The New Institutional Economics and the Study of the Cuban Economy

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Introduction

A central feature of the Cuban economy throughout its history is that it has been a 'developing' country, to use the politically correct euphemism adopted by our profession for describing economic systems that are unable to enjoy sustained economic growth. This condition has characterized the economy before the Revolution and during the Revolution. One critical question at the current historical juncture is whether or not this condition will continue to characterize the economy after the inevitable structural changes that it presently faces. What makes these structural changes inevitable is the dramatic shift in fundamental relative prices recently experienced, in particular for oil and sugar, as a result of the demise of the centrally planned systems in Eastern Europe and the Soviet Union. What is not inevitable are the specific forms that these structural changes will take and, consequently, whether or not they will shift the system onto a path that generates sustained economic growth over the long term.

Understanding of this process requires the application of the tools of our profession, especially certain advances that have become increasingly important over the last twenty years. These advances I will lump together under the rubric of the "New Institutional Economics." The aims of this essay are: first, to bring attention to the nature of this diverse literature; second, to emphasize its legitimacy as a natural extension of standard tools; and, finally, to illustrate its relevance for the present context. There are, perhaps, two sources of novelty in what follows. First, the obvious one which derives from bringing together a diverse literature in a manner germane for a particular topic. Second, a more subtle one which derives from asking a question that I found useful in my research on distribution systems: What is the economic function of an institution? For instance, in considering this question in the context of distribution systems certain aspects of the role of technology came to the surface which were not evident otherwise.

The paper is structured in the following manner. Section I provides the conceptual background through definitions, a sketch of various components of the literature, their connection within themselves and to various subdisciplines, as well as brief comments of a methodological nature. Section II discusses an important historical application of these ideas to the analysis of growth and development, a well known institution in Cuban and Latin American history, and a lesser known institution in Cuban history which is proposed for further analysis. Section III discusses applications of these tools to nonmarket settings and some implications especially relevant for the analyses of early stages of a transition from socialism. Section IV discusses an application of these ideas to market settings in advanced countries and important considerations which arise in extensions to the Cuban setting. Section V discusses the application of these ideas to the analysis of institutional change, in particular constitutions and certain types of redistributive laws. Finally, a brief conclusion highlights the nature of the questions raised in this essay.

I. Conceptual Background

Three strands of what has by now become mainstream literature constitute the core of the new institutional economics: the transaction costs literature, especially that emphasizing information costs; the property rights literature and the literature on collective action, especially that contained in the new subfield of economics referred to as public choice.[1] In this literature one can find contributions that are viewed as part of modern mainstream economics and those that are not, although most contributions would be viewed as mainstream. Nevertheless, it is useful to point out the criteria for distinguishing and its methodological origins.

Simply put, a contribution is viewed as within the mainstream paradigm if it develops from its postulates or even if it changes some of them, as long as they are contained in the protective belt and not in the hard core of the paradigm. I am applying Lakatos' (1970) distinction following in the spirit of Eggertsson (1990). What this means is that as long as a contribution assumes optimizing agents subject to constraints and analyzes interactions between agents in terms of displacement from one well defined equilibrium to another, it is a welcome contribution to enhancing the fruitfulness of the basic paradigm. For practical purposes, the controversial issues are exclusion of models based on nonoptimizing behavior such as Nelson and Winter's (1982) evolutionary models or models that appeal to unstable preferences or that include variables capturing notions of fairness or altruistic behavior in the objective function. Most importantly, contributions within the paradigm include models that specify costs of transaction as part of the environment and that allow for uncertainty or lack of full information about the environment. For instance, this group represents most if not all of the new industrial organization as contained, for example, in Tirole (1988).

One factor in enhancing the relevance and professional legitimacy of the new institutional economics for modern microeconomics is that some of the most distinguished members of our profession have been fundamental contributors to this literature, for example see Joe Stiglitz's discussion in the recent symposium on Organizations in Economics (1991). Another factor has been the incorporation of modern theoretical tools into the explicit analysis of institutions as such, for example the use of a game theoretic framework by Milgrom, North and Weingast (1990) in their analysis of Champagne Fairs. Finally, a third factor is that contributors to the various strands of literature represent a very diverse cross-section in terms of political or ideological orientation.

It is not surprising that a well known economic historian (North) and a well known development economist (Nugent) are at the forefront of this new field of analysis. In these two subfields of economics it is much more difficult to escape the obvious conclusion that institutions differ and seem to matter in determining outcomes. Of course, it is a long distance from such a trivial recognition of a fact to the integration of three different strands of modern literature in an attempt to develop a systematic explanation of this phenomenon. Indeed, the task is so difficult that both writers in the end feel compelled to go beyond the mainstream paradigm and challenge assumptions at the hard core to explain <u>some</u> aspects of the phenomena that interests them. I shall refrain from doing so while acknowledging the need to do so in some settings. A useful operating procedure is to explain as much as one can within the context of the mainstream paradigm; an important advantage is that it makes it easier for others to build upon any results obtained. In addition, in my experience as a researcher I have found that appeals to reject the hard core of the paradigm can frequently be the result of insufficient efforts at modifying its protective belt.

What is an institution? Nabli and Nugent (1989, ch. 1) answer this question in the following manner. An institution is a set of constraints which governs the behavioral relations among individuals or groups. While there are alternative definitions, this one is attractive because of its ability to encompass a wide range of issues. This characteristic seems especially relevant in the present context. These constraints can take the form of either rules or behavioral norms. Both formal and informal organizations fall within the definition as well as implicit and explicit contracts and rules of conduct.

Transaction costs are clearly relevant for the analysis of institutions. First, the constraints that evolve in the operation of economic systems can be viewed as institutions designed to accommodate one or more of these costs. Indeed, a classic contribution to this field, Coase (1937), argues that the existence of firms as organizations or economic institutions is due to their function as a mechanism for lowering some transaction costs incurred by participating in market exchange. While uncertainty plays a role in generating these costs, Coase stresses the coordinating function exercised by the firm. Moreover, he argues that the boundary between firms and markets is determined by the minimization of transaction costs. A vast literature has emerged in recent years that analyzes various aspects of this issue. The introduction of uncertainty and information costs into economic analysis, in particular, has stimulated many of these contributions. Since these factors create an agency problem between the principal, or owner of the firm, and the agents, or managers and workers, it underlies the various contributions to the principal agent literature. This agency problem exists in many organizational contexts, for example public and regulated enterprises as well as representative bodies of government and bureaucracies. Moreover, it raises new questions on why different organizational forms exist. The latter issue has been one of the main themes in O. Williamson's (1985) analyses of governance structures and opportunistic behavior.

Issues of this nature focusing on complex organizational forms such as firms have their counterpart at a lower level of aggregation. Indeed, many of the analyses in the industrial organization literature surveyed in the Handbook of Industrial Organization (1989) fall within this category, as can be seen from Porter's (1991) insightful essay on these two volumes. In particular the explanations of many business practices and market interactions among firms are developed in terms of arrangements to accommodate specific transaction costs. It lies beyond our scope to summarize all these contributions. Instead, I will provide a brief illustration on a topic familiar from my own research, Betancourt (1991).

In observing interactions between retailers and suppliers, several practices are common. For instance, manufacturers employ the assignment of exclusive territories to the retailers of their products. A standard view of this practice is as a limit to competition among retailers. Nevertheless, Matthewson and Winter (1986), for example, point out that one can also explain this practice as a means for the manufacturer to provide an incentive to retailers not to under provide selling effort or to internalize an externality. Rey and Tirole (1986) show that in the presence of uncertainty this practice or institution has the beneficial effect of using decentralized information more efficiently than other alternatives, although competition is preferable from the point of view of consumer welfare. Rey and Tirole, however, do not allow for the under provision of selling effort emphasized by Matthewson and Winter. The transaction costs associated with the provision of selling effort at the end of the channel are, thus, crucial to an evaluation of the effects of this institution on consumer welfare. Hence, an economic evaluation of legal restrictions on this practice must recognize the role of this transaction cost.

According to Barzel (1989), who is one of the leading contributors to the property rights literature, the existence of transaction costs is the starting point of the property rights literature. Property rights are the right to consume, obtain income from and alienate (sell) an asset. These rights are difficult to delineate because transactions are costly. The transaction costs he identifies are those associated with the transfer, capture and protection of property rights. What underlies the costliness of transactions is that commodities have many attributes that vary from one item to another. This allows wealth to spill over into the public domain in every exchange and provides individuals with an incentive to spend resources in capturing this spillover. As a result, divided ownership of commodities yields increased gains from exchange by allowing transfers of subsets of attributes. Restrictions that enhance the separation of individual rights enhance the gains from exchange by allowing the existence of divided ownership. The latter in turn diminishes the attributes that remain in the public domain and thus economizes on resources that would be spent on wealth capture. An underlying principle in Barzel's analysis is that individuals attempt to maximize their wealth.

Barzel discusses briefly the existence of other approaches that stress the role of transaction costs and offers some criticisms that help identify what is unique about the property rights approach. The latter stresses reciprocity and gains from exchange, observability and capability of empirical implementation, and the prediction of the development of new rights and institutions. The first characteristic is especially important in the present context. Thus, let me illustrate with an example familiar from my own work. The existence of transaction costs provides an incentive to own rather than rent assets, since the flow of income generated by some assets can be substantially affected by how it is operated or maintained. Thus, factory owners often own rather than rent capital equipment.

In the early nineteenth century, the work day of capital was not separated from the work day of labor and it generated onerous working conditions as well as Marx's view of surplus value, Morishima (1973). As I have noted elsewhere, Betancourt (1987), Marshall became a strong advocate of the institution of shift-work because it allowed the reconciliation of labor's needs for shorter working days with capital's need for profits from operating long periods of the day. Shift-work as an economic institution thus lead to improved gains from exchange in the labor contract for both capital and labor by separating the right of a worker to operate a machine during a day from the right of another worker to operate the same machine during another part of the day. On the same topic, one can note that modern technological developments in telecommunications and computers allow the use of services from computer equipment without requiring ownership. Hence, it becomes feasible in some sectors to lease computer services rather than own the computer equipment. These technological developments thus make possible other institutions, leasing contracts for computer services, that enhance gains from exchange by allowing the separation of the right to use equipment at a particular time from the right to own the equipment at that time.

The third strand of literature relevant for our topic is associated mainly with a specific new subdiscipline, public choice, which already has gone beyond the first edition of a leading textbook, D. Mueller (1979), and has made it to the JEL classification of books and articles. Here, I will merely note two important aspects: its relation to transaction costs and its position at the intersection of economics and politics. Early contributions emphasized the role of externalities as an impediment to collective action, Olson (1965). One view of externalities is as a source of transaction costs. Indeed, North (1990) in discussing Coase's (1960) famous essay stresses the interpretation that if there are no transaction costs "the competitive structure of efficient markets leads parties to arrive costlessly at the solution that maximizes aggregate income regardless of the initial institutional arrangements." His ultimate point is, of course, that there are transaction costs and that institutions do matter.

An important theme underlying this literature is that governments are actors in the economic scene with their own preferences. Once again if there are no transaction costs, especially information costs, political institutions would merely reflect the preferences of the underlying constituents and, in that sense, would not matter. The presence of uncertainty introduces a principal agent problem in this context. More generally, transaction costs create a rich array of possibilities in terms of economic institutions, political institutions and institutions that arise to bridge the two spheres of activity.

What brings these three diverse strands of literature together to constitute an incipient new field of study is the stress on transactions costs of one form or another. Because of the range of issues thus involved, it is useful to present here a view of this new field put forth by Eggertsson (1990). He suggests that there are three levels of analysis in this new field, all of which may be useful at a particular time for our present context.

At the first level of analysis the structure of property rights and organizational forms are explicitly modelled but treated as <u>exogenous</u>. The emphasis is on their impact on economic outcomes. At the second level, the <u>organization of exchange is endogenized</u>, but the fundamental structure of property rights remains exogenous... At the third level, attempts are made to endogenize both social and political rules and the structure of political institutions by introducing the concept of transaction costs.

He organizes his work along these lines. I may add that it is at this third level where it is most difficult to stay within the mainstream paradigm when the hard core is defined to exclude notions of fairness or altruistic behavior in the objective function.

II. Historical Applications

A fundamental building block in both development economics and growth theory has been the predominant, essentially monopolistic role assigned to technology as a determinant of self-sustained growth. In the development literature Kuznets (1966) identifies modern economic growth as starting with the Industrial Revolution and the systematic application of science and technology to production processes. On the growth theory side, Solow's (1957) famous paper attributed most of the growth in output to a residual called technology; the Solow-Swan model showed the rate of technological change as one of the few factors that can affect the equilibrium growth rate of output. Consequently, the paramount role of technology framed economists thinking about self-sustaining growth until the last decade.

An early challenge to this view came from North and Thomas (1973) who pointed out that a variety of factors changing relative prices influenced the development of Western institutions long before the Industrial Revolution. Moreover, these changes led to changes in property rights structures which affected incentives for the generation of innovations. This work had a limited impact on the analysis of development and growth at the time, although interest in the analysis of historical institutions from a property rights perspective continued to develop on its own. For instance, of interest in our context is an insightful paper by Batchelder and Sanchez (1988) which analyzes the 'encomienda' system as an institution from this perspective. One of the main themes of the paper is to show that property rights restrictions embodied in the 'encomienda' can be viewed as a mechanism which served to increase the wealth of the Spanish Crown. Moreover, they argue that it did so precisely because it allowed the transformation of wealth in the form of the human capital of the Indian population into nonhuman capital wealth that could be transported to Spain, where it could be more easily protected.

Recent developments have led to conditions far more hospitable for integrating the analysis of institutions with the analysis of growth and development. In the development literature there is now considerable evidence of notorious successes as well as continuing failures and there are substantial differences in the institutions that characterize the two sets of countries.[2] An influential analysis of the historical experience of many countries by Reynolds (1983) leads him to conclude that a significant political event was associated with the turning point into intensive growth, which roughly corresponds to the initial stage of what I have called self-sustaining growth, in 30 of the 34 countries identified as having reached this point. On the growth side there is considerable controversy on whether or not rates of growth converge as implied by the standard model. Indeed, Benhabib and Jovanovic (1991) aim at reconciling the evidence with the standard model, but end up concluding that our understanding of growth needs the engine of growth to be endogenized and that this engine is fueled primarily by something other than physical capital.[3] On the theoretical side models of endogenous growth may become a growth industry themselves, for example Grossman and Helpman (1990), Lucas (1990) and Roemer (1990). An important feature of these models lies in allowing for the possibility that economic policy has an effect on growth rates.

More generally, other scientific developments are facilitating the analysis of settings where institutions can affect outcomes. Analysis of nonlinear dynamical systems in physics, biology and chemistry have generated advances in the understanding of complex, self-organizing systems. Thus, they have enhanced the legitimacy of adopting similar concepts in economics and even in the humanities, e.g., a specially appropriate reference in the literary world is Benitez Rojo "La Isla que se Repite." For instance, over twenty years ago Georgescu-Roegen (1971) argued that economic and social processes were characterized by hysteresis, also called path dependence in recent literature. Nevertheless, his arguments had little impact on the growth and development literature of the time. In the last decade, however, hysteresis became a household word for macroeconomists analyzing unemployment and path dependence plays a critical role in recent work on technology by W. Brian Arthur (1989). Once an analysis allows for transaction costs to exist, institutions affect outcomes and if there is path dependence these effects will persist through time.

To conclude this section, let me note one interesting area for application of these ideas in the context of the Cuban economy. Upon reading parts of a recent book on Cuban rural society in the 19th century, Bergad (1990), I came across an institution which must have had a substantial effect on the rate of growth of the Cuban economy up to the 19th century and which, I believe, has not been analyzed from a modern perspective. This institution is the so-called "privilegio de los ingenios" which goes back to 1529 and was abolished in 1860. Ingenio land, slaves, animals and fixed property could not be mortgaged or embargoed. Creditors could attach liens to harvests, however, and these became the common guarantee for credit. The incidence of risk bearing is dramatically changed by this restriction on the use of assets and raises the question of why it lasted as an arrangement for so many years and what was its effect on welfare and growth on the island. Incidentally, no analysis of this issue would be complete without accounting for the different insurance aspects of liens on the harvests and mortgages on land. Recent developments in the public finance literature have shown that in the presence of uncertainty taxes on output may be preferable to taxes on land, despite their distortionary effects, precisely because of their insurance properties, Hoff (1991).

III. Nonmarket Applications

Ironically, it is in the writings of economists that are avid advocates of free markets where one may find the most useful tools for the analyses of nonmarket settings. Barzel (1989, ch. 8) makes this argument himself and proceeds to illustrate by applying the tools of property rights analysis to three types of nonmarket allocation: allocation by voting, allocation of blood by donation or by market exchange and allocation by government.

In adapting his insights to the present context, it is useful to start by examining two points he makes in this chapter. The first point is that it is a myth that private property has been abolished in communist states. If one defines property rights as he does and as we have replicated in Section I, this claim is logically unassailable. The right to consume commodities in the form of physical goods or intangible services can be restricted but it cannot be eliminated from any society. Parenthetically, even in capitalist societies the right to consume some commodities, for example drugs and prostitution, is restricted. Similarly, the right to obtain income from an asset can be restricted but not eliminated, especially when informal means of exchange are taken into consideration; this right, of course, is also restricted in capitalist societies, for example restrictions on the use of home premises for business purposes in residential areas. Finally, the right to sell an asset is perhaps the one most easily restricted, especially for highly visible items, but once again as informal sectors everywhere demonstrate it is difficult to eliminate this right in its entirety.

A second point he makes which is useful to stress in the present context is that "exchanges constitute a reassignment of property rights." In particular exchanges within <u>any</u> organization involve such reassignments, including the rights to allocate resources. In all such exchanges, it is impossible to delineate all the attributes of what is being exchanged and opportunities for wealth capture are provided. Wealth maximizing agents will exploit these opportunities within the constraints allowed by the system. It is these constraints which vary most dramatically between market and nonmarket settings as well as among different nonmarket settings. Furthermore, they determine differences in outcome. One conclusion he derives from this view is that "The details of such operations cannot be guessed from one's armchair, ..." This conclusion juxtaposed to the importance of path dependence indicated in the previous section has important implications for analyzing the evolution of the Cuban economy at this time.

Predictions as to the form of this evolution are fraught with difficulty; at best one can identify a range of structural changes, starting from limited liberalizations, as reported for example in J. Dominguez' (1991) recent testimony to the U.S. Congress, to the more substantial changes experienced in various degrees in Eastern Europe, the Soviet Union and Nicaragua. In understanding any of these outcomes, however, it is imperative that one begin with informed knowledge about the current situation. Thus, those who have devoted their energies to following the detailed operations of the system play a critical role in this process. In addition, the constraints that determine the outcomes of wealth maximization under a centrally planned system lie to a much greater extent outside the realm of the usual economic variables than in a market setting. Hence, in understanding this process we have to integrate expertise from other areas into our analyses in order to identify the relevant constraints and margins of optimization.

A second implication that follows from these considerations stems from the transaction and informational advantages that derive from being a participant in the existing type of exchanges. In market settings these advantages also exist and the literature abounds with terms that capture aspects of these advantages, asymmetric information, insider-outsider analyses, first mover advantage, power of incumbency, etc. What changes in the nonmarket setting is the structure of the rules as well as the relevant margins over which optimization by agents takes place. In this connection, it is also worth noting that under some rule changes those with experience in participation in market exchanges or organizational forms not currently in existence in the nonmarket setting enjoy transaction and informational advantages, although of a different nature. That these issues are important can be easily deduced from the complaints of the early reform period in Eastern Europe with respect to members of the nomenclature being among the main beneficiaries of the changes. Similarly, in recent testimony on the Nicaraguan situation, Penn Kemble of Freedom House states the following about the Sandinista Army: "Its finances raise eyebrows: it is widely believed to be the major conduit for cash payments to the FSLN political leadership." Identification of existing constraints and the relevant margins for optimization is a necessary task in the design and analysis of any particular institutional changes.

To conclude, let me note some implications for an important issue in any process of structural change: the supply and distribution of basic food products to consumers. This area is an attractive one for privatization, regardless of the system, because farmers everywhere, including Cuba, have demonstrated their capacity to increase output when offered economic incentives to do so. Since independent distribution networks do not exist in Cuba, however, it would be difficult to dismantle the state's wholesale distribution system instantaneously while assuring a minimum supply to urban centers through the existing retail outlets. Moreover, the dismantling of a rationing system may also be impossible to accomplish instantaneously. This suggests the need for coexistence of very different forms of organization with very different incentives for operating, leading to opportunities for wealth capture that undermine the feasibility of any process of structural change. A partial solution for this problem in the early stages of any such process is to grant secure property rights for a <u>limited</u> period of time on the <u>use</u> of assets (land and retail stores) to generate income by the current users of the assets, namely farmers and the operators of the retail outlets. This would provide incentives to increase and assure the distribution of food to consumers as well as information that would help monitor the performance of the wholesale operation. Monitoring would be essential because the wholesale operation is difficult to privatize immediately and would thus have considerable incentives to withhold food from retailing outlets and sell it on the side under any rationing scheme.

The time limit on the use of the assets would need to be long enough to lower incentives to consume or destroy the value of the asset, especially in the presence of uncertainty about the possibility of acquiring full ownership rights. Moreover, actual application of any such scheme must be modified to accommodate the existing situation at the time of its introduction, including the distribution of retail outlets among state run enterprises, cooperatives and other forms as well as their degree of specialization on food distribution. Some form of reasonable compensation should be collected for these rights and the rights could be made negotiable. Instituting a full system of property rights instantaneously has proved impossible in all the cases we know. Hence, it may be worthwhile to use the insights of the property rights literature to evaluate schemes in which these rights are introduced gradually. This gradual approach seems eminently sensible in a setting where the transportation system has major problems. Many famines take place because goods cannot be transported where they are needed in the required time frame and/or for lack of entitlements to the goods, Sen (1981).

IV. Market Applications

In this section, the ideas previously discussed will be applied to a more familiar market setting. A principal objective in doing so is to illustrate that these tools are in the process of development and constitute a continually evolving method for looking at problems rather than turn-key projects that can be pulled from a shelf of knowledge. Another objective is to bring out explicitly the connection between developments in the literature on transaction costs and in the analysis of property rights.

Recently my research activities have centered on understanding the operation of retail markets. An important finding of this research is the characterization of retail markets as institutions in which producers (retailers) furnish consumers with a set of distribution services together with the explicit goods or services that consumers purchase. These services are costly to produce and higher levels of these distribution services reduce the distribution (transaction) costs that consumers experience. This characterization defines the economic function of retail markets as an institution. In doing so, it provides a framework for analyzing and evaluating the performance of this function as well as for understanding why different organizational forms (types of firms) of both a formal and informal nature emerge to perform this function. Designing research projects around the question of what is the economic function of an institution is becoming popular, especially in the area of services where the intangible nature of the output obscures the nature of the answer. For example, Hornstein and Prescott (1990) ask this question about the insurance industry (1990), Bresnahan, Milgrom and Paul (1990) ask this question about stock markets and Hanak (1991) does the same for banking.

Six broad types of distribution costs can be identified in any interaction between consumers and a retail system: direct time costs and transportation costs, adjustment costs as a result of unavailability of products or services at the desired time of consumption or purchase, information costs, storage costs, and psychic costs of unappealing characteristics of the retail environment. A retail system, on the other hand, determines the level of distribution costs experienced by consumers through the level of distribution services it provides. These services can be classified into five broad categories: accessibility of location, product assortment, assurance of product delivery in the desired form, information and ambiance.[4] There is joint production of some dimensions of these services and they may affect more than one distribution cost experienced by consumers. Some retail institutions specialize in offering very high levels of some of these services, but all of them provide some level of each of these broad categories. Examples of these services, how they may be shifted between consumers and retailers, and how they affect consumers distribution costs are available in Betancourt and Gautschi (1988) and (1986).

From an economic perspective, a critical assumption in this analysis is that the levels of distribution services provided by retail institutions play the role of fixed inputs in the consumption and/or purchase activities of consumers. Thus, increases in the levels of these services by retail institutions lower the costs to consumers of obtaining a given level of satisfaction by reducing their distribution costs. The implications of this view for demand analysis have been examined in two papers (1990a, 1991a). Three aspects of this analysis are worth emphasizing. There is a strong tendency toward complementarity between all the items in any given assortment of a retail institution; distribution services tend to be complementary with all items in an assortment; distribution services that are common to all items in an assortment have stronger complementary effects than those that are specific to a single item. Common distribution services act as public inputs in the production functions of consumers. The role of distribution services is shown to be fundamental in understanding the nature of competition in retail markets and the creation of retail agglomerations.

On the cost side distribution services act as outputs of retail institutions. An important implication of this view is that higher levels of these services entail higher costs for the institutions that provide them. Putting together both sides of the market in the framework of monopolistic competition leads to several insights. In the short-run, the distribution services provided by retail institutions generate economic incentives for expansions of assortments and into market dimensions segmented by spatial or other characteristics. In the long run, these distribution services provide a rationale for equilibria characterized by the coexistence of different institutional forms specializing in the provision of different distribution services as well as for price dispersion in the same market (1988). Explicit modelling of these distribution services brings out the complex relationship between pricing policies and the provision of various levels of distribution services. Furthermore, this explicit modelling also brings out the conditions under which competition in retail markets enhances consumer welfare, Betancourt and Gautschi (1990b).

An important aspect in demonstrating the usefulness of the above conceptualization is its use in the empirical explanation of economic phenomena. In the analysis of retail firms, a great deal of emphasis has been placed on retail margins. This approach provides a sound conceptual framework for the economic explanation of retail margins. Furthermore, it suggests how to device empirical constructs that correspond to these distribution services. Finally, and perhaps more importantly, it has been implemented with aggregate data for the U.S. and France. The results show that distribution services are critical determinants of retail margins in both cases, Betancourt and Gautschi (1991b, 1991c). Another important aspect in demonstrating the usefulness of any conceptualization is its applicability in policy analysis. Leunis and Vandamme (1991) use this approach fruitfully to evaluate the effects of the Business Premises Act in Belgium.[5]

A current area of research in this context is the explicit identification of the links between this literature and the analysis of property rights. The literature just described has identified a subset of the valued attributes that are exchanged in any retail market as well as two characteristics of the operation of these markets important for the analysis of property rights. First, the implicit allocation of distribution costs between retailers and consumers as a result of providing any particular levels of distribution services. Secondly, the fact that these outputs (distribution services) are not explicitly priced.

The first characteristic provides a framework for identifying the gains or losses from exchanges associated with the emergence of particular retail institutions. The second one points to the need for the development of institutions that allow cooperation between retailers in order to internalize the costs of jointly providing these services. A particular example of institutions where these issues are important are retail agglomerations, either shopping malls or the informal markets that prevail in developing countries. The set of transaction costs emphasized in the property rights literature are important in determining the operation of these institutions, the actual forms that emerge and the nature of the gains from exchange. To my knowledge no analyses exist of these institutions that integrate both perspectives. There are, however, analyses which may provide a useful starting point. Barzel himself notes the gains from exchange generated by contracts which partially transfer ownership rights to security and maintenance firms in buildings. The divided ownership made possible by these contracts allows these firms to take advantage of economies of scale in the provision of these services and, thus, generates gains from exchange. Similarly, in their analyses of the development of equilibrium contracts for factors of production in rural markets, Nabli and Nugent (1989) suggest the possibility of extending these analyses to product markets.

Another area of research relevant for the present context is the extent to which the above analyses of transaction costs and property rights must be modified for application to developing country settings or, more generally, to settings where informal arrangements are more prevalent. Part of the answer was provided in the previous section, but it is useful to indicate here other considerations not discussed earlier. There are three important underlying forces generating the emergence of various retail forms in advanced countries: the high opportunity cost of time; the increase in the number of households due to the decreased role of extended family structures; the increase in the number of households with multiple earners. Of these three factors the last two are also relevant for the Cuban economy. Just as in other centrally planned systems, the housing sector has been singularly unable to satisfy the needs of the population. This creates a considerably pent up demand for new structures that allow the trend toward more nuclear family systems to materialize with a consequent demand for the services of the retail sector. Similarly, multiple earner households are quite prevalent in Cuba and create a powerful demand for flexibility in the timing of purchases. Analyses of the implied changes, however, is critically dependent on whether or not the satisfaction of consumer wants becomes an important consideration in the functioning of the economic system.

V. The Analysis of Institutional Change

This topic is undoubtedly the most difficult one to address, especially when it concerns changes in the basic structure of rules of a system or the third level of analysis in Eggertsson's classification. It is useful to begin with some general comments before proceeding to discuss two specific issues that are quite relevant in the present context. Eggertsson (1990) makes the case that our traditional notions of allocative efficiency (Pareto efficiency) are impossible to apply when we allow for transactions costs. North (1990) proposes the notion of adaptive efficiency for evaluating the performance of economies through time, while admitting the difficulties of implementation. Without getting bogged down in methodological discussions at this point, it is useful to note two considerations that need to be included in evaluating institutional change. Institutions can have growth retarding as well as growth promoting effects. The role of existing institutions in generating growth retarding effects has been the subject of considerable attention, e.g. Olson (1982) and Krueger (1974). Much less attention, however, has been paid to the growth promoting effects of institutions, partly because of the difficulties in doing so. In this regard, I merely note that the identification of the gains from exchange associated with the analyses of institutions in the property rights literature provides a starting point in the evaluation of such effects.

Despite the difficulties enough progress has been made to provide useful perspectives on important issues. To illustrate let us consider the analysis of constitutions. Much has been made in the popular press about the writing of a constitution for Cuba by a consultant on behalf of a particular group in the exiled community. What light can the new institutional economics throw on this activity? A standard view of a constitution in the public choice literature is as a formal social contract. According to Mueller (1991), for example, such a contract emerges to accommodate uncertainties with respect to possible opportunistic behavior by members of the polity or to spread common exogenous risks and uncertainties faced by the community. He goes on to argue that the need for a formal rather than an informal contract stems from the need to minimize transaction costs when the number of agents is large.[6] If one adopts the contractual view, it immediately follows that constitutions are of limited value unless they emerge out of a process whereby those supposed to abide by it have ample opportunity to voice their views before agreeing to their provisions.

As North (1990) points out, most of the Latin American republics got their start with constitutions not too different from the United States and about the same time but political and economic outcomes have been decidedly different. One set of factors noted by North is that the informal constraints in the operation of economic and political systems were different in the two cases. Moving on to examples closer to the present issue, the first Constitution designed in Cuba by a constitutional assembly, which was to underlie its birth as an independent nation, was never put in place. It ran afoul of the not so informal constraint that U.S. occupation troops would not leave the island because it did not contain the Platt amendment. Moving closer to the present, one can note a recent article by Manuel Ramon de Zayas

(1991) in which it is pointed out that one of the most conspicuous ideas of a political group outside the island is to get the present Cuban government to abide by its own constitution. A contractual view of constitutions suggests why these violations are likely to continue. Insofar as individual agents are unable to participate freely in the process of writing and adopting the constitution, they are unlikely to feel bound by its provisions. In a totalitarian state this condition applies to government officials at the lower levels of the bureaucratic ladder and in many cases to those occupying high rungs on the ladder.

Turning to the last and most difficult subject to be considered, what can economics, including the new institutional economics, say about restitution or the return or nonreturn of nationalized or expropriated property to its original owners? Uncertainty and its reduction play a key role in bringing this issue to the fore in any type of transition from a centrally planned system to a market economy. To illustrate this role it is convenient to consider how it arises in two different versions of this process. The first version is represented by the situation that arises in the Soviet Union where the communist party retains considerable power and the repressive apparatus of the state has not been dismantled, despite progress toward democratization and market reform and considerable lip service to both issues. As the recent summit demonstrates, public and private investments by advanced countries in this process are limited and await substantial evidence of credible commitments in this direction. For instance, one aspect of the Japanese insistence on the return of the islands taken by force is a demand for evidence of a public renunciation by the state of arbitrarily taking over property. Acceptance of this principle with respect to other holders of property will play a significant role in determining the level of investments by these types of property holders and the growth possibilities of the system.[7]

A second version of this process is taking place in Eastern European countries where substantial progress has been made in terms of both democratization and market reform, in particular East Germany, Hungary, Czechoslovakia and Poland. The issue of returning property has arisen in each one of these countries. Removal of uncertainty with respect to the direction of the process has played a role but in addition the participation of former property holders in the political process has forced these states to explicitly recognize the legitimacy of a restitution policy. Recognition of this principle removes or diminishes one source of uncertainty but introduces another, namely the issue of competing claims which must be adjudicated in some manner by the legal system. Once again until the process is clarified, the result is a paralysis of many investment possibilities due to the potential costs of legal disputes.

In this second setting an important issue becomes how the legal system is structured to adjudicate disputes on these issues. A recent paper, Scott Thomas (1991), describes the alternatives chosen or being contemplated in Poland, Hungary and Czechoslovakia with respect to this and other issues, for example including the privatization of large and medium size enterprises. For our purposes, it is useful to consider two alternative forms of compensation considered in these experiences. One is the proposed return of actual property as in Czechoslovakia; the other is the compensation with financial claims for assets, except land, proposed by the Hungarian parliament and thrown in limbo by a court decision for lack of a judicial basis to distinguish between land and other assets. The return of actual property increases uncertainty and transaction costs whenever there are alternative claims to the same assets. The legal system must evaluate these competing claims and such a process takes time. Meanwhile, private investors contemplating the purchase of such assets as part of an economic activity will be tempted to look elsewhere. The importance of this growth reducing effect stems from its greater incidence on the most dynamic sector of the system, potential and newly created enterprises. The advantage of this compensation mechanism is that in principle it eliminates the difficult task of ascertaining the value of assets although in practice this may not be the case.[8] It is also worth noting that this mechanism, by itself, is inequitable with respect to those former owners whose assets have been physically destroyed or suffered substantial deterioration. Finally, this approach requires facing the issue of determining the rights of current users or title holders who are dispossessed in this process. [9]

A compensation scheme based on the issuing of financial claims can remove the incidence of uncertainty on investments in potential or new enterprises. It does so by allowing current users or title holders to exchange tenancy rights or the assets free of legal disputes; it does so, however, at the cost of an obligation incurred by the government to resolve legal disputes by financial compensation of valid claims to the asset. The key issue in this approach is, of course, to establish the value of the asset. Symbolic compensation or compensation based on the value of the asset in the centrally planned economy is unlikely to be successful and will be challenged through whatever legal system is developed. The economic value of an asset is the discounted value of the stream of earnings it can generate in the future. The lack of full ownership rights for several decades in these societies and their operation as nonmarket systems would have considerably reduced the income generating abilities of these assets. Schemes based on current value would substantially undercompensate in most cases. Schemes based on the value of the asset at the time of confiscation, on the other hand, would be infeasible. The income generating capacity of the asset in a market economy did not exist for several decades. Moreover, any estimates based on compounding would lead to fiscal burdens that could not be met. Thus, compensation schemes would have to be related to the income generating capacity of assets under the new proposed market system. Devising such a scheme paying due attention to efficiency, growth and equity considerations is a difficult but worthwhile research task.[10] A small part of our profession, the so-called quants, specializes in the design of new financial instruments and on their pricing. While the present problem is more complex, the insights from this literature may be valuable.

Concluding Remarks

In this essay I have endeavored to provide a constructive perspective on many different issues relying on the tools of our trade. It is worth stressing that this perspective is not exhaustive. There are many issues I have not addressed. It is not for lack of importance. Issues were ommitted if others were expected to address them, for example macroeconomic and international issues stressed in Pazos' lecture (1990), or if I did not have particularly useful comments to make, for example environmental issues.[11] In those issues I did address the emphasis has been either on those factors affecting the growth promoting features of alternative institutional arrangements or in bringing out characteristics of these arrangements which become evident when one asks the question -- what is the economic function of a particular institution? By doing so, we can enhance the usefulness of our contribution to policy discussions as economists. As with most research efforts, these ideas are offered as part of an exchange involving reciprocity and mutual gains. Extensions, corrections and other proposed modifications are therefore welcome. Finally, although I have emphasized aspects especially relevant to the Cuban economy, most of these ideas are of general applicability.

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[1] This general distinction of three strands of literature is taken from Nabli and Nugent (1989) but my further characterization is not necessarily in agreement with their views.

[2] See the discussion of the evidence in Hernandez-Cata (1991) and of some of the institutions in Betancourt and Kiguel (1989).

[3] While they continue to emphasize the role of technology, they begin to allow a role for institutions by arguing for persistent heterogeneity in ex-post realizations of technological shocks due to this factor.

[4] In a recent paper Oi (1990) asks the question what is the output of a retail firm and comes up with a list that is easily reconciled with these five categories.

[5] This is an act limiting the size of retail space in different areas.

[6] There are other aspects of the design of a constitution very relevant for the present context but I will leave it to the reader to consult Mueller's paper and the literature cited therein.

[7] Announcement of a restitution policy is a powerful signal in this context but it is not the only one. Other signals, however, are less convincing and have different incentive and growth effects, for example exemptions from the country's labor or environmental legislation.

[8] For instance in the Czechoslovak case former owners and their heirs are not supposed to receive the benefits of improvements made over the last 30-40 years and the implementation of this rule generates another source of uncertainty and the need to ascertain the value of these improvements.

[9] There are numerous squatter settlements in the market economies of Latin America where the capitalist state has implicitly decided not to incur the transactions costs of enforcing the property rights of formal title holders. The uncertainty of these property rights makes this alternative at most a second best policy.

[10] For instance, under most conceivable schemes a significant part of the additional taxes necessary to undertake the financial compensation would have to be borne by future generations.

[11] Those interested in a detailed discussion of other economic issues that arise in the early stages of a transition from socialism are referred to the introduction to a set of conference papers on the transition in Poland, Hungary and Czechoslovakia, Clague (1991), and to the other papers presented at these meetings