

International and intersectoral studies of the rate of effective protection confirm, that during earlier stages of development, agriculture tends to be strongly discriminated against as compared to industry. It is only when countries reach the status of "newly industrialized" that the table is reversed and that agriculture starts becoming the protected sector--a trend which is likely to continue secularly, as the experience of Western Europe, Japan and some of the newly industrialized countries (e.g. Taiwan and south Korea)

suggests.<sup>65</sup>

The above discussion has illustrated the strong interrelations which prevail between the policy environment, and more specifically policy intervention, and other elements such as technology and form of organization, location, and the socio-economic characteristics of the actors. As Eggertsson (1990, p. 281) clearly puts it "exchange in the political arena interacts with the environment (i.e. exogenous variables such as information technology, resource endowments, geographical location) and gives rise to contractual arrangements--that is, social institutions. Again, in the political field, both the outcomes of contractual relationships and the structure of contracts themselves are shaped by transaction costs."

In a fundamental sense, one needs a theory of the state to explain the mechanisms through which markets are affected. At one extreme, institutions and policies are directly under the control of the government which operates as a benevolent dictator, reflecting some consensus national interest. At the other extreme, institutions and policies are endogenously determined through the outcome of a political process reflecting the economic and political powers of the various groups in society. In between, these two polar extremes, lay a whole set of alternative models of the state. Depending on which alternative theories of the state one adopts, the mechanisms linking the political environment and the operation of markets can vary significantly. We return to this issue in section \_\_\_ on governments and development of markets.

#### **2.2.4.5 Socio-economic Structure and System**

Under this heading we are including and combining a number of elements reflecting the initial socio-

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<sup>65</sup>In this connection see Anderson and Hayami ( ). It should be mentioned, however, that the preoccupation with industrialization has subsided somewhat since the 1960s, and that a better understanding of the role of agriculture in the development process has permeated through to the new generation of policy makers so that the relative degree of protection enjoyed by industry as compared to agriculture during an early development phase, is presently no longer quite as pronounced. However, the degree of agricultural protectionism among newly industrialized and developed countries is as pronounced today as it was in the past.

economic conditions prevailing in a given country, at a given point in time. In particular, the underlying economic system, the socio-economic structure, and the stage of socio-economic development a country finds itself in, are key determinants of market configurations and of their operation.

The economic system, per se, can range from total reliance on central planning under socialism, to pure "laissez-faire" under capitalism. There are very few examples of countries having adopted either extreme during any period in their history. Most countries rely on a hybrid mixed-economy approach somewhere within the above spectrum. The socio-economic structure, in turn, can take a large variety of forms. The socio-economic organization can be based on rigid traditions, as typified by the operation of manors in feudal times, or a totally hierarchical system as prevailed during the reign of the Incas or even a rigid caste system. Alternatively, economic and social power may be shared relatively equally by different socio-economic groups interacting impersonally, under some implicit or explicit social contract, within a democratic political environment.

That the economic and social system plays a primordial role in shaping markets is highlighted by the fact that when transactions are imposed (i.e. buyers and/or sellers are not free to decide about transactions) a market does not exist. Thus, if the economy and society are organized under a pure central planning or command system, transactions are exogenously imposed upon the actors by the state and no market, as such, exists. Likewise, no market exists when decisions are made entirely in conformity with tradition such as in the above examples of the organization of manors, the Inca system or a rigid caste system.

Generally speaking the underlying level, or stage, of socio-economic development has a major impact on the physiology of markets which is likely to prevail. The process of socio-economic development is highly multidimensional but, at least to some extent, can be captured by such indicators as the level of per capita income, the state of the relative and absolute income distribution and the shares of agriculture in total

employment and in GNP. A close relationship exists between the level of development, as measured by these indicators, and the size of and degree of integration among markets. The lesser developed a country is, the smaller and more fragmented markets are likely to be and the greater the reliance on interlocked transactions.

### **CHAPTER 3 GENERAL FRAMEWORK FOR DISTINGUISHING MARKET CONFIGURATIONS**

It has been argued that elements constitute the building blocks of market configurations and that appropriate combinations of specific elements define and shape distinct market configurations. Elements specify who the actors are, their characteristics, the environment in which actors operate and the item which is exchanged. The end result of the interaction among actors, within a market configuration, consists of a set of relatively homogeneous transactions. Market transactions, in this sense, are the dependent variables which are determined within the market structure describing the underlying relationships and constraints constituting a given market configuration.

The next step is to suggest some general principles for grouping and combining elements so that reasonably distinct market configurations are obtained. Each configuration should, in turn, give rise to a set of relatively similar transactions in terms of their dimensions and characteristics. The task at hand is to select the most important elements among the large set reviewed in Chapter 2; namely, those that seem to have the greatest discriminatory power and to be best associated (correlated) with other elements in capturing distinctive market configurations and structures. In turn, these market structures should generate relatively homogeneous transactions.

There are two key obstacles which have to be overcome in deriving a set of representative market configurations and structures. The first obstacle is the essentially multi-dimensional nature of many of the previously discussed elements and characteristics of market behavior and transactions. For example, the fact that market actors' behavior is influenced by a large number of attributes, or that the physical and locational environment, likewise, embraces a variety of dimensions implies the necessity, for analytical purposes, to be selective and focus on those dimensions and aspects of elements which are considered most

representative.<sup>1</sup> In other words, the stylized facts have to be identified. A second and related obstacle is that many of the dimensions, or aspects, of given elements and transactions can only be measured in an imperfect way. This means that in a large number of instances qualitative or categorical estimates have to be used to capture these elements rather than quantitative estimates per se.

Fortunately, many of the elements tend to 1) follow bimodal distributions; and 2) be highly interrelated among themselves.<sup>2</sup> Furthermore, the costs of developing new forms of transactions tend to restrict the number of alternative forms. These three properties help overcome the two obstacles referred to above and are, thereby, crucial in the formulation of a set of principles on the basis of which a typology of distinctive market configurations can be built. We turn next to a discussion of these two properties in 3.1 and 3.2, respectively, before proposing an analytical classification scheme in 3.3 and applying it to derive appropriate typologies of market configurations applying to product and each of the factors (labor, credit, land, and foreign exchange) in 3.4 to 3.8.

### **3.1 Bimodal Distribution of Elements**

In general, it will be seen that in developing countries the tendency for the variables reflecting specific elements to be bimodally distributed is more pronounced than in more developed countries.

Thus, starting with technology, the choice of technique is not a continuous one. Rather an entrepreneur or small farmer is faced with a few discrete alternative production techniques to choose from. The variables which together define a technology appear to fall in two sets along bimodal lines. These

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<sup>1</sup>Stated somewhat more technically, this means that if each element can be defined, or described, according to a vector reflecting its various dimensions, aspects or characteristics, a choice has to be made of which of the latter are most representative of the totality or the essence of that element.

<sup>2</sup>Strictly speaking, it is the variables reflecting the various dimensions and aspects of elements that display these two properties.

variables are, among others, the degree of factor intensity, i.e. labor and capital intensity (as measured by, say, the capital-labor ratio); the origin of the technology (imported vs domestic); the vintage of the technology, i.e. is it modern (on the production possibility frontier) or traditional (within the frontier)?; and total factor productivity (the ratio of output to a measure of total inputs). Modern technology tends to be capital-intensive, imported and display high factor productivity. In contrast, traditional technology tends to be labor-intensive, of domestic origin and yields relatively lower total factor productivity. It is true that in some instances an intermediate technology may, in fact, exist but, in general, the distribution of alternative techniques--using the above indicators to define them-- is approximately bimodal<sup>3</sup>.

The form of organization can range from a relatively self-sufficient and self-contained family firm or farm, oriented to the satisfaction of basic household needs, to a large corporation hiring factors internationally and producing for the world market. Even though there exists a whole spectrum in between those polar extremes, the alternative forms of organization tend to fall in two distinct groups, 1) family enterprises which can be further subdivided into a) household farms run under different tenancy types (i.e. owner-cultivator, fixed rent, or sharecropping tenancy); and b) informal enterprises in services and industry largely based on self-employment; and 2) unincorporated or incorporated enterprises.

The next element on our list is the physical and locational environment. Clearly, as the detailed discussion in (2.2.4.4) revealed, the most fundamental dimension of this composite element is the rural-urban dichotomy. As will be documented and argued subsequently, this is a crucial distinction in segmenting product labor, credit and land markets. In fact, the classical example of a segmented labor market is the

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<sup>3</sup>The Green Revolution technology in wheat and rice production relying on high yielding varieties (HYV), irrigated land and intermediate inputs (mainly fertilizer) is sometimes considered an intermediate technology-- between the traditional labor-intensive and mechanized alternatives. In fact, this biological-oriented technology may be quite capital-intensive when all the irrigation infrastructure and intermediate capital input costs are properly accounted for. Furthermore, for land scarce countries, the viable alternative technologies are the modern biological (HYV) technique and the traditional local one. The mechanized technology is not an appropriate alternative in a land-scarce, labor-surplus setting, in contrast with a land-rich, labor-scarce setting.

Harris-Todaro ( ) model, which, among others, provides an explanation of the determinants of the rural/urban migration.

The socio-economic characteristics and attributes of actors include their status in terms of income and resource endowment (physical, financial and in terms of human capital), their objectives as producers and as consumers, their tastes and preferences, their access to information and its distribution among them, their attitudes towards risk and uncertainty and the nature of relations among them. Here again, these characteristics will typically be highly interrelated and constitute two distinct subsets 1) the poor, uneducated relatively uninformed households, with little endowment (and practically no collaterals), oriented in their production and consumption decisions towards the achievement of survival and subsistence; and 2) the educated rich (i.e. the non-poor) who are endowed with physical and/or human capital and receive relatively high income, have access to information, can afford to take risks and have "conspicuous" tastes.

These two groups would also tend to differ significantly in their cultural aspects. The discussion of the impact of these aspects on market behavior (in 2.2.4.3) reveals that there exists a marked difference in the customs and personal value orientation of individuals operating in a traditional (typically agrarian) setting and the impersonal (arms-length trading) attitudes displayed by individuals in a more modern setting.

In the specific case of credit markets, that two sets of characteristics of borrowers and lenders, respectively, i.e. 1) whether borrowers possess collaterals or not; and 2) whether lenders are financial intermediaries (registered) or direct lenders (usually unregistered) go a long way in defining distinct credit configurations. These characteristics tend to be highly correlated with cultural elements, as well.

It was seen that the political and legal environment has a major impact on market behavior. Government intervention in markets takes a variety of forms. Among the most typical instruments are price policies and controls, quantitative controls, licensing schemes, exchange controls, protective tariffs, subsidies

and differential taxation. There appears to be a predilection on the part of governments of developing countries to rely somewhat more on discretionary rather than non-discretionary policy measures. Except in the case of taxes, the main purpose of which is to generate revenues, most policy instruments tend to be sector, product or factor-specific and undertaken with given objectives in mind, such as protection from foreign competition to encourage industrialization, or income distributional considerations, e.g. the provision of cheap food to urban dwellers.

From the standpoint of the degree of policy interventions to which they are subjected, products and services fall, to a large extent, into two major categories, sheltered and non-sheltered. This last category can be further subdivided into products which are not sheltered, in the sense that the government does not intervene in those product markets i.e. takes a neutral stance; and those against which the government engages in negative sheltering, i.e. through a whole set of discriminatory measures leading to artificial distortions. Many consumer goods tend to be sheltered to encourage import substitution and the industrialization process. In contrast, commodities competing in the world market would typically be non-sheltered, while such goods as food and transportation services might be subjected to negative sheltering taking the form, for example, of price controls of a discriminatory nature with the intent to improve the welfare of the poorer classes. Likewise, the "informal sector" is often subjected to the same type of negative sheltering.

With respect to credit, the state often provides subsidized credit to specific favored sectors or enterprises, usually in the urban areas but sometimes also in the rural areas. Consequently, certain actors are favored (such as export conglomerates in South Korea, enterprises operating in sectors producing import substitutes throughout Latin America, or large farmers in many parts of the developing world) and other actors are sealed off from this market. Similarly, under given foreign exchange regimes and licensing systems,

certain actors are eligible to obtain foreign currency at the official rate while other actors are pushed out into the unofficial curb or black market. Finally, land markets, particularly in the rural areas of the Third World, are subject to a mass of government restrictions limiting the sale of land parcels which can be used for agricultural purposes.

In summary, the extent of policy intervention tends to follow a binary scheme depending on whether products or industries are sheltered or not sheltered. Government intervention, in turn, can be of a protective kind (shelter) or of a discriminatory type (negative shelter). The impact of policy intervention on factor markets is more complex. First, to the extent that the demand for factors is derived from the demand for products, factors, used in sheltered industries, may indirectly benefit from that protection. Secondly, however, policymakers often intervene directly in factor markets, as was just highlighted, through price and quantity controls, such as minimum wage legislation, subsidized credit, exchange control, and land use and zoning restrictions.<sup>4</sup> Here again, the nature of intervention tends to divide actors in factor markets in two groups, those whose benefit from the intervention and those who do not. Thus, for example many agricultural casual workers are either not covered by minimum wage legislation, or the legislation is not implemented or ineffective, in contrast with workers in the organized urban sector.

The remaining two elements which have not been mentioned, so far, are the characteristics of products or factors exchanged and the socio-economic structure and system. Each of these elements consists of a large number of dimensions which do not normally display bimodal distributions. However, it will be seen in the next subsection (3.2) that both of these elements tend to be interrelated with other elements, particularly, location, technology and form of organization, and policy intervention. This association

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<sup>4</sup>It should be noted that a given intervention may affect product markets differently from factor markets. For example, minimum wage legislation under certain circumstances may favor workers covered by it but affect negatively firms dependent on this type of labor.

provides a rationale for classifying them in a distinct way.

The above brief review of elements indicates that many of them tend to be bimodally distributed in a developing country's setting. This property when combined with another one, i.e. that these elements and characteristics tend to be highly and systematically interrelated--a proposition which we attempt to show next--provides the basis for the market classification scheme which is presented in 3.3.

### **3.2 Interrelations among Elements**

A number of qualifications needs to be made before exploring the extent to which elements are interrelated. First, each main element is, in fact, a multidimensional composite consisting of mutually interrelated characteristics and aspects. Thus, composite elements can be said to be interrelated to the extent that their respective qualitative and quantitative indicators are interrelated. Secondly, elements and their characteristics tend to evolve over time in a fairly systematic way as will be shown in Chapter 4. Thirdly, each of the four factors and products reveal somewhat different patterns of interrelationship among elements as will be made explicit in 3.3, where their corresponding typologies of market configurations are derived. In what follows we emphasize the nature of interrelationship among elements as it relates, more particularly, to products. Two major nexuses of interrelated elements affecting, in turn, the characteristics of markets and transactions are noticeable.

The first nexus consists of the interrelation among the item (i.e. the type of product or factor), the physical and locational environment (as captured by the rural-urban dichotomy), the policy environment and the socio-economic structure and system. The intercorrelation between product and location is obvious; agricultural products are, by definition, grown in rural areas and industrial production tends to be highly

concentrated in urban areas--at least at the outset of the industrialization process<sup>5</sup>. The degree and form of government intervention is associated with the characteristics of the products, such as sectoral or industrial origin, and tradeability or non-tradeability.<sup>6</sup> The relevant issue, at this point, is that such characteristics of market behavior as degree of competition, adjustment mechanism and size of market tend to be influenced by, and sensitive to, the different combinations of the three elements under consideration and their corresponding market configurations. Note, in particular, the impact that the degree and form of policy intervention has in eliciting unofficial activities and on the adjustment mechanism and the degree of competition. Thus, the implementation of an artificially high exchange rate, rent control or minimum wage legislation, may induce unofficial--if not illegal--transactions culminating in a parallel black market. Many policy actions, likewise, affect drastically the adjustment mechanism. More specifically, all attempts at controlling prices shift the burden of market adjustment towards quantities.

Furthermore, policy measures, through their differential sheltering effects, can have a major impact on the degree of competition prevailing in different product markets. For example, tariffs and quantitative measures applied to imports, to further the import substitution process, create a "protected market" in which competition is restricted. Alternatively, non-intervention of the government in the manufactured exports market may insure that the domestic export market is linked to the highly competitive "world market". (Both of these examples are discussed in 3.4).

The second nexus of elements which appears to be highly interrelated is that of technology and form of organization, economic and social attributes of actors, and cultural aspects. In this connection, based on the more detailed and specific discussion of elements in Chapter 2, the following observations appear

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<sup>5</sup>Later, successful efforts to decentralize industry into rural areas reduces the correspondence between products and location.

<sup>6</sup>Subsequently, examples of distinct market configurations resulting from different combinations of policy environment are presented, in 3.4 as they relate, more specifically, to product markets.

relevant. First, technology and form of organization are, in reality, two distinct elements which have been grouped together because they are, in fact, highly correlated as previously indicated. Secondly, the association of cultural characteristics and attributes of actors is obvious; cultural factors affect the preferences and attitudes of the actors and their status. In turn, the resource endowment of factors (in physical and human capital terms) helps to shape the prevailing culture. Thirdly, these last two composite elements strongly influence the form and nature of transactions. Where the culture is oriented towards the community (or household) and based on customs and the actors are poor, uneducated, uninformed and trying to reap a subsistence income, transactions tend to be informal and non-monetized. Alternatively, where the culture is more impersonal, and modern and the actors endowed with assets (including skills and education) and information, the prevailing mode of transactions tends to be formal and monetized. Fourthly, the two polar types of cultural environments, just described, appear highly associated with a corresponding type of technology and form of organization. Specifically, traditional cultural characteristics are associated with traditional technology and a family type of enterprise, while modern culture is associated with modern technology and unincorporated or corporate firms.

To the extent that the three composite elements, in this second nexus, are closely interrelated, any one of them could be selected as a proxy for the whole subset. In fact, technology and form of organization is a natural choice because the characteristics of this element are relatively easily measurable in quantitative terms (e.g. various indicators can be used to identify technology), and qualitative terms (different legal status of the various forms of organization are readily observed).

### **3.3 Analytical Classification Scheme for Market Configurations**

A classification framework yielding reasonably distinct market configurations, on the basis of different

combinations of elements, can now be proposed. If the transactions form the core of the market, the problem consists of grouping (or clustering) the population of transactions into a relatively small and manageable number of relatively homogeneous groups with respect to the elements. By analogy with discriminant analysis, one can consider the elements to be discriminating variables. Each element can be thought to form an axis which together define a space in a number of dimensions equal to the number of elements. Thus, in the present instance, seven composite elements have been identified i.e. five reflecting the environment, and one each reflecting the socio-economic attributes of the actors and the characteristics of the item. Conceptually, each individual transaction can be represented by a point in this space with coordinates that are the individual transactions value on each of these seven elements, to the extent that they are measurable. In the short run these elements can be taken as exogenously given<sup>7</sup>.

If the groups of transactions differ in their behavior--i.e. in terms of their characteristics--in a relatively systematic and consistent way, with respect to these elements, one can imagine each group as being a swarm of points concentrated in some portion of this space. While the groups are likely to overlap somewhat, their respective domains are presumably fairly distinct<sup>8</sup>. This means that given combinations of elements appear to be systematically associated with given characteristics of transactions and market structures. The latter are, as it were, endogenously determined on the basis of given combinations of elements. It is in this sense that transactions are shaped by given configurations.

The next step in establishing a typology of distinct market configurations, is to choose the most essential subset from the relatively large set reviewed in 2.2--namely, those elements which seem to have the greatest discriminatory power, and to be best associated with other elements. To the extent that a close

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<sup>7</sup>In contrast, elements, in the long run, are themselves affected by the operation of the market, including the characteristics of the market and of the transactions. (See Chapter 4).

<sup>8</sup>For a good description of a spatial interpretation of discriminant analysis, see Klecka, (1980, pp. 16).

interrelationship exists among subsets or nexuses of elements, one element can be selected in each subset as a representative proxy for the other elements in the corresponding subset. Conceptually, this amounts to reducing the number of axes in our multi-dimensional space. With this goal in mind, a hierarchy of elements yielding relatively distinct market configurations is formulated.

The hierarchy of elements (as building blocks) needed to identify and capture distinct factor markets differs somewhat from one factor to another, and also from the hierarchy applying to products. In other words, different discriminating schemes are called for to derive distinct configurations for products, labor, credit, land and foreign exchange, respectively. Hence, a typology of market configurations is derived independently and separately for products and for each of the four factors in the following sections. Each section presents the appropriate technical scheme, first, and follows with a discussion of the resulting typology of market configurations before highlighting the operation of a few specific configurations.

### **3.4 Typology of Product Market Configurations**

At the highest level of the hierarchy (reflecting the most discriminating elements), the endemic nature of dualism in large parts of the developing world has to be explicitly recognized. It can be argued, as we did in the introductory section 2.1, that the two most fundamental dimensions of dualism are regional and technological. The first dimension captures the dichotomy between rural and urban areas, while the second one reflects the gap between traditional technology and family or self-employed enterprises, on the one hand, and modern technology and incorporated or unincorporated firms, on the other. This two-way classification gives rise to a dual-dual framework, described graphically in Figure 2, (presented earlier) which provides the basis for the analytical scheme developed here<sup>9</sup>.

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<sup>9</sup>For a discussion of this framework, see Pyatt-Thorbecke, (1976, pp. 74-84) and Santiago-Thorbecke (198\_).

The resulting analytical scheme applied to products is shown in Figure 3, which is described next. In the first (regional) dichotomy, rural production activities can be subdivided into a) agricultural and mining, and further subdivided into staple food and non-staple food; and b) industry processing, and services. In turn, urban production activities might best be broken down into private services (subdivided into salaried vs self-employed); and private industry (subdivided into tradeable vs non-tradeable goods). Finally, the government activities--embracing the market for government goods and services-- which overlap urban and rural areas are considered separately.

With regard to the second dichotomy, it was seen in the preceding subsection that technology and form of organization, as a composite element, is relatively highly associated with the socio-economic attributes of actors and cultural aspects and can, therefore, be used to reflect these two other elements as well. At a lower hierarchical level, the impact of the policy environment is incorporated. Typically, agricultural commodities tend to be discriminated against through a variety of government policies. Food prices are usually regulated by the government and maintained at a level below the world (import) price. The reasons for this have been discussed in 2.2.4.4, and included the desire by the state to provide cheap food to urban workers and capture an agricultural surplus by turning the terms of trade against agriculture. In the case of export crops, many countries rely on state monopolies (i.e. commodity boards) that domestic producers have to sell to. The "stabilization prices" offered by these boards are normally below the world price, which, again, leads to the state squeezing out part of the agricultural surplus. This type of discrimination (which could be called negative sheltering) by the state invites the establishment of parallel markets, respectively, for food and smuggling of export crops (i.e. selling illegally abroad by circumventing the commodity boards). In this sense government intervention in these two markets yields four distinct market configurations (i.e. food crops (official vs. parallel) and export crops (official vs. parallel)).

Figure 3. Market Configurations for Products<sup>1</sup>

		Technology and Form of Organization and Culture				
		Traditiona Technology and Family or Self-Employed Enterprises			Modern Technology and Incorporated or Unincorporated Firms	
		Negative Shelter Policy Discrimination			Non-Sheltered or Negative Shelter	Sheltered
		Intra-Family	Inter-Family			
R U R A L	Agriculture and Mining	Mainly Staple Food	Family-Farm System	Domestic Food Market <sup>2</sup>		
		Non-Staple Food	Family-Farm System	Cash Crops and Export Market <sup>3</sup>		
	Industry, Processing Services		Rural Informal Market		Rural Formal (same configurations as below)	
U R B A N	Private Industry	Tradeable	Urban Informal Market		World Market	Protected Market <sup>3</sup>
		Non-Tradeable			Regulated Market	Subsidized Market <sup>3</sup>
	Private Service	Self-Employed			Unlikely	Air-Conditioned Market <sup>3</sup>
		Salaried				
Government				Market for Government Goods and Services		

<sup>1</sup>Shaded areas represent very unlikely (atypical) combinations of elements. It can therefore be assumed that no realistic market configurations are likely to be shaped by these combinations. For example, in very few developing countries is agriculture sheltered. Hence the shaded area in the boxes at the intersection of agriculture and "sheltered".

<sup>2</sup>Each of these market configurations are likely to be subjected to negative sheltering, i.e. discriminatory treatment by the government through official prices being set below world prices, i.e. negative protection. This leads to excess demand and the appearance of a parallel market next to the official market.

<sup>3</sup>Each of these market configurations enjoy government protection through such measures as tariffs and quantitative restrictions on imports, credit or fiscal subsidies and licensing and other barriers to entry. The resulting distortions invite parallel markets (e.g. through smuggling).

Products relying on modern technologies and forms of organization outside of agriculture may be either "sheltered" or "non-sheltered". The confrontation of the degree and type of policy intervention with certain product characteristics, such as the nature and sectoral origin of the product, and whether it is tradeable or not, yields an operationally useful delineation out of which a set of distinct market configurations can be derived, as Figure 4 illustrates. Thus, six distinct non-agricultural market configurations are identified, i.e. "protected market", "sheltered market", "world market" two types of "regulated markets" and the "informal market".<sup>10</sup> Here again, commodities and services that enjoy a favorable treatment by the government through such measures and tariffs and quantitative restrictions on imports, credit and fiscal subsidies, and licensing and other barriers to entry set the stage for the appearance of parallel markets. This means that each of the first three of the above market configurations is likely to give rise to an official and a parallel configuration.

A final distinction--applying only to the traditional complex--which is introduced next relates to the nature of the relations among actors, i.e. more specifically, whether the transactions are generated within a family (household) or among families. The rationale for this distinction is to be able to analyze the border type market constituted by the family farm system, as a relatively self-contained producing and consuming unit, and part of the informal sector. The intra-family transactions--even though more "virtual" than real in the sense that exchange, by our formal definition, requires different sets of actors to operate on the two sides of the market--can be considered to be generated within a pseudo-market. The continued existence of this configuration, on a large scale in the Third World, can largely be explained by the much lower transaction costs which prevail within a family type organization than within an alternative market configuration.

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<sup>10</sup>Those are all examples of market configurations. Note that if another product characteristic had been used in Figure 3 to identify different configurations, i.e. asset specificity this would have yielded the identification of some non-market configurations.

Figure 4. Example of Interrelationships among Policy Environment and Product Characteristics in Non-Agriculture in Shaping Different Product Market Configurations and Resulting Transactions and Market Structures

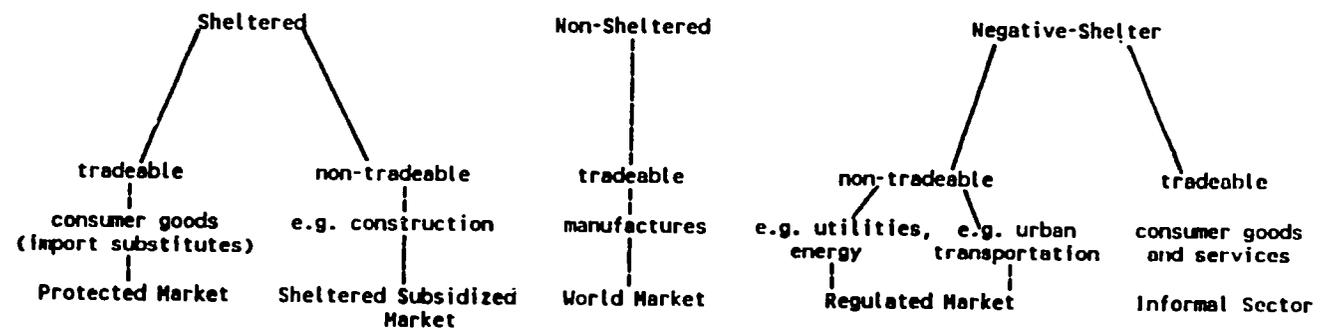
1. Elements

1.1 Policy Environment

1.2 Product Characteristics:

- a. Tradeable/non tradeable
- b. Type of product or sector

1.3 Resulting Market Configuration



2. Characteristics of Transactions and Markets

2.1 Official vs. Unofficial	official and unofficial	official and unofficial	typically official	official	official and unofficial	official and unofficial
2.2 Degree of Competition	low, often dominated by "Group"	low	high	low, often natural monopoly	often excessive competition	often excessive competition
2.3 Adjustment Mechanism	quantity	quantity	price and quantity	quantity	quantity	price
2.4 Size of Market	restricted	restricted	large	restricted	large	large

Furthermore, the evolution from an inward-looking, self-contained and subsistence type family farm system to an outward-looking one, increasingly oriented to producing for the market, is crucial to an understanding of the operation of agricultural markets.

The following observations are useful in insuring that Figure 3 be properly understood and interpreted. First, a number of reasonably distinct product configurations is identified and two of these configurations are analyzed, in detail, subsequently. The present discussion is limited to a few general comments about them to illustrate the operational usefulness of the analytical scheme and framework in capturing different configurations. Secondly, the dual-dual delineation (i.e. the contrast between rural and urban areas and between traditional and modern technologies and forms or organization) is shown graphically by two sets of double lines in Figure 3. Finally, it should be noted that the hierarchical classification scheme embodied in the general framework of Figure 3 defines different product market configurations, mainly according to the characteristics of the producers or suppliers. On the other hand, it will be seen subsequently that some of the same characteristics help identify distinct factor markets configurations, essentially from the user's demand side. This follows from the fact that the demand for factors is derived from the demand for products, and that the structure of production determines specific factor demand patterns. However, characteristics of the suppliers may also be critical in giving rise to different factor market configurations. Thus, in the case of credit, whether lenders are registered or unregistered; intermediaries or direct lenders, affects the boundaries of markets. Likewise, skill and educational level--which is an important characteristic of suppliers--may be crucial to defining different labor markets.

Following these qualifying remarks, Figure 3 can be described very briefly to illustrate the taxonomic usefulness of the general framework. Starting with rural areas, the configurations which have been identified are: a) the family farm system; b) the domestic food market which, on the supply side, is made up of two very

different sources, i.e. the marketable surplus of the family farms and the commercial food production of (large) farmers in those countries, where a bimodal food production structure prevails; c) the market for cash and exports crops;<sup>11</sup> d) the rural informal market; and e) the rural formal market (again, depending on the specific conditions which exist, the latter could embrace the same configurations as in the urban areas listed under b) below).

The intra-family farm system, in its purest form, would not be considered a market since the "transactions" are of a barter type and occur within a family (i.e. the same actors are involved on both sides of the "market"). However, in reality, it is almost impossible to find a case of pure subsistence farming. Even very small farms sell a part of their output, so that within the family farm system, decisions have to be made by household members regarding the distribution of output between self-consumption and marketed surplus<sup>12</sup>. The intra-farm household market configuration is thus closely connected<sup>13</sup> with an other configuration i.e. the commercial food market in which the marketable surplus is sold, even though this market might be dominated by larger farmers using modern techniques<sup>14</sup>.

In the urban areas the major configurations which appear are a) the urban informal sector; and b) a number of configurations characterized by producers relying on modern technology and form of organization, but subject to different types of government intervention, such as world market, regulated

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<sup>11</sup>In turn, both the "domestic food" and "export crops" market configurations are likely to be split up into an "official" and "parallel" segments.

<sup>12</sup>By analogy, an intra-family labor market can be visualized as one within which decisions regarding the family labor time allocation to production on the farm, as opposed to leisure, and off-own farm activities are reached.

<sup>13</sup>Close connections between markets are shown in Figure 3 by way of broken lines.

<sup>14</sup>In some countries traditional farmers (small holders) produce cash crops (e.g. tea and coffee) and, hence, the same broken line would have to be drawn in the cash crops market as well.

market, protected market, sheltered market,<sup>15</sup> and the so-called "air conditioned" market, which consists mainly of modern services. The market for government services completes the list of configurations appearing in Figure 3.<sup>16</sup> Two of these configurations, and their corresponding market structures (the commercial food market and the farm-household pseudo-market), are analyzed in detail in the next section.

#### **3.4.1 Domestic Food Market Configuration**

(to be inserted)

#### **3.4.2 A Prototype "Pseudo-Market" Configuration: The Family Farm**

Particularly in developing countries, a great deal of economic activity occurs among family members. Many production and consumption transactions occur within the family structure. The family farm is a common form of organization, on the production side, and meets many key consumption demands. As such, in this section, we explore the family farm as an example of a "pseudo-market" configuration. The farm household must reach decisions regarding a) what and how much to produce for home consumption and for the market; b) what and how much to consume; and c) how should family time be allocated to different activities such as on, and off farm employment and leisure. Many of the resulting transactions are virtual - implicit exchanges among the same actors on both the demand and supply side. A complicating factor in analyzing behavior within the household farm is that transactions in product and factor (particularly labor) markets are jointly and interdependently determined. For example, there is an implicit exchange of labor by household members working on-farm for present and future food consumption.

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<sup>15</sup>Here again, each of the last three markets are likely to give rise to an "official" configuration and to a "parallel" one.

<sup>16</sup>In this instance, government is a producer of government goods and services.

Within the framework of analysis suggested earlier, certain key elements can be used to explain this "pseudo-market" configuration and the virtual transactions which result. Four fundamental points which must be addressed are 1) what products and factors are supplied and demanded within the family farm configuration?; 2) why does the exchange occur within this "pseudo-market" configuration rather than outside the family structure in other markets?; 3) what are the key elements delineating this configuration, and what are the characteristics of the transactions that occur?; and 4) can the framework help explain why virtual transactions among family members are more frequently observed at an early stage of economic development rather than at a more mature stage?

#### **3.4.2.1 Key Items**

An overview of the key items exchanged within this "pseudo-market" is presented below. The items are both factors and products.

**Labor - On-farm:** The family farm flourishes on small, rural farms that are cultivated with traditional, labor-intensive technology. The family farm is able to respond to the difficulties of supervising workers. It is an organizational solution to problems associated with monitoring workers whose efforts can not be easily measured. The family structure is likely to predominate when cultural factors lead to an environment where the family structure is stable and there is a degree of trust among family members. The technology used must also yield a relatively small efficient size of production, in order for labor needs to be met within the family. Traditional agricultural technology fulfills this requirement.

**Product - Staple Foods:** One of the most crucial commodities provided by the family farm is staple food crops. Low income, subsistence households depend on own production for essential nutritional needs. The interpersonal relationship between the actors (family members) guides individual behavior in support of

a common goal of survival. Cultural factors can play a very important role in determining the pattern of food distribution among household members. It is in part cultural patterns that determine the degree of bargaining power that each household member possesses.

***Other Labor Services and Products:*** Again cultural factors may be important in determining which activities certain family members are expected to perform. Child care, cooking, other household services are frequently provided within this "pseudo-market."

***Insurance***<sup>17</sup>: There are two main types of insurance to consider. First, the family provides a form of pension system (or old age insurance) with older family members receiving support from their children in exchange for care received when young. There is an intertemporal dimension to this type of insurance which requires a relatively stable family structure. It is only when cultural norms create an incentive to maintain this intertemporal relationship that the family can effectively provide this type of insurance. Second, by tying together the production and consumption of essential foodstuffs, the family is able to provide some insurance against state contingent uncertainty. As the producer of food staples, the family farm is able to guarantee family members first priority in the use of the good produced. Crops are sold in the market only once basic family needs have been met<sup>18</sup>. Hence, even in cyclical downturns, the family as a producer can ensure some level of nutrition to the family as a consumer. If the production and consumption decisions were made

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<sup>17</sup> Pollak (1985, p. 590) discusses the role that the family plays in the provision of insurance.

"As a provider of insurance, the family has three important transactional advantages over the market or the state. First, adverse selection is limited because outsiders cannot easily join the family nor can insiders easily withdraw. Second, information disparities between individuals and their families are generally smaller than those between individuals and nonfamily insurers....Third, both family loyalty and cultural norms limit opportunistic behavior."

He also discusses the disadvantages of the family.

"First, conflicts originating in personal relationships can impinge on the insurance arrangement....Second, it is difficult to make objective and dispassionate evaluations of risk....Third, because the family or kin group is relatively small, risk cannot be spread widely enough to realize fully the advantages of insurance."

<sup>18</sup> This means that the preference function of the farm household might take a lexicographic form.

independently, the family would be more vulnerable to adverse (potentially life threatening) conditions during periods of drought or crop failure.

### **3.4.2.2 Participation in "Pseudo-market" Configurations versus Market Configurations**

The second point raised asks why exchange of the above products and factors occurs within the family structure rather than in markets. If the exchange is unilaterally imposed, say, by the household head requiring a family member to work on-farm, the configuration is no longer a "pseudo-market" but resembles more closely a command economy. Instead, a more realistic setting is that of a bargaining model where different family members have different degrees of bargaining power.<sup>19</sup> Elements related to the endowment of actors and cultural help determine the negotiation set available to each family member. Given this type of setting, there are indeed virtual (implicit) transactions. Since the objective is to economize on transaction costs, the family structure must have a lower level of these costs than markets, in order for the given set of exchanges to occur within the family, rather than in the distinct market configurations associated with products and factors. In 3.4.2.3 below, elements that are key in determining situations in which the family offers the low cost alternative are identified.

A final note on this topic, the family farm is not isolated from the rest of the world. Family members are actors in other configurations. Crops and labor services are sold outside the family farm. In fact, one of the important decisions made within the family is to determine the allocation of products and factors to the family farm and to markets. Thus, the marketable surplus generated by family farms is an integral part of the supply appearing in the domestic food configuration discussed previously. The conditions of the markets

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<sup>19</sup> There is an extensive literature on modelling family decision making. A brief overview is found in Pollak (1985, pp. 594-605.) He makes a case for using bargaining models, arguing that "[b]ecause bounded rationality precludes complete long-term contracts which specify intrafamily allocations under every possible contingency, intrafamily allocation must be dealt with in an adaptive, sequential way -- in short, through bargaining." p. 605. For an enlightening analysis see Sen (1984, Chapter 16).

outside the family influence the decisions made within the family. Market conditions form an important part of the environment in which this "pseudo-market" operates. For example, the decision to apportion labor between work on and off the family farm depends in part on labor market conditions. Factors such as the remoteness of the rural location may limit employment opportunities outside the family structure. Also the synchronicity of demand for labor on the farm and regional labor needs may also limit the scope of participation in labor markets. In a setting where the derived demand for labor comes almost exclusively from agricultural production, there is limited flexibility to serve both family and market demand.

#### **3.4.2.3 Key Elements and the Transactions They Determine**

The above discussion of items provides an indication of some of the important discriminating elements that define this configuration. It was seen how the technology employed is an important element. In order for production needs to be adequately met through the family, the technology should offer a small, minimum scale of efficiency. Since the family is relatively well endowed with labor rather than capital, the production technology should rely on labor intensive techniques. Traditional agricultural techniques fulfill the above requirements; and indeed family farms are one of the most frequently observed production units in the Third World. Supplying labor from within the family is not very restrictive given the above technology. While technological considerations explain the operational feasibility of a family farm, other factors related to the characteristics of labor help to explain why small farms are more effectively run by family labor than with labor purchased in the marketplace. Hired labor has a strong incentive to shirk, especially in agricultural production where it may be difficult to monitor the level of effort exerted. As long as there exist cultural conditions under which the family is a cohesive, trustworthy unit, there is less incentive to shirk. As Nabli and Nugent (1989, pp. 53-54) indicate in a discussion of the *raison d'être* of the family form of organization:

"Family members tend to share information about each other to a greater extent than other non-rated individuals, ... reports about inappropriate behavior and malfeasance both travel faster and are dealt with more seriously... within families than between them. For this reason family member partners could be trusted to a greater extent than non-family members partners, thereby reducing the need for costly internal monitoring of one agent by the other. Furthermore, the importance of family farms and businesses is further strengthened by the absence of an adequate market for insurance because of asymmetries of information."<sup>20</sup>

Since the resulting labor transaction is virtual (the supplier and demander of labor are in fact the same individuals) the costs which arise in the market place from asymmetries of information are removed.

The resource endowments of actors in this "pseudo-market" are modest; the bulk of subsistence needs are met through own production. Any reduction in the food available for own consumption could have devastating effects. As such, the actors in this configuration are likely to be highly risk adverse. In fact, the family may be willing to accept a lower mean income over time if it is associated with lower variance. There is a reluctance to choose an option (such as technology) which entails a risk that some of the outcomes would yield an income below the subsistence level. By tying production and consumption transactions, state contingent uncertainty faced by the family can be minimized. For example the effect of a low crop yield can be mitigated when the family is treated as a "favored customer." The family, as a consumer, receives its subsistence needs before the family as a producer sends any commodities or factors to market.

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<sup>20</sup>The following quote is revealing in this context:

"Consequently, households are likely to have to resort to protect themselves against such risks through the practice of both horizontal and vertical extension of the household. Horizontal extension, ....., may permit resource complementarity and specialization of activities within the family just like greater firm size does with respect to firm. Vertical (intergenerational) extension....., on the other hand.... also reduces risks, especially those of incapacity during old age. The inter-generational extension of the household can be interpreted as an implicit insurance contract between generations...." (Nabli and Nugent, 1989, p. 55)

The key elements which define the operation of this "pseudo-market" configuration include the following:

Item	Actors	Environment
Diverse items traded: Labor, Land, Credit, Products Homogeneity of specific items: ex: unskilled labor, staple foods Monitoring labor efforts difficult Staple Foods essential to survival	Same individuals on the supply and demand sides Endowments of family and individuals, low Degree of Risk Aversion, high Complementarity of Labor Skills among actors	Cultural Factors, Customs Technology

When the family unit's decision making process is viewed as a type of bargaining model, outcomes hinge on the bargaining power of each family member. The actual transactions that emerge depend on the negotiation set of each family member. The elements that define the negotiation set of each individual family member include cultural factors, individual resource endowments and the family's resource endowment as a whole.<sup>21</sup>

The transactions which result are characterized by a number of important features. (See Ben-Porath, 1980, p.3) The transactions cover long time periods. For example, trade of on-farm labor during planting seasons for food once the crops are harvested, covers an exchange of many months. Exchange of child care services for support during an individual's, non-productive, older years requires an exchange spanning decades. A wide variety of economic activity is covered in this configuration. Goods and services, labor, credit, and land are all exchanged. These transactions are highly interrelated and occur frequently. Terms

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<sup>21</sup>Schultz, (1990) concluded on the basis of an empirical study of Thai households that females who brought a dowry into a marriage status had greater bargaining power than those who did not.

"If nonearned income is assumed to be a proxy for bargaining power of the person who owns or controls that income, then the empirical results obtained here for the Thai population in 1981 imply that women with more 'bargaining power' prefer to increase their own consumption of leisure or time in nonmarket activities. Correspondingly, these same women prefer to have more children, though this conclusion is more qualified,..." (p. 16)

of transactions are generally in-kind rather than monetary and often of an implicit barter type. Because of the scope of time covered, the diversity and frequency of transactions, and the nonmonetary terms, the conditions of the transactions are not precisely specified nor is there an explicit balancing of exchange. In alternative market configurations, the cyclical nature of agricultural production leads to substantial price and wage movements over the course of a year; transactions are designed so that individuals are responsible for all debts within specific time periods. The flexibility offered within the "pseudo-market" is not available. Enforcement of these implicit contracts are internal to the family. Also, the transactions are specific to the family. The implicit exchange agreements are non-negotiable; they can not be transferred outside the family.

It is evident from the above characteristics of transactions that the contracts which result are necessarily incomplete. Williamson (1985) points out that when "all contracts within the feasible set are incomplete" it is crucial to systematically study "the structures that facilitate gapfilling, dispute settlement, adaptability, and the like." (p. 139) Above, we have found that family structure can effectively fill contractual gaps, settle disputes, and adapt to new conditions in situations where there is a high degree of loyalty and altruistic behavior among family members. Cultural factors play an important role in this determination. When it is difficult to monitor the effort of labor, virtual transactions also reduce informational asymmetries, thereby making families a useful forum in which to form contracts. However, the family does not always provide an effective medium in which to correct the deficiencies of incomplete contracting; the type of "pseudo-market" configuration discussed above also has limitations. These limitations include the increase in transaction costs associated with the possibility that conflict in nonproductive sectors may spill over into production. The high degree of interdependency of transactions makes this more possible in the type of configuration discussed above. Family members may also be more tolerant of slack behavior within the family than if the labor had been hired. The pool of talents within the family is limited; if technology is advanced, the family may not be

able to take advantage of economies of scale resulting from economic progress. Noting these advantages and disadvantages<sup>22</sup>, one can begin to address the last issue raised: why are virtual transactions observed more frequently at early stages of economic development?

#### **3.4.2.4 Evolution of the Role Played by the Family Farm**

An interesting observation is that "[t]he range of transactions involving family members has narrowed with modernization." (Ben-Porath, 1980, p.9) The "pseudo-market" of the family farm becomes less important in terms of the range and quantity of goods and services provided.<sup>23</sup> One can explain this occurrence by observing which key elements change in the development process. Two such key elements are related to technology (environmental element) and the degree of an individual's risk aversion (characteristic of actors).

First, consider the impact of modernization in the context of increased technological complexity. The family may now be severely hindered in its ability to utilize new technology. The family can not take advantage of economies of scale or advanced technology that requires specific labor skills that are unavailable within the family. Hence, as an economy evolves from an early to mature stage of development, the family farm becomes less viable and less prevalent.

A second change which occurs with economic development is the level of risk aversion actors face with respect to state contingent uncertainty. At subsistence income levels, any reduction in income could result, at the extreme case, in death. Individuals can be expected to be highly risk averse. However, once a basic level of income is assured, the degree of risk aversion declines. Tying production and consumption

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<sup>22</sup> See Ben-Porath (1980, p.3) for an detailed description of the costs versus benefits of a family governance structure.

<sup>23</sup> Pollak (1985) also makes the observation that "[t]he relative decline of family-based economic activities in advancing industrial societies may reflect a shifting balance between the importance of their characteristic advantages and disabilities – a secular movement from low-trust and simple technology environments favoring family governance to high-trust and complex technology environments favored by nonfamily governance." (p. 594)

decisions becomes less critical. It is apparent that the values which key elements take are critical in determining the importance of the type of "pseudo-market" configuration discussed here. While the evolution of market configurations will be discussed in more detail in the next chapter, it is apparent from this example that, as the values of key elements change in the course of economic development, the prevalence and diversity of transactions occurring within this configuration will diminish.

### **3.5 Typology of Labor Market Configurations (to be inserted)**

### **3.6 Typology of Credit Market Configurations**

An understanding of credit markets in developing countries is important for a number of reasons. First, credit facilitates growth by encouraging the accumulation of productive capital goods through its role of savings allocation. Second, credit serves as an inter-temporal bridge. It is apparent, however, that there is a diverse range of credit transactions in developing countries. One observes multinational banks providing loans to sophisticated enterprises, as well as family members rendering loans, in kind, to relatives for special occasions such as weddings. A policy maker needs to understand the type of credit transaction that emerges from each configuration in order to evaluate methods of improving the operation of credit markets, which is crucial to growth and development. Using the methodology suggested in this manuscript, the market configurations for credit (based upon the characteristics of the actors, the environment, and the item traded—credit) are delineated. The selection of key elements is discussed with reference to how these elements combine to form given configurations that endogenously determine specific types of credit transactions. Finally, we will see how interventions which change the values of certain elements may lead to perverse effects given the other elements in the market configuration.

Characteristically, in a loan contract one party grants full right of use to a commodity, or a sum of money, in return for a claim maturing at a later date. The contract spans a period of time, so the question naturally arises whether the borrower will eventually honor the claim. Further--and in contrast to rental contracts where the good concerned remains essentially intact--the item lent may be transformed: it may be consumed or spent on an investment or a production input. So, the risk to the lender is considerable and a transaction will only come about if the borrower can inspire a minimum degree of confidence. These characteristics of the item traded, combine with elements related to the environment and actors to determine market configurations.

Environmental elements which feature in the typology of credit markets include the urban-rural dichotomy. The set of government policies related to credit (such as interest rate ceilings, subsidies, rationing, degree to which regulations are enforced) also feature as a critical environmental element. Cultural factors come into play in two ways. First, the cultural environment serves as a constraint on the behavior of actors. For example, in an Islamic community, religious convictions would preclude an actor from charging a fixed predetermined remuneration. Also, the cultural environment delineates a set of loans which are made for social reasons. The motivation for these "social loans" is to promote community or family solidarity. This section concentrates on credit offered for economic (profit seeking) reasons; however, the market configuration for social loans can be delineated by the same type of elements.

Elements related to actors are perhaps the richest in terms of delineating credit configurations. Both the nature of the actors as well as the interrelationship among actors are important. Actors can be either borrowers, direct lenders, or intermediaries. The latter may be either officially registered as dealers in claims (operating within the legal environment) or unregistered. Borrowers possess different levels of collateral. The relationship between the borrower and lender determines the level of personal information shared between

the two.

The key elements upon which attention is focused are:

Item	Environment	Actors
Value of claim Time bridge Transformation permitted Consumption-Production Type of loan Monetary - In Kind	Urban-Rural Legal Setting Cultural Constraints	Borrower: Resource endowment (with or without collateral) Type of use: consumption or production Lender: Direct-Intermediary Registered-Nonregistered

Next, we explore how the elements specified above interact within the market configurations to give rise to specific types of transactions. Loans are made for both productive and consumptive purposes. Frequently, consumption loans are made for social rather than economic reasons. However, consumption loans are also made for economic reasons. There is a fair amount of risk centered around repayment of such loans, since they are not used to generate income. Two main types of transactions emerge. If an actor has sufficient resource endowments, he can offer collateral as a guarantee of repayment. Terms of the loans should be relatively favorable. If a borrower does not have collateral, the terms of the consumption loan are often linked to transactions in other factor markets. For example, a landlord may provide a consumption loan to a tenant for an increase in the labor which that tenant supplies during harvest season.

The rest of this section focuses attention on productive loans. The major credit configurations for productive loans are demarcated in Figure \_\_. The main dual-dual framework that emerges is based on the dichotomy between urban and rural areas and the distinction between lenders, who are official financial intermediaries and other lenders. These elements have been selected because of their strong discriminatory power. First, the urban-rural environmental elements tell us the sector of destination of a given loan.

FIGURE \_\_  
 Market Configurations Credit: Economic Loans for Production

				TYPE OF ACTORS	
				ACTORS OTHER THAN OFFICIAL INTERMEDIARIES	OFFICIAL INTERMEDIARIES
PHYSICAL LOCATIONAL ENVIRONMENTAL	URBAN	CHARACTERISTIC	\$	URBAN UNOFFICIAL CREDIT MARKET	URBAN OFFICIAL CREDIT MARKET
			INKIND	UNLIKELY	
	RURAL	ITEM	\$	RURAL UNOFFICIAL CREDIT MARKET (*)	RURAL OFFICIAL CREDIT MARKET
			INKIND	UNLIKELY	

Registered refers to lenders who operate within the legal environment. Nonregistered lenders operate outside the legal framework.

Note that socio-economic characteristics of the actor may limit that actor's ability to participate in a given configuration. For example, participation by a borrower without collateral to insure the loan would be restricted in those configurations delineated by intermediation.

Productive loans in rural areas are used almost exclusively for agricultural production; while such loans in urban areas are used in the manufacturing or service sectors. Since the agricultural sector is subject to seasonal fluctuations, demand for credit in rural areas shows a strong periodicity, such that loanable funds may be tied up during one part of the year, while lying idle during the other part. Also, loans in rural areas tend to be for the same purpose; consequently, it is difficult for a lender to spread risk through a diversified loan portfolio. In rural areas, community ties tend to be tighter. Actors are aware of the reputation of other actors in the market. Personal integrity is generally a sufficient collateral upon which to grant credit. Additionally, the closer ties among community members, in a rural area, lead to a greater degree of inter-linkages between credit and other factor transactions than in urban areas.

The second crucial distinction is whether a loan is made through official, financial intermediaries or other actors (primarily direct lenders). Financial intermediation allows the pooling of funds, and hence slackens restrictions on the size of loans available and the duration of loans; it also removes the restriction that the supplier and user of the funds be in close physical proximity. On the other hand, if there is no intermediation, the size and duration of loans are restricted by the preferences of the individual lenders; the lender and borrower must be in close physical proximity to facilitate the loan. Financial intermediaries can diversify the loan portfolio; and by diversifying risk, terms offered can be better than those of direct loans. Also, the greater flexibility of terms that a financial intermediary can offer makes such loans, in general, more attractive. However, an intermediary frequently has no personal relationship with a potential buyer. Collateral is thus required by the intermediary to insure repayment of a loan. Consequently, only actors with a sufficiently large endowment are eligible for intermediated loans.

One may also observe that there is a lesser degree of financial sophistication during earlier stages of development. In rural areas, the dominant source of credit is frequently direct loans. Financial

intermediation is more prevalent in cities than rural areas at early and middle stages of economic development. There is also less likelihood that government regulations will be enforced in remote rural areas as compared to cities. The majority of rural credit will be extended by unregistered lenders (lenders operating outside of the official, legal framework). In urban areas, however, both registered and unregistered lenders may flourish. There is a strong correlation between unregistered and direct lending. However, while almost all registered agents are intermediaries, there are intermediaries who are not registered agents.

Officially registered intermediaries are subject to the rules issued by the monetary authorities and are therefore required to maintain a complete administration. This requirement has several consequences. First, due to administrative costs, small loans are not economically interesting. Secondly, contacts with clients have a formal nature and clients must be literate. Thirdly, supervisors require objectively valued collateral. Reputation of clients does not count heavily for eligibility to official loans.

In the literature on credit markets in developing countries, the terms formal and informal credit markets are frequently used. These terms are inherently ambiguous; to avoid confusion, we choose the distinction of loans made by official, financial intermediaries as opposed to other actors as a more precise characterization of "formal" and "informal" credit markets, respectively. The nature of the legal restrictions and the degree to which the legal code is enforced will influence the relative size of registered versus unregistered lending.

On a finer level of distinction, we must also consider whether loans are in kind or monetary. Loans in kind are made almost exclusively by unregistered agents; it would be difficult to establish or enforce regulations for such loans. Often the lender and borrower have a long-standing relationship and/or the loan is made in conjunction with other transactions. For example, a wholesale fabric dealer lends bolts of material to a trader that he regularly does business with or a landlord lends fertilizer to a tenant in return for a portion

of the crops produced. The nature of such loans also makes intermediation difficult. Money, however, is easily dealt with by intermediaries. The fungibility of money makes such loans far more flexible.

The key elements specified give rise to four distinct configurations in Figure \_\_. A brief description of these four configurations is followed by a more in-depth consideration of the transaction that is endogenously determined in the configuration related to unofficial, rural credit.

*Official, urban credit market configuration:* Lenders are usually government sources or other registered intermediaries. Borrowers must have collateral and, in many cases, must meet certain government specified criteria (such as produce certain types of goods) and/or have personal influence in order to participate in the configuration. The relationship between the actors is formal. Terms of the loan are spelled out in specific contracts.

Loans are generally for productive purposes. The fact that the loans are monetary, however, offers some degree of fungibility. Government policy is important in determining which actors have access to loans in this configuration. Policies such as interest rate ceilings make loans from this sector relatively attractive. Quantity rather than price clearing is observed. As a result, some potential borrowers are not able to receive loans in this configuration; rationing results. There are few inter-linkages among the transactions emanating from this configuration and other transactions.

*Official, rural credit market configuration:* The three main types of institutions active in rural official credit markets are privately owned banks, state banks and cooperatives. Private banks are motivated by profit; state banks are used as an instrument to promote specific government objectives; and cooperatives seek to promote the interests of the end user. Producers in the agricultural sector (usually large farmers) are the main actors on the demand side. Because of the cyclical demand for credit associated with the seasonality of agricultural production and the lack of diversity in the uses of the credit, rural areas are not

attractive places for private banks to make loans. Hence, the principal players are generally state banks and rural cooperatives.

Loans are generally offered at very favorable terms. Again, credit rationing is observed. Political influence of the end user and specific criteria of government policy will frequently determine which borrowers' needs are met. While most loans are monetary; in the agricultural sector, loans in kind are also feasible. While the relationship between the actors tends to be formal, interpersonal relationships, particularly in credit cooperatives, do play a significantly more important role than in the official urban credit configuration. Additionally, collateral requirements are generally less stringent. As with urban, official markets, there is little inter-linkage among different transactions.

*Unofficial, urban credit market configuration:* Because of the relatively favorable conditions which the urban environment provides, financial intermediation is a more common phenomenon in this configuration than in its rural counterpart. There are countries where financial intermediation must be official in order to be legal; in others, however, unregistered financial intermediation is legal as long as certain regulations are met. In addition to unofficial intermediaries, direct lenders are the other key actors on the supply side. On the demand side, the main actors are generally those without access to the official sector. There are also industrialists and traders who have access to bank loans but, nevertheless, choose to apply for loans in this configuration because the process takes less time and carries a lower transactions cost or because they are victims of credit rationing in the official market. This type of "curb market" which has been extensively described in the literature flourishes in many countries.

Loans are both in kind and monetary. It is likely that there is a fair amount of inter-linkages among transactions for various factors and products. As the level of inter-linkages increases, the relationship between the actors becomes less formal. Knowledge of personal attributes and reputation becomes more

available, and this information can serve as a substitute for formal collateral requirements.

*Unofficial, rural credit market configuration:* Finally, let us consider in more detail the type of transaction that emerges in this configuration, marked by (\*) in Figure \_\_\_. The item traded is credit for both production and consumption--though we concentrate on the demand for productive purposes here. Production is almost exclusively in the agricultural sector. The demand for credit tends to be related to the cyclical nature of agricultural production; working capital needs are particularly high in certain seasons which tend to coincide with periods where personal savings are depleted.

Borrowers in this configuration are relatively homogeneous. They are small farmers and landless workers with low income levels. Providers of credit are more heterogeneous, however there is little participation by financial intermediaries. Employers/landlords and moneylenders are the chief actors of the supply side. In the case of employers or landlords, there is a pre-existing relationship between the borrower and lender; a great deal of inter-linkages with transactions in other factor markets is observed. Usually, the lender is willing to accept a fairly high degree of risk associated with default on the loan in return for higher potential earnings. Thus, interest rates are high in this configuration. Local knowledge enables suppliers to make loans based on personal knowledge and relationships. Since the lender's knowledge of the local environment is crucial, a given lender tends to provide credit in a small area; there are diseconomies of scale associated with monitoring personal behavior. Since lenders have substantial local knowledge, formal contracts are not required.<sup>24</sup> The fact that most borrowers lack collateral is not a constraint as information is used as a substitute.

The inter-linkage of credit transactions with transactions for other factors deserves special mention.

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<sup>24</sup>In any case one or both parties may lack the necessary skills to prepare a formal instrument describing the transaction. It has often been argued that the apparent preference that many borrowers in developing countries have for dealing with money lenders can be attributed to this consideration. The highly personalized and informal nature of the resulting transaction minimizes transaction costs.

A common inter-linkage occurs when landlords make loans to their tenants. The tenancy contract acts as a catalyst for the credit contract. Not only has the landlord/lender already scrutinized the tenant/borrower prior and during the first contract, he can also secure rather easily repayment of the loan. This arrangement economizes on transaction costs. These inter-linkages often serve to cement personal relationships and hence help to overcome the fact that there are incomplete financial markets in rural areas. Also, linkages facilitate credit transactions in non-monetized areas. These inter-linkages, however, may also reinforce market imperfections; they may be used as a means of circumventing cultural or government restrictions on the terms of loans.

In rural areas, the demand for funds is related to the agricultural cycle. Thus, the demand for credit is cyclical. Also, there is a high degree of risk related to weather patterns and crop failures. An entire community is likely to be similarly affected. These two factors combine to require high interest rates. While government policy has little direct impact on this configuration, it does have an indirect influence. Eligibility criteria for participation in the official, rural credit markets in effect determine which actors are excluded. Actors excluded from the official sector must seek loans in this configuration.

In summary, transactions in this configuration are localized, personalized and verbal. There is little competition among unofficial lenders or between unofficial and official lenders. Transaction costs consisting of expenses related to contract enforcement, information gathering and collection are nontrivial. High interest rates reflect transaction costs, risk associated with loans made without collateral, cyclical usage of funds, and the monopoly power of lenders. There are few formal contracts; and the extensive inter-linkages with other transactions may obscure some of the implicit costs of the loan.

It is important to understand that intervention in a given configuration is likely to have an impact on the remaining configurations. At times, the effect of a given policy change may lead to perverse effects. For

example, consider the impact of liberalizing the official credit market. Interest rate ceilings may be lifted under the argument that this will promote increased lending in the official sector. Indeed, funds are drawn out of the unofficial sector and into the official sector as interest rates increase. However, participation in the official market places a number of requirements on demand-side actors. Foremost, users of credit must have collateral. Hence, it is likely that the increased lending will go primarily to the same borrowers as those previously served. Some new borrowers may be served as the rationing constraint is relaxed, but these newly served actors will have the same characteristics as those who previously benefitted. Hence, low income borrowers without collateral must continue to compete for loans in the unofficial sectors. However, the pool of available funds in this sector has been reduced; credit necessary to growth in certain "marginal" industries may be severely dampened, with a corresponding deleterious impact on income distribution. A major implication of the above process is that financial liberalization is likely to affect different sectors and actors very selectively.<sup>25</sup>

### **3.7 Typology of Land Market Configurations**

Among factors of production, land has the unique property of being relatively fixed in supply and non-movable. While to some extent it may be possible to augment the available supply of useable land, this process is costly and has a limit. With the passing of time, we can expect land to become increasingly scarce for two reasons. First, the world population continues to grow at a rate that outstrips all ability to augment usable land. Second, as developing countries seek to raise the income levels of their citizens, we must recognize that there is a tendency to occupy more space per head as income grows. Increasing per capita

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<sup>25</sup>For a concrete description of this process in the context of Taiwan's curb market, see Biggs (1991). Likewise, Yotopoulos and Florio (1991) conclude that an expansion of credit through the formal (official) sector in the Philippines, following removal of interest rate and credit controls, may not increase the supply of credit to poor borrowers (without collaterals).

incomes raises demand for land. The value of land is greater than the discounted stream of the share of earnings allocated to land. Land is often used as a form of income insurance. It can also be used as collateral; hence, the owner of land has access to credit at lower interest rates due to his ability to guarantee the loan. Socially, there is also a certain status associated with land ownership. In developing countries, subsistence farming is a major occupation. Land is crucial for agricultural production; the magnitude and distribution of crops, critical for the wellbeing and survival of many individuals, depends on trade of land use or land ownership. In general, one observes that land markets in developing countries operate imperfectly. By identifying key elements, one can begin to understand why transactions for land use and land ownership emerge as they do, and what possible reforms may lead to more efficient and equitable allocation of this important factor.

There are three key dimensions to the set of elements related to the item traded. Physical characteristics of the land make up the first dimension of elements related to the item traded. These features tend to relate to land fertility in rural areas and site in urban areas. Secondly, there is a critical distinction between land which is being sold (transfer of ownership rights) and land which is being rented (granting right of use).

Key environmental elements impact the productivity of an agricultural plot or the desirability of an industrial site. These include weather, infrastructure, and proximity to urban centers. Cultural factors are also important for a number of reasons. They often constrain behavior, and they also influence the initial assignment of property rights. The legal framework also determines the specifics of the trade, particularly if the item is in an urban area or is a right of ownership. Initial resource endowments of the actors are important in determining configurations in which the actors can participate. Actors may be land owners who use or lease land, tenants, or speculators.

The key elements and their characteristics can thus be summarized as follows:

Item Traded	Environment	Actors
land quality: fertility and site right of ownership or user rights	rural or urban location infrastructure cultural factors established property rights legal framework	resource endowments and characteristics of: end users (e.g. agricultural or residential) owner users landlords tenants speculators

Figure \_\_ depicts the broad structure of the market configurations that exist in the private sector. The urban or rural environment in which the land is located combines with the proposed use of the land and whether the item traded is right of ownership or lease. Further specific elements such as land quality, socio-economic attribute of actors, and cultural factors further delineate the specific configuration in each of the six broad squares.

The use of land is critical in determining which physical properties are important. Agricultural users, for example, are interested in land productivity as influenced by such elements as soil fertility, weather patterns and irrigation. Producers outside agriculture, however, are more interested in the site. Proximity to road and communication systems, availability of electricity, water, and waste disposal, and proximity to markets determine the value of land. Agricultural users employing traditional farming techniques seek relatively small plots of land. This land is frequently of marginal quality reflecting the land users' resource constraints and the ability to more readily farm marginal plots with subsistence techniques. Larger farmers, however, tend to demand land of higher quality complemented by sufficient infrastructure to get the produce to market. When land is to be used for residential purposes, the resource constraints of the actors are of primary importance in determining the size of plot as well as the desirability of the site.

FIGURE \_\_  
 Market Configurations Land: Private Sector

			CHARACTERISTICS OF ITEM	
			Right of Ownership	Right of Use
PHYSICAL, LOCATIONAL, ENVIRONMENTAL	RURAL	AGRICULTURE	MARKET FOR AGRICULTURAL LAND	(*) MARKET FOR AGRICULTURAL LAND RENTALS - SHARECROPPING - TENANCY (FIXED RENT)
	URBAN	PRODUCTION	MARKET FOR URBAN LAND FOR USE IN PRODUCTIVE SECTORS	MARKET FOR RENTAL OF URBAN LAND TO BE USED FOR PRODUCTION
		HOUSING	MARKET FOR RESIDENTIAL LAND	MARKET FOR RENTAL OF LAND FOR RESIDENTIAL PURPOSES

Generally, there is a fairly well established legal framework dealing with ownership rights to land. This is, in part, due to the complexity of ownership rights that can emerge. For example, the sale of a given land plot can contain rights to any combination of rights related to airspace, natural resource, water, free passage over the plot, etc. Also, trade of ownership rights tends to represent the investment of a substantial portion of the purchaser's resource endowment. The considerable size of the investment combines with the durability of the item traded to make formal, legal contracts desirable, even if they entail relatively high transaction costs. In this connection the advantage of the rental market of land is that transaction costs are relatively low. Further, land rental allows a closer approximation of the optimal factor mix in production.

In urban areas, land is often tied to physical structures such as manufacturing plants, stores, or houses. Regardless of whether the land is sold or rented, the incentive to develop formal contracts increases with the value of the structure. In rural areas, however, user rights to small agricultural plots may not be as subject to formal contracts. The landlord frequently has a degree of monopoly power and the resources of the user are limited - hence restricting the set of configurations in which he can participate. Similarly, one would anticipate the same type of conditions in describing land used for slum housing in urban areas.

In urban areas, there tends to be a greater diversity among users of land than is found in rural areas. This heterogeneity of users, in terms of their preferences and means, leads to a greater degree of complexity and controversy among users in urban as compared to rural areas. Also, environmental factors tend to change more rapidly in urban areas. Technological change and development of infrastructure can radically alter the possible uses of land as well as the desirability of a given site. Additionally, government intervention, in the form of zoning restrictions for example, tends to be more intensive in urban areas.

As illustrated in Figure \_\_\_, there are six major configurations for land. A brief description of each of these configurations follows.

*Market for agricultural land:* While subsistence farmers may be able to save sufficient funds or seek loans to purchase land, for the most part, large farmers are the principal actors in this configuration. As a consequence, it is likely that relatively modern technology will be used. There will be demand for land of relatively high quality as well as access to adequate infrastructure. Contracts tend to be formal, reflecting the large scale of the transaction. This market structure tends to be highly imperfect. Many countries have enacted laws and regulations which severely restrict the sale of land that can be used for agricultural purposes. The motivation ranges from a desire to slow down the urbanization process (i.e. the conversion of agricultural land to residential or industrial uses) to protect the small farmers' interests. These restrictions lead to complex contracts, often interlinked with products or other factors, to overcome these obstacles.

*Market for urban land to be used for productive purposes:* Frequently, land will be linked with physical structures such as factories or stores. Hence, there is more difficulty in matching sellers and buyers. The site of the land is of primary consideration in determining value. Again, because of the large size of the transaction, contracts tend to be formal. Also, since purchases are generally made on credit, there is a relationship between land and credit markets. Actors who are restricted in access to credit are not likely to be important actors in this configuration.

*Market for urban, residential land:* This configuration has many of the same features as the market for urban, productive land. However, the main actors on both the demand and supply side are individuals rather than enterprises.

*Market for rental of agricultural land:* There are two important sub-categories in this configuration. These two categories give rise to fixed rent contracts (i.e. tenancy) and sharecropping arrangements.

Cultural factors and attributes of the actors determine which pattern results. In each, the land is used for traditional, small farming. There are substantial inter-linkages between the transactions for land use and other factors, particularly labor and credit. Later, the sharecropping arrangement is discussed in more detail.

*Market for rental of urban land to be used for productive purposes:* Frequently, speculators and investors purchase land. The right to use this land is made available in this configuration. Again, the land is often tied to rights to use the physical structures located on the land. Contracts are formal, reflecting the lack of personal relationship between the actors. Since land which has a better location is valued more, the site is again an important characteristic. The resource endowments of actors on the demand side will determine the type of land which a given individual can afford. Actors who are unable to afford the price of ownership rights are restricted to participation in this configuration.

*Market for rental of urban, residential land:* The discussion of this configuration mimics the differences between the configurations described above. Land is made available by investors and speculators, though actors on the demand side are individuals. Land value differs depending on site, thus making the renter's resource endowment an important factor.

*Sharecropping:* As a specific example, consider the system of sharecropping. A right to use land is granted in exchange for a share of the agricultural output produced on the land which is paid as rent to the owner. The market configuration related to sharecropping is located in the configuration marked by (\*) in Figure \_\_. The text which follows elaborates on the specific combination of key elements which help to indicate why such a system is widespread and what the characteristics are of the transactions that emerge.

Obviously, land is used for agricultural purpose in rural areas. In addition to owners endowed with land, there are land users who have minimal resource endowments. If the land user had considerable resources, he would be eligible to participate in other market configurations that would generate greater

income levels for him. There are few enforced, legal restrictions on the contract (unless the sharecropping system is altogether banned), although cultural considerations may be important in delineating terms of the contract. The contract will tend to be verbal rather than a formal, written document.

An important aspect of the sharecropping arrangement is that the risk of a poor harvest is shared by the land owner and the land user. This contrasts with fixed rental contracts (where the risk is borne entirely by the land user) and situations where there is no land item traded and the land owner hires wage labor (the risk is borne entirely by the land owner). The sharecropping transaction, as with other configurations contained in the upper right hand block of Figure \_\_, are highly inter-locked with transactions for other factors such as labor and credit. It is difficult to separate the discussion of the land transaction from trade in other factors. Agricultural production is inherently cyclical with the impact that demand for labor has peaks in rural areas. At harvest time, the market wage will considerably exceed the reservation wage of the worker. The owner of land guarantees himself a steady stream of labor working at reservation wages through the sharecropping system. Since the land user has minimal resource endowments, he has access to few alternative land configurations. He could cease playing as an actor in land markets and seek wage work, but this removes the employment stability he has in the sharecropping arrangement.

**\*\*\* Need a few paragraphs on applicability of methodology to pseudo market configurations (such as common land) and government land sales and squatter occupied land.**

### **3.8 Typology of Foreign Exchange Market Configurations**

Official markets of foreign exchange in developing countries are frequently characterized by far-reaching intervention which leaves little room for the free operation of market forces. It is, in fact, the nature of government policies which lead to the existence of multiple configurations for foreign exchange. It is

important to understand the causes, magnitudes and possible consequences of interventions which lead to deviations from the long-run equilibrium exchange rate. Exchange controls tend to lead to an overvalued exchange rate. Parallel markets arise to fulfill exchange needs not met through official channels. Roemer (1986) summarizes the reasons why foreign exchange intervention entails a cost to society. First, if government regulations are strictly enforced, only a limited amount of foreign exchange will be traded in parallel markets. Many actors with relatively high marginal valuations of foreign exchange will not have access to this factor. Second, regulations increase the level of resources devoted to evading foreign exchange controls. Third, rather than spending time on more productive activities, government officials direct their time to enforcement of regulations or acquisitions of their "share" of the rents collected as bribes. The unit cost of trading in smaller quantities is also higher, especially considering that the markets outside the official configuration are less developed.

Foreign exchange is international by nature; however markets for foreign exchange are dominated by the rules and regulations of the domestic exchange regimes. It is normally sufficient to consider domestic elements as the determinants of market configurations.

The item traded, foreign exchange, is homogenous.<sup>26</sup> What differs are the terms and conditions under which the foreign exchange is traded. Foreign exchange has no value in itself; the demand for this item is derived from the demand for specific products and services for which foreign exchange is required. The other key element defining the characteristic of the item traded has to do with whether or not the demand or supply for the exchange is generated by trade in illegal goods or services. Demand or supply thus generated is critical for defining the "black market."

There are numerous types of actors involved in foreign exchange markets. Examples of these actors

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<sup>26</sup>It is, of course true, that there are many foreign currencies traded. However, each one of them as well as the domestic currency are perfectly homogeneous. If the arbitrage process works smoothly, consistent cross rates should prevail.

include: exporters, importers, tourists, migrant workers, savers and investors, and speculators. Very often governments, as recipients or donors of official foreign aid or in other capacities, operate as buyers or sellers. Commercial banks and other dealers acting as intermediaries between buyers and sellers are also important actors. The central bank may also buy or sell foreign exchange in order to serve some policy objective, such as stability of national foreign exchange markets. In this sense, the central bank is an actor. However, in so far as the central bank delineates rules of the game, specifying how transactions must take place, the central bank can also be considered an element of the environment. In fact, the new approach to the political economy of macroeconomic policy argues that policies (such as the exchange regime) tend to be endogenously determined within a given institutional framework and corresponding set of rules of the game (Persson, Tabellini, 1990).

For all groups of actors in market configurations related to foreign exchange, information is a very important attribute. Actors are aware of the impossibility of knowing all the relevant facts (the set of all political, social, and economic events on the international, national, and even local level that can affect international exchange now or in the future) and of correctly interpreting the facts that are known. Certain actors, however, have better access to relevant information, or are more skilled at interpreting the information. Also, especially under regimes of strong intervention in domestic exchange, information about new policies can be particularly valuable because of the profits it can bring. Hence, access to information and ability to process the information correctly is an important consideration.

Since demand for foreign exchange is a derived demand, characteristics of the actors which influence the level of demand are also important in determining the demand for foreign exchange.

The environment is influenced by the rules of the game. Two features of critical importance are the nature of the government regulation and the degree of enforcement of these regulations. The definition of

parallel markets synthesized from the literature by Lindauer (1989) is a "structure generated in response to government interventions which create a situation of excess supply or excess demand in a particular product or factor market." In this case, government intervention in the form of artificially maintained exchange rates, leads to excess demand for the factor at the favorable rates found in the official market. Parallel markets give rise to unofficial transactions; these can be broken down into two broad categories (irregular and illegal) depending on the relative costs to the actors who break the rules. Cultural norms are important in that they determine, in part, the moral and ethical costs an actor faces when he breaks the rules.

In summary, the key elements are as follows:

Item Traded	Actors	Environment
homogeneous, with the exception of demand and supply related to illegal trade of goods and services	access to information access to officials type of activity	regulations, i.e. foreign exchange regime degree of enforcement

Three basic configurations associated with foreign exchange are determined by the above key elements. These configurations are the official market, the parallel market associated with irregular transactions, and the parallel market associated with illegal transactions which is operationally the same as the "black market." Here, black markets are defined as the configuration in which demand or supply of the foreign exchange is generated by trade in goods or services which are illegal.

Which basic configurations are observed in a given country depends crucially on the government policy. Figure \_\_\_ illustrates the critical role of government intervention. If there is no government intervention and freely fluctuating exchange rates are determined by market forces, parallel markets do not arise. All actors are serviced in the official market with the exception of those whose need for, or supply of foreign exchange is generated by trade in illegal goods or services (i.e. smuggling) or through such illegal activities

as overinvoicing of import documents.

If, however, government intervention leads to a distorted exchange rate, the result is the emergence of parallel markets. Two scenarios present themselves. First, the government does not enforce penalties for operating in the parallel market. In this case, irregular transactions result. We also see a distinct configuration for "black markets," since substantial penalties may be imposed on actors operating in this market, should they be caught. The second case is when parallel markets are not tolerated by the government. In this case, the distinction between the parallel and black markets disappears. Participation in either carries risk associated with government enforcement.

Now, consider in more detail this last case, marked by (\*) in Figure \_\_\_ - the configuration described as the illegal parallel and black markets. Government regulations serve to ration foreign exchange. Policy and privilege will determine which actors cannot acquire foreign exchange through official channels. In response to the excess demand for foreign exchange, parallel markets emerge. Transactions in these market configurations are dominated by market forces (i.e. are price clearing). However, since the market configuration is characterized by illegality, there are increased risks involved in supplying or acquiring foreign exchange in that configuration. Hence, the price will reflect a risk premium. The size of the official market is determined by government policy; the relative size of the parallel and black market will depend critically on the degree of enforcement of regulation, the cost associated with punishment for participating in nonofficial channels, and the benefits of acquiring foreign exchange.

Figure —  
Market Configuration for Foreign Exchange

A C T O R S	Engaged in Legal Trade	OFFICIAL MARKET CONFIGURATION
	Engaged in Illegal Trade	BLACK MARKET (Illegal) e.g. smuggling

A C T O R S	Favored by Government Policy	OFFICIAL CONFIGURATION	
	Not favored by Government Policy	PARALLEL CONFIGURATION (Irregular)	B M L A A R C K K E . T (Illegal)
			LEGAL GOODS AND SERVICES      ILLEGAL GOODS AND SERVICES
	ITEM TRADED		

A C T O R S	Favored by Government Policy	OFFICIAL CONFIGURATION
	Not favored by Government Policy	(*) PARALLEL CONFIGURATION AND BLACK MARKET (Illegal)

G O V E R N M E N T  P O L I C Y	Freely Flexible Exchange Rates
	Exchange control (e.g. fixed over-valued exchange rate) Intervention with tolerance of parallel markets
	Exchange Control Intervention without tolerance of parallel markets