KEYNOTE ADDRESS

Development Thinking at the Millennium

Joseph E. Stiglitz

We are entering a new millennium and closing out a century filled with ferment. As we look over the way we thought about development over just the past half century, we can see marked changes. It has become clear that development is possible but far from inevitable.

There is no single road to development. In recent years some East Asian economies have achieved sustained growth with relatively low inequality. They have not followed blindly the prescriptions of the Washington consensus: they did maintain a high level of macroeconomic stability, but at the same time their governments played a far more important role than the popular nostrums advised.

While the debate about the most effective strategies for development—and the appropriate role of the state—continues, research has helped us understand better what features of developing countries make them differ from developed countries (and they differ in many ways). We also now understand better what features of developing countries act as a hindrance to development. Today the debate is moving on to the far deeper question of how to foster change. We recognize, for instance, that what matters is not only what policies might foster faster growth, but also how the political process might produce those policy changes.

Equilibrium and *change* are thus the twin focuses of development economics. How do we describe the short-run equilibrium—the status quo, the state of being—of developing countries? And what are the forces that eventually lead to a disturbance of this equilibrium, to change?

Developing a thorough understanding of these questions is not straightforward. In my keynote addresses at the Annual World Bank Conference on Development Economics over the past three years, I have touched on several aspects of these topics, not without controversy. Economists differ markedly in their beliefs, especially on issues that touch on policy—which virtually all the questions surrounding development do. Accordingly, I have been concerned with the central question of how do we know what we know or come to believe what we come to believe.

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There are some policy positions on which there is almost universal agreement: for instance, governments run large, sustained budget deficits only at their peril. We can certainly agree on certain *logical* propositions, such as that free trade with perfect competition and a complete set of markets can lead to a Pareto optimum, while free trade with imperfect competition or an incomplete set of markets may result in a Pareto inferior equilibrium. But economists may differ in their judgment about the relevance of each of these propositions. And curiously, even where the weight of empirical evidence is on one side of a policy dispute, sometimes policy advisers come out in favor of the other. Or even more common, where there is a dearth of relevant empirical evidence policy advisers have come out in favor of one side with a strength unwarranted by the weight of the evidence. To understand this situation, we must pay special attention to the incentives of the policy advisers, just as we do when we study developing countries and their governments.

Equilibrium

The thinking about equilibrium in developing countries has moved a long way in the past 50 years. As in so many other areas there has been a vacillation between extremes, with current positions closer to a "middle course."

Economic Institutions of Developing Countries—Rationality and Efficiency

Earlier models saw the behavior of people in developing countries as culturally determined in ways that made standard economic laws of little relevance. More recently, an opposite strand of research has emphasized *rationality* and *efficiency*. Evidence has shown that peasants respond to economic incentives; for instance, farmers shift production to products yielding higher prices. Earlier literature emphasized the importance of institutions that interfered with economic efficiency. The newer view saw institutions as part of the creative responses of societies to social needs—as efficient responses to market failures. A notable example is sharecropping. The earlier view saw this as an institution in which landlords not only exploited workers by taking between one- and two-thirds of their output, but in doing so also greatly attenuated incentives to produce. The newer view saw sharecropping as a rational response to the absence of market insurance and the sharecropping contract as having implicit or explicit provisions that mitigate the adverse incentive effects (see Cheung 1969).

As time went on, economists realized that many of the features of the sharecropping contract could not be explained by standard economic theories. The theories could not, for instance, convincingly explain why shares typically remained fixed even as circumstances affecting demand and supply for land and labor changed, nor could they explain why contracts were very simple.[1] Thus the concept of norms was introduced to explain institutional arrangements, bringing the analysis at least partially back to the earlier "cultural" theories.[2]

So, yes, incentives matter. Sharecropping provides incentives at the same time that it provides risk sharing in an economy with insurance markets that are far from complete. But there is no reason to believe that institutions themselves—the conventions that determine how individuals relate to one another—are efficient,[3] or that they respond quickly or efficiently to changes in economic circumstances.[4] Just because peasants respond to market incentives does not mean that markets are efficient. Just because an institution arises to serve a particular function does not mean that it serves that function well. (The belief that it does is sometimes referred to as the functionalist fallacy.) Markets yield Pareto efficient outcomes only under highly restrictive conditions—such as perfect information, perfect competition, and complete markets—conditions that are far from satisfied in most developing countries.[5] Indeed, nonmarket institutions that arise to address a market limitation may actually be dysfunctional.[6]

The new approaches have not only taken the shine off the Panglossian view of rural peasants and their institutions as efficient and rational disciples of Adam Smith; they have also provided insight into these institutions, which the older neoclassical theory could not. In particular, in the past several decades there has developed a theory of rural organization explaining the structure and performance of key institutions in many developing countries, such as sharecropping contracts, rural moneylenders and, more broadly, rural credit markets, and the interlinkage of land, labor, and product markets (see, for example, Bardhan 1989; Hoff, Braverman, and Stiglitz 1993; and Stiglitz 1989b).[7] This theory of rural organization is based on societal responses to imperfections of information and incompleteness of markets. But unlike in the earlier theory, these responses are not necessarily "efficient" or even welfare enhancing, the structure of the institutions does matter, and because the consequences of information asymmetries are affected by wealth disparities, distribution also matters.

Inequality and Poverty in Developing Countries

Anyone visiting a typical developing country could not but be struck by the huge inequalities in living standards. While a few enjoy a life of wealth and luxury, millions live subsistence lives in poverty. In some countries this disparity is a consequence of a feudal heritage; in many it is part of the colonial inheritance, a result, for instance, of European colonial masters appropriating vast amounts of land, leaving others only the residual. By a curious exercise of cognitive dissonance, when the colonial powers granted independence to their former colonies they forgot the abrogation of (implicit) property rights that they perpetrated in the first place and strongly urged that the newly independent countries respect property rights (including those of white settlers).

In the 1950s economists such as Nicholas Kaldor, Simon Kuznets, and Arthur Lewis advanced theories that inequality would lead to or was necessary for growth. Or, conversely, that growth would at least initially lead to increased inequality.[8] These earlier economists did not discuss the impact of growth on poverty—the number and well-being of those at the very bottom of the income distribution, with incomes below some

critical level. But earlier historians and social commentators, such as Karl Polanyi (1944), had argued that in the early stages of capitalist transformation in Europe poverty had in fact increased: this happened as the social safety nets provided by communities eroded and as environmental conditions in the urban areas to which those in the rural sector were migrating degraded—before public safety nets were established (late in the 19th century in Europe, during the Great Depression in America) and before environmental regulations were imposed. Neoclassical economic theories blithely ignored issues of distribution altogether, since markets were efficient regardless of the distribution of income. Thus, since income inequality tended to remain fairly stable, increasing incomes would benefit all—including the poor.

In the past decade we have rejected most of these conclusions of "trickle-down economics." While there is considerable evidence that growth is an important contributor to reducing poverty (see the brief discussion in Stiglitz and Squire 1998), it is also clear that some countries have been able to achieve far better outcomes for the poor than other countries with comparable incomes. Thus if a government is particularly concerned with improving the plight of the poor, it should not simply focus on growth. The experience in East Asia shows that an economy need not have huge inequality to achieve high savings rates. Indeed, the experience suggests that (at least within a range) rather than there being a tradeoff between equality and growth, the two might be complements. Egalitarian education policies, for instance, have played a pivotal role in growth (see Birdsall, Graham, and Sabot 1998; and World Bank 1993). And increased equality has led to enhanced political and social stability, thereby creating a better investment environment.

Both theory and evidence argue that distribution matters—and not just for who gets what, but for how much there is to get. Sharecropping is an inefficient economic institution that arises out of the huge inequalities in the distribution of wealth (land).[9] The extent of credit rationing (and, more generally, the extent and consequences of capital market imperfections) also depends on distribution (see Aghion and Bolton 1997 and Piketty 1997). And a large study of sugar cooperatives in India showed that inequality in the distribution of assets affects the relative control rights of different groups of cooperative members, which in turn affects the extent to which the cooperatives depress the prices paid for inputs supplied by members and divert the resulting retained earnings (see Banerjee and others 2001).

Old concepts of "power"—discredited as Marxism grew out of fashion—are beginning to take on new meaning, especially as the links between political processes and economics move toward the center of discussion. Not long ago it was argued that it did not matter how privatization occurred in the economies in transition; as long as there were clear "owners," Coasian arguments held, they would have an incentive to ensure that the assets were deployed in the most efficient way. While theorists long recognized the stringent conditions under which Coase's conjecture held, the experience of the past decade has laid to rest any claims that it did not matter how privatization proceeded (Stiglitz 1999c).

Going one step further, some have also made an argument, which I have referred to as the "political Coase theorem," that the new owners would also demand any

missing institutional infrastructure through the political process (see, for instance, Shleifer and Vishny 1998).[10] Needless to say it is not oligarchs—who believe they can do better for themselves negotiating special deals behind closed doors—who demand the rule of law, but the middle classes. It was not John D. Rockefeller who strongly supported competition policy at the turn of the previous century, nor is Bill Gates doing so today.

Similarly, there is a growing recognition that the institutions set up within many societies that govern race and gender relations—including those that support discrimination in pay and access to education—have adverse effects on overall efficiency (see, for instance, North 1990). In many parts of the developing world today, institutions exist that preserve feudal power relations, institutions that interfere with overall efficiency at the same time that they increase inequality. While earlier analyses (Becker 1957) questioned how such inefficient discriminatory equilibria could be enforced, modern game theory has provided convincing and simple answers.[11]

Features of Developing Countries That Impede Development

One reason that we want to understand the nature of the equilibrium in developing countries is that we wish to understand what may be preventing development. Why is it that so many countries seem to have "settled" on an income per capita that is so much lower than that in the more advanced industrial countries?

The older theories focusing on culture and "underdeveloped institutions" suggested that these were the barriers; only by changing culture and adopting more advanced institutions would societies bring about development—and these were daunting challenges (I return to this theme later). The neoclassical theories offered a far more positive prognosis: Institutions did not really matter. Outcomes were determined by the underlying factors of production. Countries were poor because they lacked capital. They lacked capital because of imperfections in international capital markets, imperfections begrudgingly acknowledged to exist by some of the neoclassical economists (who seemingly continued to deny the role that capital market imperfections played within countries). Thus international financial institutions had a role in facilitating the flow of capital and in overcoming the capital market imperfections that impeded the flow of capital from the capital-rich to the capital-poor countries.

Later, evidence mounted that one reason for the seeming failure of capital to flow to the capital-poor countries was that the return to capital was not high.[12] There was an obvious response: those countries lacked complementary factors such as skilled labor. This led to an emphasis on increasing education.[13] But despite shortages of skilled labor, many developing countries have experienced alarming brain drain, suggesting that the returns to education as well as to physical capital are still higher in developed than in developing countries.

Some economists began to think that the problem was not market failure but government failure, in the form of predatory states captured by those engaging in rent seeking activities that interfered with the efficiency with which resources were

allocated. In some developing countries such interventions indeed seem to be part of the problem—but only part. Those seeking rents do not waste the volume of resources in their quest that would account for the differences in levels of production, nor does their interference seem to create a sufficiently sizable deadweight loss. Moreover, the standard arguments for rent dissipation assumed perfect competition.[14] All the rents were expended in an attempt to get special treatment (such as tariff protection). But imperfections of competition characterize political markets perhaps even more than they do conventional markets. These markets are far from perfectly contestable. And in product markets it has been shown that even arbitrarily small sunk costs can enable an incumbent monopolist to maintain his monopoly power; the monopoly rents need neither be dissipated nor competed away (see, for example, Stiglitz 1987b).

These theories did not provide a convincing explanation of underdevelopment, but they did make an important contribution. Poor countries can ill afford any inefficiencies in resource allocation, and thus the elimination of market distortions would be a move in the right direction. Not surprisingly, developing countries that have moved in this direction have seen a rise in standards of living—but hardly a closing of the gap with industrial countries.

The literature also helped focus attention on issues of political economy. But there was a certain intellectual inconsistency in the stance of critics of the predatory state who argued for a minimalist role for the state. Their moral injunctions would presumably not suffice: why then would predatory states reform? When predatory states seem to reform, shouldn't political economy arguments lead to worries that the seeming reform is not really a reform, but a change in the manner of acquiring rents—and not necessarily in ways that reduce the adverse effects? (I return to this theme later.)

As we move into a new century, and as the disastrous results in most transition economies become increasingly apparent, we are coming to recognize that lack of development is often due to failures of collective action. The problem is not just predatory states but also states failing to provide the institutional infrastructure required for a market economy. Government *does* have a role—the state and the market are complements, and it is important that the state undertake its "responsibilities" and do so effectively and efficiently. The articulation of the theory of market failure, especially as applied to developing countries, allows a more precise articulation of the appropriate role of the state (see Stiglitz 1991a, 1996a, 1998b). An enhanced understanding of agency theory and of the ways in which the state differs from the market allows a better understanding of some of the mechanisms by which the efficiency and effectiveness of the state can be improved (see Stiglitz 1989a, 1991b).[15]

The state, besides ensuring that it performs its own functions well, also has a role to play in helping to alter other institutions in a country. Once it is recognized that the institutional arrangements in a society might not be efficiency enhancing, but rather power and wealth preserving, a new rationale for collective action arises—not just to correct market failures but to alter nonmarket institutional arrangements

that impede efficiency and increase inequality. These institutional arrangements are sometimes, but not always, creatures of political processes, for instance, at the local and village levels. But to alter arrangements at one level might require interventions arising from another level.

The Role of the State in Altering Equilibrium Conditions

So far we have followed the development debate as it has cycled from institutions and culture explaining everything, to their being irrelevant, to their being explicable themselves and efficiency enhancing, to their being partially inexplicable and possibly even dysfunctional. We have followed the debate from inequality being unimportant, to inequality promoting growth, to inequality having a direct adverse effect on growth—and to a recognition that institutions, rather than promoting efficiency by filling in the gaps from market failures, may even impede efficiency as they seek to preserve existing inequalities and power relationships. Conversely, there has been a shift from the view that growth inevitably increases inequality, to the view that growth inevitably improves the plight of the poor, and, finally, to the view that while growth normally improves the plight of the poor, that outcome is not inevitable and some growth strategies are more pro-poor than others.

We have seen too how the explanation of why developing countries are poorer than developed ones has shifted—from capital, to human capital, to predatory states. But while each of these plays a role, there is a sense that (at least as conventionally articulated) the differences are too great to be explained just by these factors. Some other factor or factors are also at play.

If we write the aggregate production function in the standard way,

$$Q = F(A, K, L, H)$$

where K is capital, L is labor, and H is human capital, there is a "factor" A that differs between less and more developed countries. Let us think of it as a vector of dimensions that characterize countries as being more or less developed. In the rest of this section I illustrate some of the key components of the "factor" A.

INFORMATION. The theories discussed so far suggest that imperfections in information help lead to an equilibrium in developing countries in which resources are less efficiently allocated than in industrial economies. The imperfect information (agency) theories and the "market failures" they bring to light suggest four immediate implications for the role of government (see World Bank 1999):

- Information flows are weaker in developing countries. Governments should take action to improve information flows, which would in turn affect prevalent institutional arrangements.
- Agency problems, such as those associated with sharecropping, reduce production and consequently the welfare of all participants. Governments should take actions to reduce agency problems and the consequences of

information asymmetries more generally; one such action would be redistributing land so that farmers own their own land.

- Weak capacity for gathering and processing information in developing countries prevents the establishment of many necessary market arrangements enjoyed in developed countries. Governments should help create institutions that find more efficient ways around information asymmetries, such as microcredit schemes with peer monitoring. (For an overview of microcredit see, for instance, Morduch 1999; for an early theoretical analysis of government strategies see Stiglitz 1990.)
- In general, information is imperfect and markets consequently work imperfectly. Thus in the design of all policies governments should take into account that markets cannot be assumed to work as they would under the standard "demand and supply" framework.

KNOWLEDGE. Another dimension of *A* is knowledge: developed countries differ from developing countries in their knowledge, including that of production processes. Once again government has a role in promoting the generation, acquisition, and use of knowledge.[16]

- Knowledge is like a public good, or at least an impure public good (for an early discussion of this issue see Stiglitz 1987a). Thus there is likely to be underinvestment in the production and dissemination of knowledge, giving rise to an important public role in these activities.
- The transfer and adaptation of new technologies, central concerns of developing countries, are no less a public good, and no less important, than the original production of knowledge. Governments can take a cue from East Asian economies and invest in a highly educated, technologically literate labor force and in the transfer of technology (World Bank 1993, Stiglitz 1996b).

The World Bank has increasingly seen closing the knowledge gap as one of its central roles. The president of the World Bank, Jim Wolfensohn, has often spoken of it as a "knowledge bank" (see Wolfensohn 1996). Knowledge, including knowledge about development, is a global public good: the benefits of that knowledge can be of value to everyone. It is therefore appropriate that knowledge be provided by an international public institution, such as the World Bank.[17]

SOCIAL AND ORGANIZATIONAL CAPITAL. A third dimension of *A* is a country's social and organizational capital. Production processes take inputs and translate them into outputs. That process typically involves more than one individual, requiring individuals to relate to one another. How they relate affects the efficiency with which inputs are transformed into outputs. And how they relate depends on their information, on the organizations in which they work, and on the norms and institutions that govern their "public" behavior (that is, their behavior in dealing with others). In modern societies we typically take these forms of "capital" for granted, though we often appreciate people whose word is their honor (so that no contract is

required). But in the transition economies and in many developing countries we have seen what happens when social capital deteriorates.[18] In both the Russian Federation and African countries, for instance, electric lines fall prey to copper thieves.

A large literature emphasizes the importance of contract enforcement; without such enforcement intertemporal trades cannot be made and credit markets cannot work. Government has a role in ensuring a strong and consistent judicial system, but most contracts are not enforced through the courts. Reliance is placed on self-enforcing incentives for compliance, associated, for instance, with repeated games and with norms, the breaking of which results in adverse social and economic consequences. Modern analyses of organizations have emphasized that the "good" behavior of organization members often seems difficult to explain simply by looking at incentives—even long-run incentives associated with job promotion and reputation (for classic analyses see Marshall 1897). Organizations seek to change the "preferences" of members, to have them identify with the organization (see Simon 1991).

The level and nature of social and organizational capital certainly differ across countries, and they can change during development and transition—often in adverse ways.[19] Some of these effects are an inevitable consequence of development—but even then it is important for policymakers to be aware of them and possibly to take offsetting actions. (In a few countries, such as Uzbekistan, the government has explicitly recognized the importance of social capital and tried to strengthen it.) In some cases governments have some choice over policies (such as having extremely high interest rates) that may produce an additional adverse effect.

Poverty Traps

So far we have seen how norms, the distribution of wealth, and institutions (including political institutions) affect equilibrium in developing countries.[20] There are a host of factors, besides differences in capital per worker, that explain differences in output per worker.

Another line of analysis argues that there can be more than a single equilibrium. Which equilibrium the economy "chooses" may be determined by history—and affected by government action.[21]

A recent strand of analytical research has focused on the observation that the major determinant of the environment of each actor (firm or household) in any economy is the behavior of other actors, and that there may be multiple equilibria.[22] Charles Darwin ([1859] 1993) observed something similar in his visit to the Galapagos Islands, a set of islands that have similar physical characteristics but developed markedly different flora and fauna.

This view that development is not deterministic is in direct contrast to the standard neoclassical approach. In that approach the economy at each date is determined by preferences, technologies, and resources. And the story of its evolution is equally simple: today's preferences, technologies, and resources determine those of

tomorrow.[23] Policy has an accordingly limited scope: it can only help facilitate the transfer of resources (or technology) or increase the rate of their accumulation (for instance, through actions that increase the savings rate).

By contrast, in the multiple equilibria models another set of actions is possible: the government can impose policies that help move the economy from one equilibrium to another. For instance, if families worry about unemployment, they may send more than one worker into the labor force. Thus an increase in the unemployment rate leads to an increase in the supply of labor. If there is a minimum wage (or an efficiency wage) at a level above that at which demand for labor equals supply, there may be one equilibrium with a low unemployment rate, so that each family sends few workers into the labor force. There may be another equilibrium with a high unemployment rate, so that each family sends many workers into the labor force. But if the government were to provide a guaranteed income to families, each family would need to send out fewer workers, and the only equilibrium to emerge would be the low unemployment equilibrium (see Basu, Genicot, and Stiglitz 1999).

The theory behind affirmative action is similarly that a government intervention can help eliminate a "bad" equilibrium, with statistical discrimination. Multiple education equilibria can exist: If relatively few people choose to get educated (say, at a high level), the average productivity of those without education will be relatively high and the returns to an education low, so that only those for whom the cost of acquiring (a high level of) education is low choose to do so. But if many choose to get educated (again at a high level), the average productivity of those without education will be relatively low and the returns to an education high, so that it will pay a large fraction to obtain (a high level of) education. If there are two racial or ethnic groups in a society, one may wind up in the low equilibrium trap. This is possible particularly if the members of that group had at one time been precluded from large segments of the labor market, so that for them the return to education was low. With enforcement of nondiscrimination or affirmative action policies, the minority comes to be treated like the majority, in which case the minority's low-level equilibrium is eliminated (this model is developed in greater detail in Stiglitz 1974b).

Dynamics of Change

We now have a broader understanding of why developing countries may have such a low level of income. The reasons go beyond a lack of capital. As we have just seen, there may be a "poverty trap." The harder question is what drives change—what enables it to occur in ways that move an economy from underdevelopment to development.

Development as Transformation

First I should say something about what we mean by "development," which follows from much of what has been said in the previous section. Developing countries, in the neoclassical vision, were just like developed countries except that

they were poorer; they had fewer resources—in particular, less capital and human capital. So there was little to development economics: it was simply a question of what could be done to increase the pace and efficiency of the accumulation of capital.

From this perspective, Hollis Chenery and Anne Krueger, two of the earlier chief economists of the World Bank with different viewpoints, had much in common. Both the planning approach associated with Chenery and the approach arguing for liberalization associated with Krueger saw the essential problem of development as a narrow one of resource allocation—increasing the efficiency of resource allocation and allocating more resources to investment. One, noting the pervasive market failures in developing countries, looked to planning as a way of increasing the efficiency of resource allocation and increasing investment. The other, noting the pervasive government failures in developing countries, looked to stripping away the role of the government, hoping that the market, left to itself, would both allocate resources more efficiently and allocate more resources to investment.

More recently there has been a return to older doctrines that saw more to the development process.[24] Development is now seen as a transformation of society, a move from old ways of thinking, and old forms of social and economic organization, to new ones (see Stiglitz 1998a, b, c).

The new view argues that development and the developmental transformation involve a change in the way people think and the way societies function—a change in norms, expectations, and institutions. These changes are reflected in the *A* of the production function: more developed countries are able to transform a given set of inputs into greater output. But the changes have even more profound effects on the dynamics of change, for development involves not just the acceptance of change but its promotion and, indeed, its routinization. Traditional societies typically accept matters as they find them; the developmental transformation entails questioning existing arrangements and continually seeking alternative and more efficient ones—including better processes of change, reflected in what is typically referred to as the scientific method. All societies involve a mix of the new and the old, of scientific and prescientific ways of thinking. In developing countries, however, traditional modes of thinking, and traditional institutions, dominate.

This more expansive vision does not bring with it a corresponding set of obvious strategies for promoting change. But it does point to some areas that may have received insufficient attention, and give new reasons for certain development policies. Education is important not just because it increases "human capital," but because it also increases the acceptance of change—it introduces individuals to the scientific method, to ways of thinking that are markedly different from traditional ways. Trade is important not just because it makes it possible to purchase some goods at a lower price (or makes some goods available that otherwise would not have been). Trade is also important because it brings a country into closer contact with others, and these contacts bring a change in ways of thinking. In this respect promoting exports (making countries understand the nature of the international

marketplace, the importance of standards, and the like) may be far more important than liberalizing imports.

Reform

Perhaps the hardest question facing policy economists interested in development relates to reform: how to change the institutions and policies that govern an economy. What disturbs an equilibrium and causes the economy to move from an underdevelopment equilibrium to a developmental path characterized by greater wealth creation and rising standards of living?

Even if we think of the government as an "outside actor" (rather than as part of the system), we must contend with the difficult problem of how the government can change ways of thinking and institutional arrangements. But matters become even murkier if we think of the government as endogenous.

The nature of the problem is posed most clearly by some of the recent debates on privatization. Governments in many countries have run enterprises that produce conventional goods, often at low efficiency. One reason cited for the poor performance is corruption, government officials' continual rake-off of the profits of public enterprises. The model for change that seemed to underlie the strategies of the international financial institutions was as follows: A mission (made up of something akin to missionaries) would go to the country and explain the virtues of privatization—in particular, how privatization would increase efficiency and stem the corruption that was bleeding the economy. The government officials (the perpetrators and beneficiaries of the corruption) would suddenly see the light, cry out "hallelujah," and run to the parliament to pass a privatization law. The feelings of virtue that would overcome the government officials would more than compensate for their loss of income.

In reality, of course, privatization allows corrupt government officials to steal not just a fraction of today's rents (profits), but a fraction of the present discounted value of all future rents. If government leaders are corrupt, inferences about policy reforms should be made with care. The reforms may be endorsed because they enhance the opportunity for corruption, not because they promote the overall efficiency of the economy. All this, one might say, is elementary economics: incentives matter, and we should look at the incentives of those in power. While elementary, this principle seems all too often to have been ignored. And in doing so, the international financial institutions may in some instances have advocated policies that had the effect of aiding and abetting corruption rather than stemming it.

If this is so, it raises a difficult issue: when and how will meaningful reform occur? Here I want to put forward a simple way of looking at this issue that focuses on *incentives* and *ideas* as they affect both individuals and the coalitions that form among individuals and groups, and examines whether they work to promote or resist change. I also attempt to identify the disturbances to the initial equilibrium.

Several examples will help illustrate. In the example I just gave, the disturbance to the initial equilibrium was an *idea,* the notion that privatized firms are more effi-

cient than government-run enterprises. Unfortunately, this idea was closer to being part of an *ideology*, a primitive (nonscientific) belief system, not well rooted in evidence or theory. And the *incentive* to implement that idea was the ability of the politician to appropriate even more rents. Thus the transition economies that were encouraged to privatize and to liberalize their capital accounts before establishing good corporate governance and other elements of the institutional infrastructure required for a market economy truly did change. But the result was that politicians (acting according to their incentives) privatized by selling state assets to those most willing to pay them bribes, and those buyers (acting according to their incentives) promptly stripped the assets from their new firms and took a substantial part of the value out of the country (see Black, Kraakman, and Tarassova 2000).

The provision of public education is an example of a reform driven by the *incentives* of ruling elites that eventually led to a reduction of their power. Here the disturbance was the development of new technologies that required more trained labor. With a sufficiently high discount rate, supporting more mass education would pay off for existing elites even though it would mean a loss of power in the future. (For a more extensive discussion of this example see Bourguignon and Verdier 2000.)

During the East Asian crisis the *idea* of transparency surfaced, the lack of which was cited by some as one of the main causes of the crisis. Several contrary observations, however, led to a widespread suspicion that transparency was not at the root of the problem.[25] (Perhaps those who raised concerns about transparency were themselves trying to hide something!)[26] But once the idea of transparency was let loose, it took on a life of its own. Thailand, for instance, included in its new constitution citizens' basic right to know. The need for a comprehensive disclosure regime became recognized, a regime that would embrace hedge funds and offshore banking centers as well as the banks in the developing world. But the arguments for transparency seemingly came full circle, and now some of those who had spoken so loudly in its favor (for instance, in the U.S. Treasury) expressed some misgivings—going so far as to suggest that excessive disclosure requirements might be counterproductive, since they would reduce the incentives for gathering information!

The authors of America's declaration of independence, who wrote "All men are created equal," probably did not fully grasp the implications of this fundamental *idea*. But it was an idea with enormous power, one that was eventually used to attack slavery and discrimination in all its manifestations.

Evolutionary Change

In the previous section I emphasized the distinction between change and equilibrium. The analysis of developing countries entails examining why the equilibrium in many of these countries appears to differ so markedly from that in more developed countries and what the forces for change are. In fact, much of traditional analysis has focused on equilibrium dynamics, that is, change that is itself part of an equilibrium process. By contrast, I have contended that the focus should be on a developmental

transformation that is more fundamental—that involves changes in individuals and societies, in their ways of thinking, and in institutional arrangements—and that such changes cannot be described well by models of equilibrium dynamics. The difficulties of analysis have been highlighted in my attempt to describe reform processes, the deliberate attempt by government or outsiders to intervene in ways that lead to these more fundamental transformations.

A distinction is sometimes made between revolutionary and evolutionary processes of change. The first entails rapid changes, affecting the foundations of society and its institutions; the second entails more gradual changes, affecting only a few parts of the system at a time—though over time the cumulative effects of such changes can be revolutionary. From this perspective the American revolution was not really a revolution, for social and economic relations remained largely intact; indeed, it can be viewed more as an attempt to prevent a reversion to an earlier social order than as an effort to force a change to a new order. The French, Russian, and Chinese revolutions, at least in their conceptions, were far more revolutionary; they purported to fundamentally change social relations. Each encountered problems—excesses followed by changes that resulted in a social order different both from what had prevailed before the revolution and from the conception of those who had initiated the revolution. Recognition of the problems encountered by revolution has renewed the focus on evolutionary processes of change.

The analysis of evolutionary processes begins with the observation that societies are always bombarded by shocks that give rise to change. Some forces for change arise internally, others from the outside.

INTERNAL SOURCES OF CHANGE. Among internal sources of change are the processes of research and development in modern society; these generate changes in technology that may in turn lead to profound changes in society. The Internet revolution portends to be every bit as important as the industrial and scientific revolutions that preceded it, fundamentally changing the ways in which individuals and businesses interact with one another.

Ideas often take on a life of their own. They evolve over time, an evolution that is both the consequence and the cause of changes in society. Ideas, simple and complex, gradually find applications in one area after another, evolving in the process. The full implications of such ideas as assembly lines, just-in-time production, and replaceable parts can take years, even decades, to play out. As they do, change affects one part of society, then another—in a never ending progression—until virtually every part has been transformed.

EXTERNAL SOURCES OF CHANGE. Some of the most profound changes in societies have stemmed from events that are at least partially exogenous. The encounters in the 19th century between, for instance, Asian and European societies led to major changes, particularly in the Asian societies as they confronted new ideas and new circumstances (including new technologies). The recent global financial crisis has left in its wake a firmer commitment in many countries to democratization, a firmer

opposition to corruption, but also a broader suspicion of ideology, as the adverse effects of premature capital market liberalization—so strongly supported by market ideologists—have gradually sunk in.

CHANGES CANNOT BE FORCED. Among the sources of change, as I have said, are changes in knowledge and information or, more broadly, in beliefs and perceptions. But such changes cannot be forced. Encounters across cultures have such impacts in part because they indirectly change people's beliefs about what is possible. Outside advisers can thus have the most profound and lasting effects not through conditions attached to loans and aid (which are unlikely to be sustainable through the vicissitudes of changing political currents) but through analysis—by exposing the alternatives and the risks and consequences of each. Arguments based on ideology are most successful in swaying only those who are already converted, not those who have yet to see the light.

Science, Ideology, and the Developmental Transformation

The developmental transformation has already changed people's ways of thinking in many parts of the world. The scientific method has been embraced, and there is little enthusiasm for abandoning one religion only to adopt a new one of market fundamentalism. As I said in my address at the 1998 Annual World Bank Conference on Development Economics, an explicit part of the scientific method is the recognition of uncertainty (Stiglitz 1999b). By failing to convey to the developing countries the range of views and the sense of scientific uncertainty, we do them and ourselves a disservice: not only do we set back democratic processes and the developmental transformation, we undermine our own credibility. There is a marked contrast between the seeming confidence and certainty with which the international financial institutions impose certain reforms and the critical scientific method, which fosters the

> willingness to hold belief in suspense; ability to doubt until evidence is obtained; willingness to go where evidence points instead of putting first a personally preferred conclusion; [and] ability to hold ideas in solution and use them as hypotheses to be tested instead of as dogmas to be asserted . . . (Dewey 1939, p. 145)

This part of the scientific attitude is translated into the policy domain through such suggestions as multiple advocacy (Haas 1990, p. 210) and double visioning (Schön 1983, p. 281).

Why do the international financial institutions so often ignore these precepts, presenting their advice as if the policies they recommend were Pareto dominant policies and without sufficient warning of the associated risks and the limitations of the scientific evidence in their support? This question is particularly relevant because of the irony: the prevalence of prescientific, ideological ways of thinking in institutions

supposedly committed to bringing about the developmental transformation, an essential aspect of which is scientific thinking.

Only recently have such institutions become subject to the same analytic scrutiny to which other organizations and institutions (including governments) have been subjected. Such analyses begin with the presumption that it is not wanton perversity that leads to these behavioral patterns in large international organizations. There are quite human impulses that push for conformity and rigidity.

As economists, we believe strongly in the importance of incentives. In my 1998 address I suggested that we economists and the institutions for which we work might not rise above this general principle. The incentive structures we face—and, more particularly, the interests we and the institutions we work for serve—might play more than a small role in the advice we give and in the views of the world that we hold. Methodologies that support those views are encouraged; studies that contradict them are given more intensive scrutiny. Is it any accident that the cross-sectional studies showing that trade liberalization is positively associated with growth were widely disseminated, while those showing that capital market liberalization is not so associated were not (see Rodrik 1998)?[27] The reason I touch on this epistemological issue here is to encourage a healthy skepticism.

To be sure, we must guard against the opposite danger, of pretending that there are no general truths, no lessons to be learned, from economic science. Countries must make decisions, and they want to base those decisions on the best available evidence. They might like it to be the case that economic science pointed the way to particular decisions. In some areas there is indeed a broad consensus among economists. But in other areas economists may disagree even where the weight of empirical evidence is on one side. For instance, the evidence shows that capital market liberalization does not enhance economic growth and does increase risk. Yet many policy economists, especially at the International Monetary Fund (IMF), advocated capital market liberalization, though now (too late for many who have suffered from premature liberalization) they seem to openly recognize the risks.

A natural question is, why, in the absence of evidence of its benefits and with strong evidence of its risks, did the IMF still advocate capital market liberalization with such vehemence? The easy answer would be ideology—IMF economists' strong belief in market fundamentalism led them to ignore the dangers of this policy prescription. While this answer is probably true, an economist naturally pushes the analysis further: Were there incentives at play? Were some interests being served? Framed this way, the question answers itself once one looks at the governance structure of the IMF. The organization is dominated (in terms of voting power) by the advanced industrial countries, each represented by officials from its central bank and finance ministry, with close links to the country's financial markets. And the United States, the single country with effective veto power, stands to gain much from increased access to financial services markets.

The advocacy of capital market liberalization is an extreme case, both because of the clear evidence against the policy and because of the clear interests of those dominating the IMF. In other areas, relevant empirical evidence or well-developed the-

ory in support of a policy choice may be lacking, but all too often policy advisers nevertheless come out strongly in favor of one side or the other. For instance, problems in public pension programs made it clear that reforms were desirable. But it does not follow from the fact that some public pension programs fail that all of them must fail. And it is a fallacy that government failure requires a market solution. Even in developed countries transactions costs, potential abuses of uninformed investors by unscrupulous firms, and high market volatility (combined with the unavailability of insurance against such risks as inflation) may make privatization unattractive (see, for example, Orszag and Stiglitz 2000).

All these problems are far more severe in developing countries. Thus policymakers often face the difficult choice between strengthening a publicly managed pension program (possibly by using private contracting) and privatizing it while trying to establish a regulatory regime that prevents abuses and insurance schemes that provide a modicum of economic security to the aged. Outsiders from international agencies have tended to strongly recommend the second choice, even though there is little basis for this stance. Why? Again, ideology provides only a partially satisfying answer; the role of interests cannot be ignored.

Resistance to Fundamental Change

Thus all too often advice has been presented that goes well beyond the evidence in its support. But there is a concern too about the way in which advice is given—and, more broadly, about how policy decisions are made. Why is only a single view presented? Why does so much go on in secret, without broad consultation? Besides the human proclivity for establishing and defending authority, there is another force that shuts down inquiry, and that is the recognition by those in power that new ideas can be a force for change—and for changes that undermine that power.

Because knowledge and information can be such a powerful force for change—and for changes in direction that cannot always be fully anticipated—those in power have a strong penchant for conducting public affairs in secret. They want to control, as much as possible, the process of change—to make sure that it does not take a turn not in their interests. The more open and public the decisionmaking process, the greater the possibility of such unwelcome turns in events.

Much of the change in society is effected through political processes. Whether changes occur, and what changes occur, depend in no small measure on what coalitions form. But the dynamics of coalition formation are complex, affected by incentives, ideas, and beliefs and expectations about, for instance, what changes are feasible now and in the future.

The dynamics of coalition formation are important both in understanding resistance to change and in thinking through the consequences of alternative strategies for sequencing change. And they are important both for those wishing to prevent change and for those wishing to promote it. For instance, elsewhere I have suggested that often some groups recognize that a certain reform would result in a political dynamic posing the risk that they would be worse off in the long run even if they

would be better off in the short run (Stiglitz 1998d).[28] Having recognized this dynamic, these groups often block the reform.

Political Processes and the Promotion of Change

To see how awareness of the dynamics of political processes affects the design of reform strategies, consider a government privatizing a monopoly, with the eventual goal of creating a competitive private market. Should the government wait to privatize until after a competition law has been passed? One view would be that delay would only extend the deadweight losses from inefficient public ownership. But once political dynamics are taken into account, delay might appear more desirable—for without delay, the ultimate objective might never be attained: it might be easier to adopt a competition policy before a noncompetitive privatization has occurred than after. A privatization that results in a monopoly firm has created a vested interest against competition. But behind the veil of ignorance—before anyone knows who will become the monopolist—all can agree that it is better to have more competition.

I have argued that sustainable development, and sustainable reform, are based on changes in ideas, interests, and coalitions. Let me repeat that *such changes cannot be forced.* Changes in ways of thinking often take time. That is why the approach to reform based on conditionality has largely failed (see World Bank 1998). That is why the Bolshevik approach to changing society—forced changes from a revolutionary vanguard—has failed time and time again. The shock therapy approach to reform was no more successful than the Cultural Revolution and the Bolshevik Revolution.[29]

Conclusion

To return to the refrain at the beginning of this essay: We now recognize that development is possible but far from inevitable. We have learned that there is more to development than more rapid accumulation of capital, though without that development is unlikely to occur. And we have learned that there is more to development than more efficient allocation of resources, though poor countries can ill afford to waste any resources.

The most successful developing countries have not followed the neoliberal doctrines encapsulated in the Washington consensus. To be sure, growth is difficult without macroeconomic stabilization. But Turkey has shown that it is possible to have sustained (though precarious) growth even with rather high inflation, and econometric studies have shown that reducing inflation below a critical threshold yields few if any discernible benefits, though disinflation may have large costs. The recent crisis in East Asia has reminded us—if we needed reminding—that economic instability may arise from a multitude of sources other than bad macroeconomic policies. Indeed, it is increasingly recognized that some of the same policies that the international financial institutions pushed in the name of promoting growth also increased economic volatility (see Easterly, Islam, and Stiglitz in this volume).

All too often there has been a confusion between means and ends. Liberalization and privatization have been pursued as ends in themselves rather than as means to more rapid and equitable growth or greater economic stability—and all too often they have been pursued in situations where the consequences worked against those more basic objectives.

Experience in developed countries should have provided a clear warning that there is far more to development than privatization, liberalization, and stabilization. The South of Italy has lagged far behind the North—one of the most dynamic regions in the world—despite there being no trade barriers with the rest of Italy (or the rest of the European Union). The economic regime of the South—in terms of liberalization, privatization, and stabilization—is essentially the same as that in the North, yet its performance is markedly different. Something else matters, and matters a lot.

We now recognize too that long-term sustainable growth requires the development of a consensus behind reform policies. *Reforms cannot be imposed from the outside*—part of the reason for the widespread failure of conditionality. Meaningful democratic processes that involve participation and voice, combined with policies that promote equity, can enhance consensus building and a sense of inclusion and even create the social capital that is increasingly recognized as a key to long-term success. The developmental transformation entails more than solving technical economic problems so that an economy can increase efficiency and resource mobilization—as important as this is. Thus in our thinking about development, we have gone beyond projects—recognizing that even good projects will make a difference only if they are scaled up—and beyond policies—from good macroeconomic policies to dynamic programs for enterprise creation. We have begun to focus on institutions, such as those that promote competition and good governance in the public and private sectors. Contrary to the neoclassical model, institutions do matter.[30]

One important way in which the new theories differ from the old is in stressing that not only institutions matter, but also the distribution of income. Thus reducing poverty and inequality assumes an importance not only as an end in itself, but also as a means of achieving stronger economic performance. The World Bank's *World Development Report 2000/2001: Attacking Poverty* has emphasized the multidimensional nature of poverty—the poor face not only a chronic shortage of income but also a sense of voicelessness and powerlessness and a high level of economic insecurity (World Bank 2000). The discussion continues about the extent to which policies pursued in recent years have promoted economic growth, but there is little debate that in at least some instances the policies and the way in which they have been imposed have increased economic insecurity and the sense of powerlessness.

As we enter the 21st century, we thus approach development with a more comprehensive framework, an awareness of broader objectives and more instruments, a greater sensitivity to the complexity of the development process, a greater sense of humility in the face of the tasks ahead—but also a greater sense of optimism about

what the future might bring.[31] We know that development is possible. The challenge is to foster it in ways that benefit the poor, strengthen democratic processes, heighten the overall sense of well-being, and widen economic and political freedom.

Notes

1. In general, optimal contracts were highly nonlinear (see Peyton 1996). To be sure, economic theorists did provide partial explanations of this phenomenon; for instance, the possibility of arbitrage (and the impossibility of monitoring such arbitrage activities) meant that it might be impossible to implement nonlinear contracts, or contracts in one region with shares differing markedly from those in a neighboring region.

2. See, for instance, Platteau (1994). One manifestation of this concern with norms is reflected in the recognition of the importance of social capital (see the section on social and organizational capital).

3. Thus neoclassical theory argued that institutions either did not matter—economic outcomes were always efficient, and one had to see through the veil of institutions to the underlying economic forces (as Cheung had argued in the case of sharecropping) or mattered only to enhance economic efficiency. Stiglitz (1974a) showed that, with imperfect information, both propositions are wrong; sharecropping did attenuate incentives and the sharecropping equilibrium was not, in general, constrained Pareto efficient (Greenwald and Stiglitz 1986).

4. There have been some attempts to explain the failure of adoption on the basis of theories of asymmetric information. See, for instance, in the context of the evolution of contractual provisions, Stiglitz (1992).

5. Markets are not even constrained Pareto efficient, that is, taking into account the costs of establishing and running markets and of obtaining information. See Greenwald and Stiglitz (1986).

6. Arnott and Stiglitz (1991) show for the insurance market that the nonmarket institutions, which arise from the partial insurance that arises from concerns about moral hazard attached to market insurance, may crowd out market institutions, so that the equilibrium level of market insurance—and, more important, the level of expected utility—may be lower.

7. Other strands of literature have provided insights (often in terms of the responses to risk) into demography (the determinants of family size)—see, for instance, Rosenszweig (1988)—and other aspects of household behavior.

8. Kaldor (1956) was one of several authors to put forth the idea that wage earners and profit earners had different propensities to save. According to these theories, only by increasing the income share of the rich (or of capitalists) could one increase the aggregate savings rate. Kuznets (1955) described how in an economy that drew more and more people from (low-income) agriculture into (higher-income) industry, inequality would first increase, then decrease. Lewis (1954) set out the dual economy theory of development, which stressed the importance of savings: increased inequality, increased aggregate savings, and thus promoted growth.

9. This is an example of a more general set of propositions in agency theory, which showed that the clean separation of distribution and efficiency issues that characterized neoclassical theory was no longer true when there was imperfect information. See Hoff (1994) and Stiglitz (1994).

10. Though to be fair to Coase, he was much more aware of the limitations of this "theorem" than were most of those who invoked it, and it is unlikely that he would have gone so far as to subscribe to the tenets of the "political Coase theorem" (see Coase 1992).

11. Modern game theory has reinforced earlier, more intuitive arguments on this question. See, for example, Abreu (1988) and Akerlof (1985).

12. It certainly was not as high as the shortage of capital would suggest it should be, using conventionally estimated production functions. See, for example, Lucas (1988) and Stiglitz (1988).

13. Again, capital market imperfections played a key role in explaining underinvestment in education: the poor especially lacked access to capital to enable them to invest in education, despite the huge return to such investment. The inherent problems in correcting this market failure meant that in most countries there was a presumption for a large role for the state.

14. See Krueger's (1974) seminal article on government rent seeking and Bigsten and Moene (1997) for an example of rent dissipation.

15. For practical "manuals" see the discussions of the "reinventing government" initiatives in the United States, for instance, Osborne and Gaebler (1992). For an application to developing countries see Stiglitz (1998b).

16. Standard neoclassical theory assumed that knowledge was given and fixed—a particularly inappropriate set of assumptions for developing countries. It was also assumed that knowledge moves quickly across porous boundaries. Yet even within countries there seem to be large differences in productivity between "best practice" firms and average firms, differences that cannot be easily explained in terms of the standard factors of production.

17. For a discussion of the concept of international public goods and the role of the international financial institutions in the provision of international public goods, including knowledge, see Stiglitz (1995b, 1999a, 2000b).

18. For a discussion of social capital in the context of a comparison of development in China and Russia see Hussein, Stern, and Stiglitz (2000). For an excellent recent overview of social capital see the collection of papers in Dasgupta and Serageldin (2000). Also see the references at www.worldbank.org/poverty/scapital/library/keyread1.htm.

19. Some of these changes can be understood in conventional economic terms: high interest rates reduce the value of reputational capital; periods of rapid change, with high probabilities of organizational death, reduce the incentives to maintain organizational capital (see Stiglitz 2000a). Other changes are beyond the realm of standard economic analysis.

20. This section is based on Hoff and Stiglitz (2001) and the papers cited there.

21. Gunnar Myrdal (1957, 1968) has probably done the most to popularize the intuitive notion of the vicious circle in the economic development literature, particularly to account for persistent and increasing national and international inequality. Positive feedback means that some deviation or tendency is reinforced so that the process "snowballs" until it meets some countervailing force. For developing countries, processes of "catching up" can be accelerated and processes of "falling behind" aggravated (at least in relative terms). A virtuous circle and a vicious circle operate to drive the dynamics of divergence in opposite directions. The vicious circle leads to a low-level equilibrium and the virtuous circle to a high-level equilibrium. To get out of the trap of the low-level equilibrium, a comprehensive development effort of coordinated action is needed so that the virtuous dynamics take hold and drive to the high-level equilibrium. Models of multiple equilibria associated with "coordination failure" are associated with Rosenstein-Rodan (1943) and more recently, Murphy, Shleifer, and Vishny (1989).

22. If almost everyone else in society is (or acts) bureaucratic, it is more likely that it pays me to be (or act) bureaucratic, and it is more likely that those with bureaucratic mentalities will prosper and multiply. There is thus a bureaucratic equilibrium, but there may also be an innovative equilibrium, in which most individuals are "innovative" (see Stiglitz 1995a). In the innovative culture bureaucratic people do not survive, and conversely in the bureaucratic environment. There are thus multiple equilibria (in this case, multiple equilibria cultures). Robert Putnam (1993, p. 177) wrote about the self-reinforcing cultures of northern and southern Italy:

> Stocks of social capital, such as trust, norms, and networks, tend to be self-reinforcing and cumulative. Virtuous circles result in social equilibrium with high levels of cooperation, trust, reciprocity, civic engagement, and collective well-being. These traits define the civic community. Conversely, the absence of these traits in the *un*civic

community is also self-reinforcing. Defection, distrust, shirking, exploitation, isolation, disorder, and stagnation intensify one another in a suffocating miasma of vicious circles. This argument suggests that there may be at least *two* broad equilibria toward which all societies that face problems of collective action (that is, *all* societies) tend to evolve and which, once attained, tend to be self-reinforcing.

23. Note that nothing in neoclassical theory itself ensures a unique equilibrium, but the simple aggregative models typically had structures that guaranteed that outcome.

24. For instance, that of Paul Rosenstein-Rodan, the World Bank's first chief economist. See, for instance, Rosenstein-Rodan (1943).

25. Note that the last set of crises occurred in the Scandinavian countries, countries with the seemingly highest level of transparency. This certainly suggests that transparency itself does not inoculate against crises. Also note that transparency had been increasing in many of the East Asian countries, and that many other countries not experiencing a crisis had far less transparency. Finally, note that most of the relevant information (for instance, Thailand's persistent trade deficit and Korea's high level of corporate indebtedness) was already widely known, and that economic theories even suggested that more information might be associated with increased market volatility. For a review of these arguments see Furman and Stiglitz (1998).

26. Indeed, there were clear incentives for pushing the transparency argument: the investment firms that had pushed their clients into investing in these countries wanted to shift blame (it was not their faulty investment advice that was to blame; what were they to do, given the lack of transparency in the countries?). To be sure, there was a certain hollowness in this argument, since these investment advisers should have, at the very least, been aware of the lack of transparency. And to a large extent the only reason that they could make higher than normal risk-adjusted returns on these investments was the investors' purported informational advantage. Some industrial country governments, especially the U.S. government, had an interest not only in defending these firms but also in shifting blame: they did not want the spotlight to turn on them and reveal that the underlying problem was the excessively rapid financial and capital market liberalization that they had pushed on these countries.

27. Similarly, empirical studies, such as Rodriguez and Rodrik (1999) questioning the earlier studies that showed that trade liberalization had lead to faster growth were also given less play.

28. Sometimes the reason for this was closely related to the reason for advocating the reforms. Economists typically advocate greater transparency, partly because bringing certain costs—for instance, those of subsidies—into the open will erode support for them. But the beneficiaries of these subsidies also recognized that increased transparency would threaten the sustainability of the subsidies.

29. See Stiglitz (1999d) and Roland (2000), a textbook on transition economics that summarizes the literature on this point and advances a critique of the "cavalry approach" to transition.

30. Indeed, the irony is that the ascendancy of the neoliberal doctrines based on the neoclassical model occurred at a time that economic theory was stressing the limitations of that model and developing an alternative paradigm based on imperfect information and incomplete markets (and associated other market failures, including imperfections of information).

31. See Wolfensohn (1998) and www.worldbank.org/cdf.

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