A 'New Institutional Economics' Perspective on Market Augmenting Government

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Just as many others in this conference, my initial encounter with the notion of market augmenting government arose through the work of Mancur Olson. Upon seeing an early version (1994) of his paper with Clague, Keefer and Knack on Contract Intensive Money[2], several elements of the concept present in that paper suggested themselves as insightful ways to look at the world. First, the paper argues that there are two types of markets -- those where transactions are or tend to be self-enforcing, which are illustrated by spot markets, and those where they are not, which are illustrated by future-oriented markets. Second, the paper also suggests that the role of government in both types of markets is different. In the former, governments provide law and order services and money as a reliable medium of exchange services; in the latter, they must provide, in addition, contract enforcement services. Third, the paper stresses that most markets in modern economies are future-oriented and that a failure to provide contract enforcement services prevents development. Finally, it goes on to propose contract intensive money (CIM) ,or the ratio of demand and time deposits to the broad money supply (M2), as a measure of the effectiveness of governments in providing contract enforcement services and to test its explanatory power in various ways. The second element of this paper provides a narrow and descriptive view of what we are presently calling market augmenting government services.

Earlier work by North (1990) provided a useful characterization of markets into traditional and modern and emphasized the need for an impartial judiciary in the latter type. Nevertheless,

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[1]The discussion below evolved out of my role as rapporteur for the conference, and is based on the papers presented at the conference not on their revised versions.

[2]Interestingly, the final version of the paper, Clague,et.al.(1999), is much less focused on the first two issues noted below.

the distinction between spot and future-oriented markets and the emphasis on contract enforcement services and their measurement enhanced considerably the operationalization of these ideas. It also leads easily onto the question – what happens when governments fail to provide market augmenting services? Several things: markets may fail to exist; or they may operate at a very low level of transactions; or alternative institutions arise that provide a substitute for the lack of these market augmenting services. For our current purposes it is useful to focus on the last alternative. With respect to the first two types of services provided by governments, which support all types of markets and especially spot markets, historical examples and current ones of alternative institutions are easy to find. Dollarization in Argentina, for example, would be an institution where another government, namely the U.S., provides the market augmenting services of a medium of exchange, albeit one that is more reliable than what can be provided through the market augmenting services of the Argentine government. Russian mafia activities are, among other things, an institutional device that substitutes for the inability of the Russian government to provide the market augmenting services of law and order.

With respect to the provision of contract enforcement services, the array of alternative institutions that may arise in any setting to perform this function is quite broad. For instance in evaluating Cuba's limited reforms in markets where transactions are not self-enforcing with this question in mind, I found several of them in relation to foreign investment [Betancourt (1998)], e.g., the use of a Paris court to settle disputes with foreign investors, exemptions from the country's labor code and corruption in Bardhan's sense (1997) of use of public office for private gain. More generally, in regimes where the legal system can be easily manipulated by the government the role of market augmenting government through the provision of contract enforcement services either does not exist, exists at a very rudimentary level and/or is provided

through mechanisms other than an independent impartial judiciary system. Is it possible in this setting for institutions to arise that are an alternative to an impartial judiciary and that allow these economies to perform well and future oriented markets to develop? In Cuba the answer is no; but in China the answer is a definite yes over the last twenty years.

In the case of China, at least two major institutional reforms are associated with their recent economic performance. The development of the household responsibility system in 1979 eliminated a major element in the repression of spot markets, by securing the property rights of agricultural households with respect to the fruits of part of their efforts. The development of town and village enterprises in the early 1980's eliminated an important element in the suppression of some future oriented markets, by allowing these enterprises to become the residual claimants to the fruits of their efforts. Why have these two institutions flourished in the absence of an independent judiciary? What alternative contract enforcement mechanisms arise in the Chinese system? One can argue that the agricultural markets relevant for the success of the household responsibility system are those in which transactions are largely self-enforcing; hence, all you needed was to stop suppressing them. Moreover, China in 1979 was primarily an agricultural country. The same argument is not convincing for the more industrial markets relevant for the town and village enterprises. One possible explanation for their economic success put forth in the literature, Qian and Weingast (1996), is the combination of their becoming residual claimants with their facing of interjurisdictional competition.

Understanding the role of market augmenting government services is fundamental to answering this type of question about growth, but it will also require incorporating into the analysis an understanding of the existence of alternative institutions that at a particular point in time may perform the same functions that market augmenting government services perform or of

how different governmental structures perform these functions. Keeping this functional perspective in mind is helpful in assessing the contributions of the conference papers to our understanding of market augmenting government, and perhaps more importantly in pointing at major gaps in this understanding.

Do different types of governments provide different levels of market augmenting government services? Earlier work by Mcguire and Olson (1996) considers two extreme types of governments, utopian democracies and pure autocracies, and shows that a utopian democracy has an incentive to take into account the excess burden of taxation and, thus, provide an optimal[3] level of a public good that improves economic performance in the private sector. A pure autocracy has no incentive to take into account this excess burden of taxation and, thus, provides a different level of the public good, which is chosen independently of the level of taxation in this case. In this context actual governments can be modeled as a linear combination of these two extremes. McGuire interprets the public good as a market augmenting government service and extends the model by showing how governments fail to provide optimal levels of market augmenting services due to their pursuit of redistribution, discrimination in segmented markets and corruption on the tax and expenditure side.

While this analysis is insightful, the specification of the public good in the model seems more compatible with public goods such as infrastructure than with market augmenting services such as law and order, a medium of exchange or contract enforcement services. The former require additional quantities of resources to increase market output directly and may be subject to diminishing returns; while the latter can also be viewed as public goods, they increase market output indirectly by increasing the gains from exchange through a reduction of uncertainty and a

[3]Optimal in the sense of maximizing national income subject to a budget constraint.

lowering of transaction costs and may be subject to threshold effects and increasing returns. This suggests that governments augment markets by providing two very different types of services or public goods: those that increase market output directly, which we think of primarily in terms of quantity, and those that increase market output indirectly, which we think of primarily in terms of quality. Revisiting Mcguire's arguments with this distinction in mind may be a fruitful area for future research.

Two different dimensions are also at the heart of the paper by Cooter on the optimal number of governments for economic development. He takes the type of government as given, namely democracies, and asks how many levels of government should we have along the vertical dimension (the number of layers in a federalist system) and along the horizontal dimension (according to functions to be performed, which he calls factoring). He shows than in situations where conflicts are likely to prevail disaggregating the number of functions of governments or factoring avoids intransitive election cycles whereas in situations where cooperation is likely to prevail these intransitive cycles would not arise and slicing or nonfactoring allows voters to enjoy the benefits of cooperation through bargaining. Similarly, along the vertical dimension if uncertainty is large you want flexibility in the relations between the principals (politicians) and the agents (bureaucrats) but this increases the possibilities for corruption to prevail in the bureaucracy; such possibilities are mitigated by increasing the number of elections through devolution. Choosing the optimal level of government along both dimensions improves the performance of democratic governments by diminishing political instability and corruption. In our context, it improves the capacity of democratic government to provide market augmenting services of whatever kind.

Not surprisingly, five of the remaining eight papers presented at the conference deal with

some aspects of financial markets. It is precisely in these future oriented markets, with their intertemporal separation of the gains from exchange to at least one of the two parties to an exchange, that the provision of contract enforcement services plays its most critical role. These contract enforcement services or provision of secure property rights across time, space and even states of nature are at the heart of financial exchanges.

Lanyi and Lee's paper looks at the East Asian financial crisis from three perspectives. First, they attribute a role in the crisis to the autocratic nature of East Asian governments by discussing some of the factors leading to the evolution and dissolution of stable autocracies, sometimes paralleling Olson's arguments about democracies in the Rise and Decline of Nations. In particular the persistence of faulty macroeconomic policy is singled out as more likely in an autocracy, which raises the uncomfortable issue of democratic Japan's similar macro policies and economic decline since 1988. Second, they analyze the role of corporate and financial governance in determining the allocation of credit in general and in the East Asian countries. They make a very convincing case of the existence of major problems with respect to governance by creditors and owners due to lack of enforcement, poor regulation of the financial sector and limited competition in the domestic goods market. They note that these deficiencies may have asymmetric effects in good and bad times. This section of the paper provides an instructive discussion of the variety of market augmenting services governments must provide for the efficient functioning of financial markets. Third, they address the relation between international financial arrangements and domestic governance. While interesting in its own right, this section is quite speculative in many respects and sheds little light on market augmenting government.

A relevant issue that is not addressed in the paper is the debt/equity ratio of nonfinancial firms in the crisis stricken Asian economies. Their debt/equity ratios were around 3/1, in contrast

to typical ones of less than unity in the Americas and Western Europe.[4] The market augmenting services that need to be provided by governments may be very different in the two circumstances, unless one assumes that this ratio itself is evidence of financial mismanagement or underprovision of market augmenting services in this area. In either case -- what alternative institutional arrangements allowed these economies to grow so fast for so long under these circumstances? Is it that 'corruption' was an effective substitute for market augmenting services in the financial sector, by lowering uncertainty and encouraging financial transactions for many agents, during the expansionary period but became an ineffective one in the later phases, perhaps due to the opening of the capital accounts?

Summers provides us with an account of good contract law, especially for loans secured by personal property. Thus, he identifies eight characteristics that these laws must have for augmenting the market for these loans in a society and he also points out typical shortcomings in this area. An important feature of his argument is that these laws must have a sound underpinning in the basic institutions of society and in a general respect for the rule of law by the members of society if these characteristic are to be achieved. In other words, the provision of market augmenting services in terms of good contract law in this area requires other more general market augmenting services for enforcement to be feasible. He recognizes, just as North (1990) did, that we don't have an answer to the fundamental question of how to produce the market augmenting service that we label 'respect for the rule of law' in a society.

While the paper by Summers tells us what good contract law for loans secured by personal property should be, the paper by Holden and Sobotka shows how commercial law in Latin America departs from the ideal and assesses its economic consequences. A tell tale sign that

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[4]See Wade and Veneroso (1998).

there is a problem is that credit to the private sector in Latin America is usually less than 50% of GDP, and often far less, whereas this ratio is close to or exceeds unity in the more advanced countries. Commercial law in Latin America is primarily based on French civil law, which provides less security for creditors than the alternatives in theory and is rated as having greater enforcement problems in practice. Their diagnosis of the problem is that small and medium size firms have limited or no access to credit due to the inability to obtain secured lending (because of the legal system's deficiencies) and the high costs of unsecured lending. This has discouraged the provision of unsecured trade credit although it has encouraged the use of consignment sales. While the authors dismiss this alternative institutional arrangement as inefficient, no discussion of the reasons or measurement of efficiency losses is provided; a more thorough discussion of guarantees as an alternative institutional arrangement to secured loans finds them unlikely to perform this function effectively.

Wallis takes a historical perspective to analyze the granting of charters to corporations in the U.S. by American states during the 19th century. He concentrates on bank charters in the early period (1790 to 1840), because of their monetary importance to the states and because the U.S. had a well developed financial system by 1830, at least by the standards of the time. During this early period, these charters were special charters that had to be granted by the states legislatures. They vary quite a bit in terms of the monopoly privileges granted, some of them may have made Suharto proud, and how the states fiscal interest was pursued. Nonetheless during this period they tended to emphasize one time payments and the receipt of dividends from the chartered corporations. Subsequently, there is a transition to general incorporation acts, frequently a different one for different type of businesses, for which taxes on capital become a more attractive revenue raising mechanism for the states. Finally, in the 1880's New Jersey adopts a single type

quite liberal general incorporation act, lifting most restrictions.

The period prior to the 1840's provides an example of an institutional arrangement whereupon government is providing market augmenting services in a less than optimal manner, by modern standards, yet both the financial sector and, more generally, the American economy were doing well during this period. One possibility is that both would have done better with a better institutional arrangement, and another is that competition among states limited the worst consequences of this system. It is also possible that this institutional arrangement was suitable at that stage of development given the population size and levels of economic activity in these states, but lost its virtues as size increased. In any event, Wallis concludes that the transition to the 'superior' general incorporation system in banking as well as in other areas was driven far more by ideological revulsion against the notion of privilege associated with the special charters than by revulsion against inefficiencies introduced by the special charter system. Given the variety of conditions among the states, more detailed research aimed at disentangling the role of ideology from the other considerations mentioned above in adopting the more attractive form of market augmenting government with respect to banks would be desirable.

Levine's paper focuses on another financial market: stock markets. Two market augmenting services provided by governments in these markets are securing the property rights of minority shareholders and regulating the disclosure of information by firms in these markets. Levine develops two empirical indicators of these services: shareholder's rights, which is an aggregate of five dummy variables indicating voting rights of minority shareholders; and account , which is an index of accounting standards based on an assessment by the Center for International Financial Analysis and Research. A well developed stock market is one where it is relatively easy to trade ownership of companies and it is argued this helps a country grow faster. Levine measures this

ease of trade by Value Traded, or the value of shares traded relative to GDP. Account provides a powerful explanation of value traded while shareholder's rights does not, although both play an important role in explaining other features of stock market development.
Finally, Levine shows, using a cross-country time series data set, that value traded and two other stock market indicators have a positive and statistically significant effect on growth while controlling for a variety of other variables.

Tests of overidentifying restrictions are used to establish that the legal and regulatory environment, as measured by Levine, do not have an independent effect on growth. An interesting result in the paper is that banking sector development, measured as credit to the private sector divided by GDP, has an effect on growth that is complementary to stock market development, in the sense of having the same sign and being statistically significant but the interaction of the two has no effect on growth. Not surprisingly given the Holden and Sobotka paper, Latin America performs poorly with respect to the two indicators of market augmenting services needed for stock market development. Levine's analysis is extremely useful by generating specific results with respect to features of market augmenting government services that are in general difficult to measure. Nonetheless, going farther and using numerical estimates of the effects on growth of reforms based on this methodology could be highly misleading. For instance, the resources and the amount of time required to change the index Account from 45 to 50 could differ dramatically from those required to go from 55 to 60, and the implicit assumption in this type of calculation is that they are the same.

In the remaining three papers we move from the financial realm to other future oriented markets. Heal points out the subtle role of market augmenting government in the environmental area by characterizing and differentiating two types of innovations that have emerged in the last

twenty years: the creation of markets for tradable permits in pollution rights and the creation of markets for the services of nature's assets or capital through privatizing and securitizing. Given that the public good (or bad) is privately produced, which is the case for example with sulphur dioxide emissions, the government creates a market in pollution rights by providing two specific market augmenting services: setting the level to be produced in any given year and generating secure property rights through the issuance of tradable permits.[5] These services increase the gains to society from its necessary interactions with the environment by internalizing externalities in the consumption of the public good.

A second type of innovation is more recent and specialized. In the case of ecosystems which generate services with commercial value, Heal argues that a well developed property rights infrastructure can allow the market to generate the conservation outcome provided producers can appropriate the benefits of providing these services to consumers. Ecotourism in South Africa is perhaps the best example. Well defined property rights in land and contract enforcement mechanisms have allowed a private corporation to restore farmland by contracting with the owners to do so while retaining management of the ecotourism reserves to which these restored lands are added. This is an example of how divided ownership of an asset, in the terminology of Barzel (1989), increases the gains from exchange. This divided ownership is made possible by the provision of market augmenting services by governments in the form of secure property rights over the land and contract enforcement services that allow the corporation to use the land and restrict what the owner farmers can do.

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[5] Heal shows how the introduction of a market in permits allows for an efficient allocation as a result of introducing an extra set of prices that lead to personalized prices for the public good, which restore the independence of equity and efficiency in this allocation that equal consumption of the public good had voided.

One of the issues that arises in the environmental area is the need to define the market for permits in terms that go beyond national boundaries in some cases. While Heal points out that distributional considerations between countries make it more difficult to create markets for pollution permits in these cases, Sandler's paper brings out that this is only the tip of the iceberg in terms of the difficulties of providing market augmenting services across national boundaries. He also discusses a number of reasons why countries should be interested in doing so. Two points stand out in Sandler's paper . First, he shows that if the structure of incentives over an issue can be characterized in terms of an assurance game (multiple Nash equilibria) rather than a prisoner's dilemma game (a single Nash equilibria), a central authority that can correlate the strategic choices of agents can improve expected payoffs. Second, the former is more likely in the provision of standards, for example, than in the provision of peacekeeping forces to eliminate ethnic cleansing. Indeed, authorities that provide transnational market augmenting services independently of governments have arisen through private sector efforts despite collective action problems. Sandler points out that Intelsat's communication system is an example which exists because it has the features of a club good; namely, nonpayers can be excluded and the network can be used simultaneously by all members. In so far as the sacrifice in national autonomy is small, the creation of international agencies to provide market augmenting services takes place when the net gains from exchange for every nation are large. Substantial net gains generated by adding the benefits to each agent in a nation is one reason for these international agencies to have arisen in telecommunications, postal services and air travel.

Both of the previous papers identify conditions in different economic spheres where the provision of market augmenting services by government and other institutions is most effective: namely where these services have the characteristics of club goods. Azfar's paper takes us into a

very different realm by seeking to identify conditions that always work in generating growth. His approach is to find an empirical association between four indicators of policy and convergence, or the notion that poorer countries grow faster than rich ones. By selecting countries that rank above the median on the ICRG index of institutional performance in 1982, the primary plus secondary rate of school enrollment in 1960, the Sachs-Warner measure of trade openness, and below the top quartile in terms of the sum of inflation plus the standard deviation of inflation, Azfar finds strong evidence of convergence for the 24 countries that satisfy all four conditions. While the evidence is appealing, skepticism is warranted. For instance, results that arise in cross-country convergence regressions often don't survive when confronted with panel or time-series data, Aghion and Howitt (1998, Ch1).

By the way of a conclusion, I will try to identify some significant gaps in our knowledge of market augmenting government. Some gaps arise because it is difficult to measure market augmenting services. Perhaps the best aggregate measure of market augmenting services is the ICRG index. There are five components in the ICRG index that represent five different market augmenting services provided completely or mainly by governments. While each component is given equal weight in the construction of the index, Summers paper implies that the component ' Rule of Law' is more fundamental in some sense than the component 'Repudiation of Contracts', for example, and the index does not capture this distinction. Similarly, 'Corruption' and 'The Quality of the Bureaucracy' are treated as additive components of the index. Nevertheless, Cooter's analysis implies that these two components interact with the federalist structure of a democracy in determining the actual levels of market augmenting services provided. No measure of regime type is considered explicitly in this index. Yet, McGuire's arguments imply that the provision of levels of market augmenting government services vary by

regime type.

In economics one finds with some frequency a conflict between the diagnostic messages generated by aggregate or macro indicators and the ones generated by individual or micro indicators. Not surprisingly, a similar conflict arises with respect to market augmenting services. For instance, South Korea and Malaysia make Azfar's select group of 24, in which the four conditions for convergence are satisfied, but South Korea also makes Lanyi and Lee's group of most seriously affected countries by the Asian crisis. The latter point out that South Korea earns a 2 on a direct scale of 1 to 5 indicating the degree of protection of shareholders' rights (Malaysia earns a 3), an individual or micro indicator of market augmenting services. Is it that some of the more detailed aspects of the provision of market augmenting government services in the financial area can not be captured in aggregate indexes such as ICRG? Since no Latin American country makes it to the group of 24, one could argue that Azfar's four conditions together yield a similar diagnostic message for Latin America than the paper by Holden and Sobotka with respect to the credit market and the one by Levine for the stock market. Unfortunately, many of the Latin American countries score above the median on the ICRG index and, thus, would not focus on institutional reform based on this index. In other words, further aggregation is unlikely to resolve the conflict in diagnostic messages.

Some of the gaps arise because it is difficult to understand institutional change. Wallis illustrates the nature of institutional change, including the role of ideology, with respect to the provision of market augmenting services in the financial area through the shift from special banking charters to general incorporation laws in the states of the U.S. in the nineteenth century. Chile's reform of its banking system in the early 1980's provides an alternative illustration. In order to remedy some of the perceived reasons for the crisis of 1982, a regime ideologically

committed to laissez-faire introduced strict regulation and supervision of the banking system, Edwards and Edwards (1987). This is an example of a government providing essential market augmenting services in the banking sector as a result of a crisis. This type of phenomenon, which is relevant to the design of effective policy reform, points to the need for individual country analyses of episodes classified as successes and failures in the provision of market augmenting services by governments.

More generally, Sandler's Intelsat example illustrates that governments are not the only institutions in a society providing market augmenting services and this topic has not been systematically explored here or elsewhere. Incidentally, some of the institutional examples provided by Heal where a market generates the conservation outcome suggest that the provision of a given level of market augmenting services may be the joint outcome of public and private efforts. Institutions arise to satisfy some individual or collective need and perform functions that have economic consequences. Governments through various institutional forms of corruption can provide substitutes for the market augmenting services of, for example, an impartial judiciary or the rule of law. Given any broad type of regime classification, such as autocracy or democracy, some institutional forms of departures from reliance on an impartial judiciary or the rule of law may be far more inefficient than others and this topic may provide a fruitful integration of analyses of corruption and market augmenting government.

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