

## **An Institutional Economics Perspective on Economic Growth\***

A. Allan Schmid, Michigan State University      schmid@msu.edu

©2005 A. Allan Schmid

We have seen a succession of themes and programs that were reputed to be the answer to world poverty. The Washington Consensus dominated policy discussion for a decade and now we have the Copenhagen Consensus and United Nations Millennium Project and Goals among others.<sup>1</sup> (Acemoglu, Johnson, and Robinson 2001) (AJR) say that a nation's political and social institutions play a key role and Edward (Glaeser and et.al. 2004) say they don't, preferring to emphasize human skills. (Rodrik, Subramanian, and Trebbi 2004) say institutions trump all while Robert (Fogel 2004) emphasizes nutrition and health.

The debate over whether institutions or some factor such as human capital or health is more important is misplaced. Only physical factors are in a production function. But, it is institutions that help explain why and what physical factors are present and combined in a particular way and time in that function (Schmid 2004, 88). Change the institutions and you change the available factors and their combination, and you have a different production function. When income growth is regressed on institutional variables, the connection of institutions to the factors in the production function is put in a black box. It is hard to account for specific production relationships that way. The coordinating and enabling function of institutions is then not specifically modeled.

Neither institutions nor technical factors of production, institutions nor income, social structure nor human agency have primacy. All are embedded together in evolution and emergence. The utility of making everything a kind of capital and throwing them all into some grand production function is questionable. Part of the problem is that hours of labor (even with years of schooling) and monetary measures of capital investment are inadequate to specify a production function. Perhaps the whole enterprise of comparative institutional performance is flawed with only an illusion of precise measurement.<sup>2</sup>

---

\* A version of this paper was prepared for the Seventh International Workshop on Institutional Economics, University of Hertfordshire, UK, June 22-24, 2005. For helpful critique, I thank Dan Bromley, James Shaffer, Carl Eicher, Jean-Philippe Collin, Denys Nizalov, Don Kanel, Laura Donnett, Trond Andreson, Andrew Dorward, Tracy Beedy, and Agus Pakpahan. Research supported by the Michigan Agricultural Experiment Station.

Some of the measures of institutions in the econometric literature are reviewed by Glaeser, et.al. (2004). These include indicators of institutional quality such as the International Country Risk Guide, governmental effectiveness collected by (Kaufman, Kraay, and Mastruzzi 2003) including such things as regulatory burden, and limits to executive power. Many recent studies of the role of institutions in development take off from the argument that secure property rights are essential for investment and therefore development.<sup>3</sup> Researchers such as AJR take this as a given and limit their measure of political institutions to those that make rights secure. Glaeser then proceeds from there and argues that the actual empirical measures used do not measure constraints on the executive (read in general the ability of government to expropriate property). This measure is based on the implied assumption that if property rights are secure, development is automatic. How did the role of institutions get condensed to constraints on the executive? Perhaps it is part of the ideological movement to discredit government in general (all the while of course using government for the purposes of an elite).

A right can be secure, but of a kind and distribution that is inimical to certain kinds of development (particularly raising the poor). Who wants the advantages of the elite in Indian villages (described by Harriss-White, 2003) to be secure? Part of the failure of recent econometric studies to inform policy debate is the limit of the dependent variable to per capita income growth. This tells us little of what is happening to the poor.

Econometric studies of growth rates in different countries are further flawed by the non-availability of on-the-ground institutional differences—and the complementarity and functional substitutability among them. As will be argued below, growth may be related to “selective confiscation” of property rights. Also, the prevailing neo-classical notion of institutions as constraints has to be supplemented by their role as enablement. Glaeser’s point that growth in income can cause institutional change, as well as vice versa, is well taken. We need to go further. The essential evolutionary and emergent character of growth calls for research methods in addition to even the most clever econometrics. Instead of accepting the charge of circularity as crippling, we need to work with over-determination in which independent variables become dependent and so on.

Glaeser finds that human skills (measured by years of schooling, not a actual skill of a particular kind) explain more than political institutions. Even if true, it begs the question of where education comes from. The problem of proxies and instrumental variables is rampant. Glaeser disputes AJR’s finding that growth was caused by colonists in the 16<sup>th</sup> century who

brought political institutions with them by pointing out that they also brought skills. No doubt. But, if these skills are to be transferred to succeeding generations, there will be some institutions and transactions to finance education and create receptivity in children. Decentralized government was probably a key in frontier U.S., but there are other parts of the world where central governments made similar investments. Indeed, in the vein of finding substitutes, Glaeser's most telling story raising doubts about the role of political restraints is the fact that several despots in Asia nevertheless led their countries to growth in per capita income.

Rodrik, Subramanian, and Trebbi (2004, 4) after constructing a model regressing per capita income growth on AJR's variables of political constraints, plus an instrument for trade integration and geography declare "the quality of institutions trumps everything else." They qualify their work by admitting that it has little policy relevance. "But nothing is implied about the actual form that property rights should take (22)." "Indeed, there is growing evidence that desirable institutional arrangements have a large element of context specificity ...." Indeed!<sup>4</sup> Problems of endogeneity need not stop analysis. Arguments of primacy and proximate cause should be replaced with a perspective of evolution and emergence.

Implicit in a regression with change in per capita income (or its distribution) as the dependent variable is a change in production functions (or a change in ownership of the product thereof). It is institutions that make the change in production function possible. Knowledge is embedded in the production function, not a separate variable.

This paper offers a framework of interdependence within which we might organize our experience and research, and suggest some testable hypotheses and research questions. It will be argued that institutions must be specified much more carefully than has been done in recent econometric studies. The problem of poverty will be emphasized, but general economic, political, and social development will also be addressed.

The distribution and structure of opportunities energize and define what becomes development and who gets it (including, but not limited to per capita income and its distribution). It is institutions (property rights *writ large*) that make one person's interests a cost to others (and thus a source of income). In a world of interdependent parties, it is institutions that make some people's preferences count when there are conflicting interests.<sup>5</sup>

This paper will develop hypotheses on the relationship between institutional alternatives and their consequences. Less attention to institutional change explaining change or stasis will be noted.

The transaction is a basic unit of observation in institutional economics. Property is a relation between/among people affecting who gets what. It is not a relation between a person and a factor of production. When people are interdependent, one person's opportunity to act is another's exposure to that act or even obligation to act in a certain way.<sup>6</sup> Thus, the right of Alpha is a non-right for Beta. From this it follows that institutions are never simply constraints in general, but also enablement.<sup>7</sup> Enablement not only in the sense that the rights holder has an opportunity set with which others may not interfere, but also that may allow the holder to achieve something that is not possible to achieve acting alone. The single-handed entrepreneur is much celebrated in economics and folklore, but collective action and organization is the heart of development.

Central to an institutional economics perspective and a better specification of institutional variables is the character of goods and services (any opportunity)<sup>8</sup> that are sources of human interdependence. Without knowing the particular sources of interdependence, one cannot design specific institutional forms to achieve a particular performance (function). The sources of interdependence include: goods that are incompatible in use, have high exclusion costs, economies of scale, non-rivalness, transaction costs, and produce rents. Each source of interdependence will be examined in turn. Some hypotheses relating institutions to development and alleviation of poverty will be developed for each source (noted in italics). The institutional variables identified by this framework will be seen to differ markedly from those used in the econometric studies noted above. The institutions that give direction to the interdependence created by one type of good are not relevant to another source. Categorization of sources of interdependence provide a framework that facilitates seeing the comparability and cumulative findings of various authors in institutional economics. A two-stage analysis of growth is suggested. First, test the relationship of the factors of production to output and income. Then test the relationship of institutions to the presence and combination of the factors. This paper is focused on the later test.

### **Incompatible Use Goods**

The first source of human interdependence to be examined is goods (any opportunity) whose use by different people is incompatible. This interdependence is controlled by factor ownership. Two points will be made: (1) Not enough attention has been paid to the relation of ownership to

poverty. (2) The emphasis in conventional literature on security of ownership is misplaced.

On the first point, it is always better to be the owner of an opportunity rather than a buyer. Nowhere is that clearer than in the use of resources where my use is incompatible with yours. If I have the use or exchange right to land and you do not, I will be fat and you thin. See (Jayne et al. 2001) and (Carter 2003). Many informal institutions related to discrimination by gender, ethnicity, or class; job access and security; patronage and debt bondage; access to education and credit, and land tenure function as rights to incompatible use goods. An institutional economics perspective suggests that the problem of the poor is that they own little that can be made a cost to other actors. *Hypothesis: Many informal institutions related to land tenure, job access and security, and discrimination by gender or ethnicity allocate incompatible use goods to the disadvantage of the poor.*

But, what about the incentive to apply one's labor (and other owned resources) to the production of new goods?<sup>9</sup> It has become a canon of development that people will not sow if they have no opportunity to reap. (Never mind for the moment that hired reapers get so little of the product.) In explaining the divergent rates of growth of 16<sup>th</sup> century Spain and England, Douglass North (1990, Ch. 12) emphasizes the difference in security of property rights. To meet the costs of war, the Spanish crown often confiscated the lands and other property of its aristocrats, while England made ownership and taxes more predictable. The lesson? Don't muck with property rights. There is of course some truth in the relationship of motives for effort and the opportunity to enjoy its fruits—though this is often interpreted in favor of the elites rather than the workers. Still, development invariably involves the uncompensated losses of some to the advantage of others. Development may involve preventing old rights holders from extending their rights to new opportunities often created by new technologies that previous custom and law could not have anticipated.

Take an example from U.S. frontier history when waterpower was the key to development. There are only a few sites for milldams. But, they back up water requiring not only the dam site, but also a flowage area. Assembling the necessary land faced high transaction costs and arguments over sharing the hoped for, but uncertain profits (distributed to the milldam constructor and the flowage landowners. Many American states decided in favor of the mill entrepreneur and against the flowage owners, giving in effect eminent domain power to private persons to acquire land at its agricultural value rather than its unique value for waterpower. If the courts had insisted that landowners be compensated according to their own

bargaining power, the westward movement of settlement would have been slowed. The same scenario applied later to canals and railroads. So contrary to the general message of North and others, a certain amount of insecurity of rights (uncompensated change in opportunities) is essential to development. Imagine bargaining over air rights when airplanes became common; or, over noise rights for railroads and urban transport lines. *Hypothesis: entrepreneurs can tolerate a certain amount of “confiscation” of rights, and in fact uncompensated change in rights is essential for development of new products.* This might be called “*selective confiscation,*” paralleling Schumpeter’s “creative destruction.”

**TINA.** “**There **Is **No **Alternative**”** is a popular slogan often dominating policy discussions. The near elimination of communism is taken by many as evidence of the superiority of capitalism. But there are many kinds of capitalism for the developing world to emulate. The capitalisms of Germany, Japan, Sweden, and the U.S. are quite different. Ownership of the means of production can take many forms. In Germany, labor has equal seats on corporate boards, and Japan has labor-management councils.<sup>10</sup> Does this make a difference when a firm loses market share for one of its products? Do they just fire workers as in the U.S., or search for new products to employ their workforce? Are corporate executives paid less in Germany than the U.S? Does it mean they attract less capable management? Those who criticize the capitalism in their country are faced with TINA. But, in fact there are alternatives.<sup>11</sup> Some Latin American economists are balking at privatization and arguing for self-sufficiency, not country by country, but regionally (Barkin 2005).<sup>12</sup> They note that the Spanish forbade their colonies to trade with one another. Economies of scale might be achieved with one large firm in a region. However, a distributive conflict would arise in deciding which country gets what industry if only one is possible. U.S. regional development policy at one time was built on the economics of growth centers with the argument that peripheral areas would benefit more than if they all had equal, but small employers. But, the policy collapsed when every community wanted to be the chosen growth center. Growth often requires sharing and cooperation.****

The issue of alternatives will be a theme to be explored in all of the cases below. In most cases, alternatives to the *status quo* depend on collective action.

### **High Exclusion Cost Goods**

Another source of human interdependence whose direction affects growth is that of goods with high exclusion cost. Some goods if they exist for the use of one person are hard to exclude others from using even if they have not contributed to production of the good. This creates a problem for institutions built on individual rationality—namely that of the opportunistic free rider. The outcome of this kind of interdependence is shaped by institutions that enable or suspend individual calculation. The classic case of Prisoner’s Dilemma and the accompanying commitment problem stem from exclusion costs.

The Prisoner’s Dilemma illustrates the difference between institutional constraints and enablement. To be trapped in the undesirable Nash equilibrium is not the fault of constraints. It is the lack of institutions that enable the parties to do what they can’t do acting individually.

An example is extensive use of forests for fodder, etc. It is relatively cheap to exclude large scale logging if the logger does not pay.<sup>13</sup> But, it is expensive to exclude a nearby resident from harvesting firewood and fodder. It is difficult to keep farm animals from eating tree seedlings over a large area. Each person acting alone is motivated to take all they can get. Countries like India have instituted Joint Forest Management schemes (a kind of common ownership) to inspire local people to self-police themselves and limit their use to sustainable levels (Hill 2000). *Hypothesis: Something more than individual calculations of advantage is necessary for the production of high exclusion cost goods.*

Another example was the threat of sand dune encroachment on settlements and water holes in Mauritania 1983-1990 (Lund 1995). While everyone stood to lose eventually if the dunes enveloped the village, not everyone was forthcoming in contributing labor to their management. An effective technology is to erect a line of palm fronds to catch the sand. But, instead of joining together to implement this control, some wanted to profit from the sale of palm fronds that before had no economic value. Nevertheless, some communities were successful in avoiding crippling free riders. What informal and formal institutions make the difference? How does social capital in the form of caring for others develop? How do habits evolve so that individual advantage is not calculated and people just do the right thing? This may beg the question of how the “right thing” is conceived.

Today, Chinese farmers are being dispossessed while local party officials profit from making land available for industrial use (Yardley 2004). Many are pleased to have the new jobs, but some farmers lose their resources without compensation. The result of any protest is a high

exclusion cost good. If some group bears the costs (incur the wrath of the officials), all farmers benefit. Still, some bear huge personal costs to protest. *Hypothesis: Protests whose result is a high exclusion cost good are easier to organize if the issue carries an emotional charge.* Witness the recent large-scale protests in China around the issue of how Japanese textbooks portray treatment of Chinese by the Japanese military in WW II. What are the processes in which these emotions arise and are channeled? See (Schmid and Soroko 1997). Impact analysis of alternative institutions blends into institutional change analysis. When do the poor rise up and declare they will not take it anymore? Maybe they already are, and we call it terrorism. Among others, the Zapatistas in Chiapas comes to mind. Why did the mass of people rebel in the USSR and East Germany when they did? (Kuran 1995) Why do the poor in the U.S. support abolition of inheritance taxes when they have no chance to benefit?

Ocean fisheries are common pool resources with high exclusion costs. The failure to implement effective institutions to achieve sustainable harvest has resulted in over-fishing and collapse of the majority of the world's commercially important marine fisheries (Diamond 2005) 480. Over-fishing especially threatens the poor since fish account for 40% of all protein consumed in the Third World. A hopeful institutional development in Western countries is the Marine Stewardship Council that certifies sustainable fishing. Ecolabeling has resulted from demand by Western consumers who forego opportunistic purchase of cheaper non-certified fish. *Hypothesis: Consumers in poor countries will not be an effective force to achieve sustainability in their essential fisheries.*

The competition among countries, states and cities to bid for plants and jobs by offering tax breaks and tax havens is another example of the Prisoner's Dilemma. Individual free-riding non-cooperators gain from any restraint by others. Most governments would like to escape the social trap, but it would take near unanimous commitment via international treaty (Reich 2005). Agreement among the European Union members to avoid tax giveaways was hard enough. *Hypothesis: it will take some dramatic event to create enough emotion to overcome the individual calculation of the advantage of non-cooperation.*

### **Economies of Scale (Increasing Returns)**

A major contributor to rising incomes is to have an industrial structure of increasing returns industries (Reinert 2005). The WTO's open market rules are making it harder for poor nations now mired in constant or decreasing



return industries to escape. H-J. Chang critiques countries who “pull up the ladders” they used to achieve increasing returns and deny them to poor countries (Chang 2002). *Hypothesis: To achieve increasing returns requires collective action.* If this is true, nations must be allowed to design their own industrial policy. The EU has an institution to review mergers. Should it have one to review a nation’s proposed taxes/tariffs to achieve an industrial structure with economies of scale instead of a blanket prohibition?

Neo-classical economics has given little attention to increasing returns industries because they have no natural equilibrium. Not every factor can be paid its marginal product. A key issue is who pays for the fixed investments and who pays only marginal cost. We may like the slogan of every tub on its bottom (all pay their own way), but it has little meaning here. The person who pays full fare for an airline seat is not pacified by the argument that she was not the marginal user adding little to cost—“let me off and I will get back on as the marginal user.” *Hypothesis: Differential pricing of goods with economies of scale can get the fixed investment paid for to the advantage of different groups.* It is a possible basis for favoring leading sectors—charge them only marginal costs while others pay for the fixed factors of production. (Will such domestic policies run afoul of WTO rules?)

Huge fortunes are made in the process of mergers and acquisitions at the same time that many workers lose their jobs. If it is a good thing from the point of view of consumers, why not share in the costs of adjustment?

### **Non-Rival Goods (marginal cost of another user = zero)**

The polar case of increasing returns is when the marginal cost of another user is zero. Note that the reference point has changed from the cost of another physical unit to the cost of another user of the same physical unit. The resulting interdependence is directed by pricing rules. Various aspects of communication and utility networks provide examples. Once a fiber network is laid or a cell-phone network is built, adding one more user is near zero cost; same for water and electric lines. Again the issue is who pays the fixed cost and who pays marginal cost. *Hypothesis: Non-rival goods present a huge opportunity to structure fees (and profits) to favor the poor (or rich).* Alternative cost allocations for multiple-use projects of various kinds have this opportunity.

Most knowledge products are non-rival (or nearly so) once produced. Once a music recording or a drug formula is produced, copies are cheap. U.S. foreign policy is heavily driven by the interests of its intellectual

property holders—honor copyright and patents or no foreign aid. The U.S. expanded the reach of its intellectual property with the establishment of the WTO in 1986 and the Uruguay Round negotiations in 1994. Once drugs for AIDS are developed, additional doses are cheap. Drug companies have responded a bit with differential pricing for rich and poor countries. There is a dilemma here to be solved. The fixed costs have to be recovered (an argument for intellectual property rights), but how much is enough? The earnings from non-rival goods are the stuff of fortunes that do not necessarily feedback to product development. (Pagano 2004) argues that unless intellectual property is shared, it will be the cause of increasing disparity between rich and poor. “Egalitarian policies should challenge the inequality associated to the privatization of knowledge and consider alternative forms of rewards.”

### **Rents**

Economic rent is a return above opportunity cost due to a natural limit to supply. Institutions that ration the supply or tax the rents direct the outcome of this interdependence. If a market is used to allocate the scarcity, there will be rents. The classic case of Ricardian rent was due to differential fertility of land. Today, the differential productivity is more likely human made in the form of city centers, highway interchanges and subway stops. *Hypothesis: Rent is a major source of income for the wealthy and one in which the poor cannot participate.* Henry George advocated that taxes on rents could be a major source of public finance (supporting economic growth and the poor perhaps). Instead, U.S. tax policy gives it the privilege of low rates applied to capital gains. Attempts to direct rents are a major source of government corruption the world over. If you can influence the location of public improvements and zoning permission, you stand to harvest great wealth over your neighbor who works as hard but is not well connected.

Landowners in the U.S. have succeeded in shifting taxes from property to sales (value added tax in Europe), changing the incidence of taxation from the relatively rich to the less rich. The U.S. tax code gives deductions for interest paid on home mortgages, but not for apartment rentals. This tax-expenditure is greater than the subsidies given to housing for the poor. But of course, in American culture it is regarded as a god-given right to capture the gain in real-estate value due to general growth of cities and public investments.

The favored tax treatment of land is widespread. (Ahene 2000) observes with respect to land or site-value taxes. “Africa’s current tax effort

is far lower than the average for other developing regions.” “Nowhere is African-owned farm land subject to a significant tax.”

**Rent-seeking:** Unfortunately, modern economists do not distinguish economic rent and profit. A return above opportunity costs that comes from differential nature, increasing returns, or continuous innovation needs to be distinguished from that coming from traditional monopoly. As Reinert (2005) remarks, business schools teach how to earn profits from disequilibria. Part is via product differentiation, part from innovation, part from tariffs, etc. We have not yet figured out how to protect infant industries without them becoming protected monopolies. Rent-seeking is used in so many different ways that perhaps the term should be abandoned. Neoclassical economists use it to distinguish productive from non-productive activity, but this is often presumptuous of protecting the *status quo* of whose interests count. (Samuels and Mercurio 1992)

### Transaction Costs

The transference of rights across people is not without cost. Several types can be distinguished: information or measurement costs, contractual costs, the commitment problem in the context of asset specificity, and those arising because of fundamental uncertainty. Since the sources of transaction costs are different, the institutions controlling them are different.

For example, information asymmetry provides a context for opportunistic behavior. Harriss-White (2003, 64) describes a number of consumer frauds in India to the advantage of small retailers and disadvantage of the poor consumer.

Contractual costs are addressed by the Grameen Bank that harnesses local knowledge and social pressure to reduce credit risk. When the problem is poor health leading to loan default, credit can be combined with insurance as was done in the case of the Self-Employed Women’s Association in Gujarat and the Life Insurance Corporation of India. The agricultural poor are particularly susceptible to shocks of weather and price variability in world markets (Jayne 2005). The risk sharing institutions available to rich country farmers are generally not available in poor countries.

“Trading at a distance with strangers” is an ingredient to specialization and increasing returns emphasized by North. Trust is required when sanctioned contracts are not practical. Informal habits and culture matter. The historical institutional research of (Greif 1993) into 11<sup>th</sup> century Mediterranean trade contrasts the development consequences of the Italian Genese and the Jewish Maghribs of North Africa. The latter used family

ties to control opportunism, but the Italian's use of an "efficiency wage" allowed greater scale.

North's emphasis on reducing transaction costs in order to achieve all available Pareto-better trades is well taken, but can draw attention away from who has what to trade in the first place. The poor don't just miss out on trades that would enhance the value of their assets, they just don't have many assets.

The interdependence of poor and rich countries' agriculture is illuminated by an understanding of the transaction costs associated with specific assets. Western farmers have specialized equipment that would only have a scrap value if demand falls. They cannot go quietly and marginally into the night of alternative businesses. This makes them a fierce lobby for government subsidies and protection. While Brazil has had recent success in achieving WTO sanctions against U.S. cotton subsidies, it is a never-ending conflict. It is simply not true, as Oliver Williamson suggests, that entrepreneurs do not make fixed investments without assurances. They do and they will fight to preserve their value. At that point, the only alternative is to win their consent for change by sharing in the necessary losses. If the U.S. and Western Europe had helped farmers and land resources move out of agriculture, it would have been a lot cheaper than the years of subsidies that we have seen. This is not to mention the havoc created for the farmers of poor countries. So much for the fabled automatic, individualistic market reallocations of neoclassical theory.

The Japanese Keiretsu, the Korean Chaebol, and the German banking practice of integrated loans to firms in related industries arise in the context of transaction costs and economies of scope. Auction markets can't deal with the uncertainties of coordinating investments in new fields. The profitability of each firm in a supply chain depends on the scale and timing of other related firms. (Chang and Evans 2000) have described the rise and fall of the Chaebols and industrial policy in Korea. There can be no simple rules for choosing institutions here such as minimizing transaction costs because the impacts of each are different and hotly and continuously contested.

No amount of cleverness can do away with fundamental uncertainty. All consumers would benefit from the development of alternative energy sources. But, the huge investments necessary are slow coming in part because of uncertainty. *Hypothesis: Fundamental uncertainty may be a situation where consumers will have to collectively guarantee some minimum return if the investments are to be forthcoming.* This is not to

minimize the incentive problems and choice of firms that would be necessary to implement it.

### **Path Dependence and Collective Action**

Circular and cumulative causation describes a relationship between an initial change in an independent variable and the dependent variable whereby the dependent variable in turn causes a change in the formerly independent variable in the same direction as the initial movement and often with amplification. If the path is not desired, it takes explicit collective action to point it in another direction. It is a dynamic aspect of economies of scale explored above. Once a country achieves substantial economies of scale in an industry, it will be difficult for other countries starting that industry to compete. Initial advantage becomes permanent. This is the problem of path dependence that Brian Arthur and others have demonstrated (Arthur 1994). The same process is involved in the relation of economic and political power. Economic success provides resources for achieving political power, which feeds back again on making rules favoring the profits of the initial group. Initial advantage is sustained. I will explore several examples of path dependence.

**Population Settlement Patterns:** Most capital cities of the world have reached diseconomies of scale, particularly in poor countries—think Mexico City, Karachi, or Beijing. Further growth means congestion and greater pollution, even when it drives up the price of land and makes some rich. Path dependence is evident. Peasants still flock to these cities for the promise of jobs because at the margin they hope to be better off even if it decreases the quality of life for all. Is there an alternative? It would require massive collective action to change the trajectory. There are places that still enjoy increasing returns and would benefit from more people. But firms and households will not move there because at the moment they are not large enough. It is akin to the classic case of Prisoner's Dilemma. If a prospective migrant could be assured that others would move at the same time, a smaller regional city could become as attractive as Mexico City, and without choking on the air.

The problem can be understood by a less dramatic case. Les Halles was the central food market for Paris for years. But, as it grew, the congestion was horrific—a problem for sellers as well as buyers and neighbors. But, no one seller would move to a new location because there would be no buyers. The solution was collective action in the form of the

government building a new market at Rungis and closing the old one in 1971. Can large cities in poor countries gather support for new cities? And which new cities? *Hypothesis: In path dependent situations, you can't get to what most would regard as a superior outcome without large-scale collective resolve (enablement).*

**Trade, Globalization and Cheap Labor:** Samuelson argued that trade would bring about equalization of factor returns. With respect to globalization however, he recently bluntly says that many economists are “dead wrong about *necessary* surplus of winning over losings...(Samuelson 2004).” He observes that even where there is a surplus, the winners seldom compensate the losers. Perhaps sensing this, some countries and groups within them hesitate to take the full globalization path, but staying off is also costly. How much do some wages fall in the rich countries and how much do wages rise in the poor? The per capita effects depend on population size. The politics of the rich countries of Western Europe, the U.S., and Japan are embroiled in trade and labor struggles. Good paying jobs and whole industries are being lost to regions of low wages. Labor is migrating from poor countries to rich creating cultural and economic conflict. While most economists and political leaders insist on TINA, some labor groups are not so sure as evidenced by demonstrations at the WTO meetings in Seattle in 1999, increasingly violent demonstrations against foreign workers in Western Europe, and the recent French and Dutch rejection of the European Union constitution. Those whose jobs are not threatened (including most professors), rejoice in lower prices, others have no jobs to buy the cheap goods with.<sup>14</sup>

The most common policy for development of poor countries today is to sell goods into the rich countries, since the poor countries have so little effective demand. The Japanese followed this policy, plus closing its borders to selected imports ignoring the WTO and IMF.

Why is it necessary to take a job from one place to create a job in another? Why can't the engine of development be for poor countries to produce for their own people? Why “subsidize” western consumption with products produced by low wages to earn some income with which to buy domestic and international products? Is access to the purchasing power of the rich countries the only way to get effective demand? If the Chinese can make cars for the U.S., certainly they can build houses, plumbing, and appliances for their own people. In recessions, countries use government spending to supplement effective demand. Why not as a development tool? Because the IMF would have a fit! That is not sufficient reason. The rich

countries create money via government borrowing to re-energize their economies. We don't object to government borrowing to pursue wars, but even the rich countries are loathe to create money for their own poor to buy the products of its less than fully employed factories. Chinese banks loan money to Chinese entrepreneurs to build factories to make stuff for Wal-Mart. Would they not loan to build factories if the Chinese consumer had more yuan?

If there is ever a case of "pulling up the ladder" and forgetting the policies that made the West rich, it is in banking. Today the poor countries are forced to adopt balanced budgets and "sound" monetary policy. The U.S. forgets the role played by wildcat banking in the 19<sup>th</sup> century. Local banks saw opportunities and created their own money. With loans, the blacksmiths made farm implements with which farmers increased production, and with new income, city craftsmen could buy more agricultural and other products. Each benefited from the effective demand of the other. Credit was locally made, not only imported. Of course, the eastern moneyed interests fought the western silver coinage states spawning a populist candidate for president who urged voters to not let them crucify us on a "cross of gold." The monetary systems in the years after 1832 were described by Andrew Carnegie as "the worst in the civilized world." But, (Galbraith 1975) 103 in his history of money said, "Yet not everything could have been wrong. For those who spoke most despairingly of the monetary aberrations of the United States in the last century spoke always admiringly and sometimes ecstatically of the nation's economic development." Are we caught in an ideology that says only the relatively wealthy have access to bank loans and it is the savings of the wealthy that make investment and economic development possible (Schmid 2004)(197)? Today, the poor countries wait for capital from the World Bank, and even the job seekers in the rich countries are told they must give tax breaks to capital or they will have no jobs.

The global financial crises of 1997-98 were created by capital market institutions that allowed speculative short-term capital to rapidly move in and out of countries. The IMF enforced fiscal and monetary austerity on Indonesia with disastrous effects on the poor. Seventy-five percent of its firms went broke as interest rates soared. The domino effect of failed banks and calling of loans is another example of circular and cumulative causation. (Stiglitz 2003) (217) observed, "Evidently the IMF was willing to supply billions to bailout Western banks, but when it came to much more miserly sums to provide assistance to the poor, the money had run out." Some countries such as Korea and Malaysia partially resisted IMF demands and

fares much better. China avoided a downturn with an expansionary monetary and fiscal policy. Now that it is on the WTO path, this may be harder in the future.

Is there an alternative to policies of cheap labor and dear capital? If there are alternatives, it will take some collective decisions among nations rather than each making its best choice at the margin. There is more than one kind of globalization as there is more than one kind of capitalism.

**Technological Change:** Surely technological change is a mighty engine of growth. But, who get the fruits thereof is often a matter of institutional path dependence. The Green Revolution in Asia is awesome, but Harris-White's 88% of the population still remain poor (Harris-White 2003). Let's look at one example in the Philippines. New rice varieties and public investment in irrigation in the 1950's and 60's greatly increased rice yields. Before these technologies, the landless laborers received one-sixth of the harvest for their labor. After, they had to give additional uncompensated weeding labor to get the same share. The laborers protested (some joined the Communist rebels), but were beaten down by the local police who owed their jobs to the landlords. Neoclassical economists such as (Hayami and Ruttan 1985) argued that this was a natural outcome since marginal factor earnings must be inexorably equated—wages of the urban poor would have been less than what landless laborers would have received if the old customary shares had been retained. But, who says the surplus production was a wage payment? Why was it not an ownership claim? Stockholders of a corporation do not have to have equal returns to those of workers. If the water and new varieties had been sold to the landowners and the revenue distributed to the "stockholder" citizens, no one would have described it as unequal factor equalization! Why do we not ask these questions about ownership?

Path dependence is evident when power via institutions favorable to an elite in one period begets power in the next period. Still, change and new paths do happen. (Hodgson 1996) emphasizes the role of disruptions such as war and revolutions, but also finds a place for democracy.<sup>15</sup> Surely, the Great Depression provided a context that delegitimized some prevailing institutions and even economic theories. Even so, reaction sets in, and the changes of Roosevelt's New Deal (and Keynesian economics) were contested by Thatcher and Reagan (and Hayek and Friedman) and continue under attack today. In one sense, fundamental institutions change slowly, but others change with every shift in the parties who control legislatures and presidents. Independence movements in colonial countries were the



occasion for substantial institutional change, but many fundamentals were retained and are being reinforced by new despots and international organizations (and slogans like TINA).

There is more to technology than capital goods. “Significant increases in productivity can result from better deployment of tasks, a reduction of waste, and improved organizational or other skills (Hodgson 1996).” It is easier to import material technology to a poor country than to create the collective “congealed habits” and organizational routines to realize its potential. This has something to do with the fact that in spite of World Bank loans for investment projects supported by favorable benefit-cost analysis, so many countries cannot repay their debt. Too much of the new institutional economics is directed to the problem of shirking and too little to the detailed enabling relationships inside the firm. Research has stalled at the level of markets vs. hierarchies, functional vs. multidivisional organizations, and so-called incentive compatible contracts. Who is going to assemble cross-national and cross-industry measures of alternative routines and corporate cultures that could be related to differences in development? And what would policy-makers do differently if we understood the relationships?

I close with two topics that cut across all of the sources of interdependence: the rule of law and the issue of efficiency and distribution.

### **Rule of Law**

It seems irrelevant to speak of alternative institutions for development if people are ruled by despotic and exploitative personalized governments. Too many rulers are content to be parasites on the citizenry, even ignoring the first rule of parasitism—do not kill your host or you may die as well. Foreign aid and mineral earnings get swallowed up in the personal fortunes of a small elite and subsidies are just the means of buying enough support to stay in power.

By the rule of law, I do not refer to a mythical set of rules whose language requires no interpretation, as some so-called strict constitutionalists in the U.S. use the term to hide their self-interests behind. No set of words speaks for itself. But, one can hope for an environment where all government acts are not based on personal favors to dependants. The poor are hopelessly disadvantaged in a trade of bribes. But, so are they in the U.S. where corporations “buy” legislation via political campaign contributions where millions of dollars are necessary to campaign for the Congress.<sup>16</sup>

How does rule of law evolve?<sup>17</sup> A free press and openness are supportive (Klitgaard 1988), but that still begs the question of how to get a free press, etc. U.S. policy is to aid only good governments, assuming we can trust our leaders to know who those are. Raghuram Rajan (Rajan 2004) 57 suggests that a better starting place for development modeling “may be a world where nothing is enforceable, property and individual rights are totally insecure, and the enforcement apparatus for every contract must be derived from first principles—as in the world that Hobbes so vividly depicted.” A true study of political economy is in order, but what does a Hobbesian institutional economics look like? Where did the vision of Turkey’s Ataturk come from? Is that a relevant question? In Zambia, the contemporary president, handpicked by the previous president, started an investigation for alleged corruption of the former president. How do less corrupt leaders evolve? I suspect it is when a substantial number of the population itself is willing to forgo opportunistic behavior.<sup>18</sup>

### **Efficiency vs. Distribution?**

There is no conflict or tradeoff between efficiency and distribution. Change the distribution of income and rights and you change prices and what is efficient. Efficiency is a derivative of a particular distribution and cannot be a guide to choice of institutions and whose preferences count. The choice is among efficiency 1, efficiency 2, and efficiency (n).<sup>19</sup> This is not to say that income distribution is unrelated to some countries being richer than others. Greater equality and less hierarchy may be necessary to achieve advances in productivity that depend on trust, cooperation, and innovation by labor.

A closing plea for conceptual clarity: let us abandon the metaphor of “institutional mechanism.” Language matters. Are the relationships among people similar to the gears of mechanical clocks? Mechanisms don’t get mad, bear grudges, have cognitive variance, learn, and have variable connections among components. But people do! A biological metaphor would be more liberating.

### **Conclusion**

Development economists need to understand the production economics of human skills, health, infrastructure, technology and capital goods, as well as the institutional economics of the human interdependencies involved in each. Regressing income on institutional variables will not provide this understanding. I suggest a two-stage analysis. First test the relationship of

institutions to the presence and combination of the factors of production. Then test the relationship of the factors to output and income. For example, using the analysis above: What institutions make it possible to produce a high exclusion cost good such as urban infrastructure, and then what is the role of infrastructure in production and income? Likewise, what institutions facilitate the achievement of increasing returns, and then what is the role of increasing returns in a nation's income. This will not be understood if we regress income on trust, democracy and other institutional indices.

A catalog of interdependencies and a disparate variety of examples have been proposed—not the focused orderly formula and silver bullets that many prefer. But, what if development is like that? What if it is made of a host of variously interconnected institutions full of complements and substitutes rather than prerequisites?<sup>20</sup> Institutional economics has theories capable of generating testable hypotheses relating alternative institutions to different components of economic growth.<sup>21</sup> These theories can focus on specific transactions and varieties of goods and services that create human interdependencies that in turn are controlled by different institutions. *Theory can help identify the institutional detail that matters for each source of interdependence.* Institutions cannot be effectively measured by some index of property rights security, free trade, or regulatory burden all thrown into a regression with rates of growth as the dependent variable. The detailed combinations of land tenure, discrimination, voluntary action avoiding free riders, industrial policy, differential pricing, tax incidence, sharing of uncertainty, and corporate culture must be measured and related to the existence of alternative production functions each producing different rates of growth and its distribution. Whether we employ econometrics or case studies, the institutional variables must be more carefully measured. And they must include *enablement as well as constraints.*

There are alternative institutions to those extant today, and scholars need to invent more. None are automatic and without conflict.<sup>22</sup> Development and ethics are inseparable, as are politics and economics.

## References

- Acemoglu, D., Johnson, S., and Robinson, J. A. 2001: The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91, 1369-1401.
- Ahene, R. A. 2000: Nations of Eastern Africa. *American Journal of Economics and Sociology* (December).

- Andresen, T. 2004: *Nonlinear Dynamics of Complex Systems Tell Us That 'Tina' Is Not True*. Norwegian University of Science and Technology 2004 [cited 2004]. Available from [http://she.web.unsw.edu.au/Conference\\_2004/Papers/andersen.pdf](http://she.web.unsw.edu.au/Conference_2004/Papers/andersen.pdf).
- Aoki, M. 2001: *Towards a Comparative Institutional Analysis*. Cambridge: MIT Press.
- Arthur, W. B. 1994: Competing Technologies, Increasing Returns, and Lock-In. In W. B. Arthur (ed), *Increasing Returns and Path Dependence*, Ann Arbor: University of Michigan Press.
- Backhaus, J. G. 1999: The Codetermined Corporation as a Player in the Labour Market. In G. deGeest (ed), *Law and Economics and the Labour Market*, Cheltenham: Edward Elgar.
- Bardhan, P. K. 2005: *Scarcity, Conflicts, and Cooperation: Essays in the Political and Institutional Economics of Development*. Cambridge, Mass.: MIT Press.
- Barkin, D. 2005: *Overcoming the Neoliberal Paradigm: Sustainable Popular Development*. Poli-talk 2005 [cited 2005]. Available from <http://www.politalk.com/topics/wto/neoliberal.html>.
- Bromley, D. W. 1997: Rethinking Markets. *American Journal of Agricultural Economics*, 79, 1383-1393.
- Carter, M. R. 2003: Designing Land and Property Rights Reform for Poverty Alleviation and Food Security. *Land Reform (FAO)*, 45-57.
- Chang, H.-J. 2002: *Kicking Away the Ladder : Development Strategy in Historical Perspective*. London: Anthem.
- Chang, H.-J., and Evans, P. 2000: The Role of Institutions in Economic Change. In *Paper prepared for the meetings of the "Other Canon" group*. Venice.
- Diamond, J. 2005: *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking.
- Easterly, W., and Levine, R. 2002: Tropics, Germs, Crops: How Endowments Influence Economic Development. *Journal of Monetary Economics*, 50 (1), 3-39.
- Fogel, R. W. 2004: *The Escape from Hunger and Premature Death, 1700-2100 : Europe, America, and the Third World*. New York: Cambridge University Press.
- Friedman, T. 2005: *The World Is Flat*. New York: Farrar, Straus, and Giroux.
- Galbraith, J. K. 1975: *Money: Whence It Came, Where It Went*. New York: Bantam Books.

- Glaeser, E. L., and et.al. 2004: Do Institutions Cause Growth. *Journal of Economic Growth*, 9, 271-303.
- Greif, A. 1993: Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders Coalition. *American Economic Review*, 83 (3), 525-48.
- Haggard, S., and Kaufman, R. R. 1995: *The Political Economy of Democratic Transitions*. Princeton, N.J.: Princeton University Press.
- Halperin, M. H., Siegle, J. T., and Weinstein, M. M. 2005: *The Democracy Advantage: How Democracies Promote Prosperity and Peace*. New York: Routledge.
- Harriss-White, B. 2003: *India Working*. Cambridge: Cambridge University Press.
- Hayami, Y., and Ruttan, V. 1985: *Agricultural Development*. 2nd ed. Baltimore: Johns Hopkins Press.
- Hill, D. 2000: *Assessing the Promise and Limitations of Joint Forest Management in an Era of Globalization: The Case of West Bengal*. Paper presented to the Conference of the International Association for the Study of Common Property, Bloomington IND, May 31-June 4 2000 [cited 2000]. Available from <http://dlc.dlib.indiana.edu/archive/00000273/00/hilld041200.pdf>.
- Hodgson, G. M. 1988: *Economics and Institutions: A Manifesto for a Modern Institutional Economics*. Philadelphia: University of Pennsylvania Press.
- . 1996: An Evolutionary Theory of Long-Term Growth. *International Studies Journal*, 40, 393-410.
- Jackson, G. 2005: Stakeholders under Pressure: Corporate Governance and Labour Management in Germany and Japan. *Corporate Governance: An International Review*, 13 (3), 419-28.
- Jacoby, S. M. 2005: *The Embedded Corporation: Corporate Governance and Employment Relations in Japan and the United States*. Princeton, N.J.: Princeton University Press.
- Jayne, T. S. 2005: Food Marketing and Price Stabilization in Eastern and Southern Africa" a Review of Experience and Emerging Policy Options. Paper read at World Bank Workshop on Managing Food Price Instability and Risk in Low Income Countries, at Washington.
- Jayne, T. S., Yamano, T., Weber, M. T., and Tschirley, D. 2001: *Smallholder Income and Land Distribution in Africa: Implications for Poverty Reduction Strategies*. East Lansing: Michigan State University.

- Kaufman, D. A., Kraay, A., and Mastruzzi, M. 2003: Governance Matters iii: Updated Governance Indicators for 1996-02. In *Policy Research Working Paper 3106*, World Bank. Washington.
- Klitgaard, R. E. 1988: *Controlling Corruption*. Berkeley: University of California Press.
- Kuran, T. 1995: *Private Truths, Public Lies: The Social Consequences of Preference Falsification*. Cambridge, Mass.: Harvard University Press.
- Lund, S. 1995: *Institutional Rational Choice Theory and Design of Appropriate Institutional Arrangement for Natural Resource Management: The Case of Sand Dune Fixation in Mauritania, 1983-1990* 1995 [cited 1995]. Available from <http://www.indiana.edu/~iascp/abstracts/340>.
- Mankiw, N. G. 1995: The Growth of Nations. *Brookings Papers on Economic Activity*, 1995 (1), 275-310.
- North, D. C. 1990: *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Pagano, U. 2000: Radical Political Economy and the Theory of Contracts. Paper read at European Society for the History of Economic Thought, Febr. 25-27, 2000, at Graz, Austria.
- . 2004: Cultural Globalization, Institutional Diversity and the Unequal Accumulation of Intellectual Capital. In *Working Paper, University of Siena*. Siena.
- . 2004: Legal Positions and Institutional Complementarities. In *Working Paper, University of Siena*. Siena.
- Przeworski, A. 2004: *Some Historical, Theoretical, and Methodological Issues in Identifying Effects of Political Institutions*. Dept. of Political Science, New York University 2004 [cited 2004]. Available from [http://www.nyu.edu/gsas/dept/politics/faculty/przeworski/przeworski\\_home.html](http://www.nyu.edu/gsas/dept/politics/faculty/przeworski/przeworski_home.html).
- Rajan, R. 2004: Assume Anarchy. *Finance and Development* (September), 56-7.
- Reich, R. 2005: The Vanishing State? *The American Prospect*, May.
- Reinert, E. S. 2005: Development and Social Goals: Balancing Aid and Development to Prevent 'Welfare Colonialism'. Paper read at High-Level United Nations Development Conference on Millennium Development Goals, March 14-15, 2005, at New York.
- Rodrik, D., Subramanian, A., and Trebbi, F. 2004: Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development. *Journal of Economic Growth*, 9, 131-165.

- Sachs, J. D. 2005: *The End of Poverty*. New York: Penguin.
- Samuels, W. J., and Mercurio, N. 1992: A Critique of Rent-Seeking Theory. In W. J. Samuels (ed), *Essays on the Economic Role of Government*, New York: New York University Press, 111-28.
- Samuelson, P. A. 2004: Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Econmists Supporting Globalization. *Journal of Economic Perspectives*, 18 (3), 135-146.
- Schmid, A. A. 2004: *Conflict and Cooperation: Institutional & Behavioral Economics*. Oxford: Blackwell.
- Schmid, A. A., and Soroko, D. 1997: Interest Groups, Selective Incentives, Cleverness, History and Emotion: The Case of the American Soybean Association. *Journal of Economic Behavior & Organization*, 32, 267-85.
- Schumpeter, J. A. 2005: Development. *Journal of Economic Literature*, 63 (March), 108-120.
- Solow, R. M. 1988: Growth Theory and After. *American Economic Review*, 78 (3), 307-317.
- Stiglitz, J. E. 2003: *The Roaring Nineties: A New History of the World's Most Prosperous Decade*. 1st ed. New York: W. W. Norton & Co.
- Weitzman, H. 2005: Ecuador's Rhetoric Jangles Investor Nerves. *Financial Times*, May 1, 2005.
- Yardley, J. 2004: Farmers Being Moved Aside by China's Real Estate Boom. *New York Times*, December 8.

---

<sup>1</sup> In April, 2005, street demonstrators drove the President of Ecuador from office in part because of his austerity measures taken at the demand of the IMF; this in spite of the country's six percent growth the previous year. Apparently, the growth did not filter down to all. The incoming economy minister pledged to use some oil revenues for social spending instead of debt repayment. In June, 2005, Bolivia was on the verge of civil war. Protestors demanded nationalization of Bolivia's natural gas reserves. In 2000, the Indian majority forced out an American water utility prescribed by the IMF. (Weitzman 2005) Individual economists have their favorite answers that make them famous and the subject of conferences. For example, Jeff Sachs was the inspiration for privatization and marketization in the former USSR and now touts increased aid and technological development for poor countries (Sachs 2005).

<sup>2</sup> (Przeworski 2004) 16 asks, "Is the science of comparative politics possible?" (Solow 1988) 311 says, "Historical time-series do not provide a critical experiment." "To believe ... that empirical economics begins and ends with time-series analysis, is to ignore a lot of valuable information that cannot be put into so convenient a form. I include the sort of information that is encapsulated in the qualitative inferences made by expert observers, as well as direct knowledge of the functioning of economic institutions." (Mankiw 1995) 308 in the same context observes, "Basic theory, shrewd observation, and common sense are surely more reliable guides to policy." In a similar vein, (Bardhan 2005) (vi) argues, "The world of institutional and political economy is full of ambiguities, contextual nuances, and multi-dimensional complexities, which—given the current state of empirical knowledge—are extremely difficult to capture with necessarily oversimplified quantitative exercises in model building or hypothesis testing."

<sup>3</sup> (Rodrik, Subramanian, and Trebbi 2004) declare, "Obviously, the presence of clear property rights for investors is a key, if not the key, element in the institutional environment that shapes economic performance." It is not obvious to me.

<sup>4</sup> AJR (2002, 1270) also recognize that their measure of institutions may “correspond poorly to the real concept that is relevant to development (which is likely to be a broad range of institutions, whereas we only have an index for a particular type of institutions).” Likewise, (Easterly and Levine 2002) say, “Nor does the kind of general indicator of institutional quality we use ..., provide much guidance to officials making real laws and regulations.” (Przeworski 2004) 8 remarks, “Yet everyone relies on such indices.” Not everyone!

<sup>5</sup> “Institutions are systematic patterns of shared expectations, taken-for-granted assumptions, accepted norms and routines of interaction...” (Chang and Evans 2000). Hodgson (1988) 10 defines them as “a social organization which, through the operation of tradition, custom or legal constraint, tends to create durable and routinized patterns of behavior.” My own different but compatible definition is “Institutions are sets (networks) of ordered relationships (connections) among people that define their rights, their exposures to the rights of others, their privileges, and their responsibilities.” (Schmid 2004) 6.

<sup>6</sup> As (Pagano 2004) (2) puts it, “The rights of some individuals must often be jointly consumed with duties (that is an absence of liberties) of other individuals.”

<sup>7</sup> (Chang and Evans 2000) 3 makes the same point saying, “we must get beyond the traditional view of ‘institutions as constraints’, focusing attention instead on institutions as devices which enable the achievement of certain goals whose achievements require supra-individual coordination...” See also (Hodgson 1988) 132.

<sup>8</sup> The interdependence need not involve a physical good. It might include access to jobs, markets and education or the practice of abortion or wearing a religious symbol.

<sup>9</sup> No one doubts the role of incentives, but forward looking “reasoning why” must be supplemented with “seeing that,” i.e., behavior based on reinforcement; experienced, but unconscious feedback.

<sup>10</sup> See (Backhaus 1999), (Jackson 2005), and (Jacoby 2005).

<sup>11</sup> See also (Andresen 2004)

<sup>12</sup> The experience with MERCOSUR, however, is mixed.

<sup>13</sup> Among the exceptions is Indonesia where 70% of all wood cut comes from illegal operations because of bribes paid to government officials (Diamond 2005, 471).

<sup>14</sup> Some suggest the answer for the U.S. and Western Europe is more education in science and technology. But, not everyone can be a rocket scientist. Thomas (Friedman 2005) suggests that if more are engineers, there will be a shortage of janitors whose wages will then rise. I doubt it will be so automatic. Samuelson (2004, 144) observes, “perhaps a third of Americans are not highly educated and not energetic enough to qualify for skilled professional jobs.” He argues that US workers have lost their monopoly access to superlative capital that previously supported high real wage rates for janitors, etc. That capital is now available to foreign educable masses.

<sup>15</sup> (Halperin, Siegle, and Weinstein 2005) argue that the weight of the evidence favors the view that democracy contributes to development.

<sup>16</sup> “When policies to be legislated are up for sale to the highest contributor to the campaign fund, development projects may not win out ... and being told that the policies thus legislated will be implemented well by the bureaucracy and the court system under a democracy is not much consolation (Bardhan 2005, 98).”

<sup>17</sup> See, (Haggard and Kaufman 1995). Bardhan (2005, Ch. 8, “Corruption,”) says differential incidence of corruption can’t be adequately explained by the degree of the regulatory state. He suggests that the reason for the persistence of corruption is that it is mutually beneficial for both the official and the client.

<sup>18</sup> Harris-White (2005) invites attention to “people’s moral world.”

<sup>19</sup> I believe this is consistent with (Pagano 2000) observation, “In the Marxian approach, no general statement can be made as to what forms of work organization will be efficient, as the issue is contingent upon social norms.” It is beguiling to think that there is some aggregative measure of the social product to be achieved by the correct set of institutions. Even I speak of “economic development” sometimes without a qualifier as to whose notion of its content is implied. Surely Arrow’s impossibility theorem should have made us more cautious.

<sup>20</sup> Complementarities and substitutabilities of market governance institutions has been explored by (Pagano 2004) and (Aoki 2001) 85-90. Harris-White (2003, 15) “No general hypothesis is advanced about the relative importance of the different elements of the structural matrix, there is no privileged list of ‘crucial’ institutions or forces.” She also argues that the mix of different structural elements is often unique to a geographic region.



---

<sup>21</sup> (Schumpeter 2005) distinguished growth and development. Development is defined as “transition from one norm of the economic system to another norm in such a way that this transition cannot be decomposed into infinitesimal steps.” As of 1932, he argued that economists understood little of development. I’m not sure our knowledge of fundamental transformations has improved. If not, we can only expect some modest growth in poor countries. Modesty rather than hubris seems in order.

<sup>22</sup> Citizens and their political representatives need to know which institutions serve their particular interests so that they can better work out their accommodation with each other. See, (Bromley 1997).