

DEVELOPMENT THINKING AT THE MILLENNIUM

Joseph Stiglitz*

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INTRODUCTION

We are entering a new millennium and closing out a century filled with ferment. As we look over how we thought about development over just the past half century, we can note marked changes. It has become clear that development is possible but far from inevitable. We can also note that the most successful developing countries, those in East Asia, did not blindly follow the prescriptions of the Washington consensus: they did maintain a high level of macro-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 the *features* of less developed countries that make them differ from more developed countries (and they differ in many ways). We also now understand better what features of less developed countries act as a *hindrance* to development. Currently 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 changes.

* The author is Professor of Economics (on leave) at Stanford University and Special Advisor, World Bank. The views expressed are those of the author and not necessarily those of any organization with which he is or has been affiliated. The author is indebted to Nadia Roumani and Noémi Giszpenc for research assistantship and to Karla Hoff for very helpful comments.

Equilibrium and *change* are thus the twin foci 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 over the past three years, I have touched upon several aspects of these topics, not without controversy. Economists differ markedly in their beliefs, especially on issues that touch upon policy—which virtually all of 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? Let us remember that as economists, we believe strongly in the importance of incentives. In my talk two years ago, I suggested that we economists and the institutions for which we work are unlikely to rise above this general principle. The incentive structures we face—and more particularly, the interests we and the institutions we work for serve—might be playing more than a little role in the advice we give and in the views of the world that we hold. Studies that contradict those views are given more intensive scrutiny.¹ The reason I touch on this epistemological issue here is to encourage a healthy skepticism. We all agree that countries must make decisions and they want to base those decisions on the best available evidence. We also agree on certain policy areas: for instance, governments run sustained large budget deficits only at their peril. We can certainly agree on certain logical propositions such as 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 judgement concerning the relevance of each of these propositions. Curiously, even where there is a dearth of relevant empirical evidence, all too often policy advisers have come out strongly in favor of one or the other side.² To understand why this may be the case, we must pay special attention to the incentives of the policy advisers and the institutions for which they work, just as we do when we study the behavior of bureaucrats and governments in developing countries.

¹ Is it an accident that the cross sectional studies showing that trade liberalization is positively associated with growth were widely disseminated, while those that showed capital market liberalization was not so associated were not? Initial studies that seemed to show that voucher privatization was working were also widely publicized, but later information about the tunneling and other adverse effects were little noted.

² For instance, problems in public pensions programs made it clear that some reforms were desirable. But it does not follow from the failure of some public pension programs that public pension programs must necessarily fail. Indeed, the fallacy that government failure requires a market solution is not unlike the familiar criticism of the market failures approach: just because markets do not work efficiently does not mean that a government program will remedy the deficiency. Even in developed countries, transactions costs, potential abuses of uninformed investors by unscrupulous firms, plus high levels of market volatility (and the unavailability of insurance against key risks such as inflation) may make privatization unattractive (except perhaps to the brokerage and fund management firms). All of these problems are far more severe in developing countries. Thus, policy makers often face the difficult choice of deciding whether to try to strengthen a publicly managed (possibly using private contracting) pension program, or whether to privatize, trying to establish a regulatory regime that prevents abuses and insurance schemes that provide a modicum of economic security to the aged. The simple fact of the matter is that while outsiders from

I. EQUILIBRIUM

Thinking about equilibrium in less developed countries has moved a long way in the past fifty years. As in so many other areas, there has been a vacillation among extremes, with current positions closer to a “middle course.”

Economic institutions of developing countries—Rationality and Efficiency

Earlier models saw the behavior of those 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 demonstrated that peasants respond to economic incentives; for instance, farmers shifted production to products yielding higher prices. In the extreme, this view held that developing countries were just like developed countries, except they lacked capital. Some even argued that there was no meaningful discipline of “development economics.” Earlier literature emphasized the importance of institutions that interfered with economic efficiency. The newer view saw institutions as part of the creative responses to societies: institutions represent efficient responses to market failures. A notable example is sharecropping. The earlier view saw this as an institution in which not only did landlords exploit workers by taking between 1/3 and 2/3 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 argued that the sharecropping contract (implicitly or explicitly) had provisions that mitigated the adverse incentive effects.³

As time went on, empirical evidence mounted against the efficient rational peasant working within efficient institutional structures—productivity and input utilization under sharecropping was lower than on owner-managed farms.⁴ Economists realized that many of the detailed features of the contract could not actually be explained by standard economic theories. One could not, for instance, provide a convincing explanation of why shares typically remained fixed, even as circumstances (affecting demand and supply for land and labor) changed, nor could the theories explain why contracts were very simple. (In general, optimal contracts were highly non-linear.⁵) Thus the concept of *norms* was introduced to explain

international agencies have tended to strongly recommend the latter course, there is little basis for this policy stance.

³ See Cheung (1969).

⁴ See for example Berry and Cline (1979) and Binswanger, Deininger, and Feder (1995).

⁵ See Peyton (1996). To be sure, economic theorists did provide partial explanations of these phenomena, e.g. the possibility of arbitrage (and the impossibility of monitoring such arbitrage activities) meant that it might be impossible to implement non-linear contracts, or contracts in one region with shares differing markedly from those in a neighboring region.

institutional arrangements⁶—bringing the analysis at least partially back full circle to the earlier “cultural” theories.

So, yes, incentives matter. Sharecropping does provide incentives at the same time that it provides risk sharing in an economy with far from complete insurance markets. But there is no reason to believe that institutions themselves—the conventions that determine how individuals relate to one another—respond quickly or efficiently to changes in economic circumstances.⁷ Just because peasants respond to market incentives does not mean that markets are efficient or even that their behavior is well-described by the standard economic model. Just because some institution arises to serve a particular function does not imply 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, e.g. of perfect information, perfect competition and complete markets, assumptions that are far from satisfied in most developing countries.⁸ Indeed, non-market institutions that arise to address a market limitation may actually be dysfunctional.⁹

Economists soon recognized a variety of deficiencies with this approach. That individuals respond to incentives does not mean that they either respond efficiently, or in the way that neoclassical theory predicts. An alternative theory of *behavior* and *institutions* developed: The *theory of rural organization* explained the structure and performance of key institutions found in many developing countries, such as the interlinkage of land, labor, and product markets, the existence and terms of sharecropping contracts, and the structure of rural credit markets (including the role and behavior of rural money lenders).¹⁰ This theory of rural organization was based on societal responses to imperfections of information and incompleteness of markets, but unlike the earlier theory, these responses were not necessarily “efficient” or even welfare enhancing. In this theory, the structure of the institutions does matter; and because the consequences of information asymmetries is affected by wealth disparities, distribution really does matter.

⁶ See for instance Platteau (1994). One manifestation of this concern for norms is reflected in the recognition of the importance of social capital. See below.

⁷ There were some attempts to explain the failure of adaption on the basis of theories of asymmetric information. See, e.g. in the context of the evolution of contractual provisions, Stiglitz (1992a).

⁸ Markets are not even *constrained Pareto efficient*, i.e. taking into account the costs of establishing and running markets and of obtaining information. See Greenwald and Stiglitz (1986).

⁹ Arnott and Stiglitz (1991) show for the insurance market that the non-market institutions may actually crowd out market institutions, so that the *equilibrium* level of insurance—and, more importantly, the level of expected utility—may actually be lower.

¹⁰ See, for instance, Hoff, Braverman, and Stiglitz (1993) and Bardhan (1984). Other strands of literature have provided insights (often in terms of the responses to *risk*) into demography (the determinants of family size)—see for example Rosenzweig (1988)—and other aspects of household behavior.

Inequality in developing countries

Anyone visiting a typical less developed 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.¹¹ In some countries, this is a consequence of a feudal heritage; in many, it is part of the colonial inheritance, where, for instance, European colonial masters appropriated for themselves 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 perpetuated 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 Kaldor¹² and Simon Kuznets¹³ advanced theories that inequality would lead to growth, or the other way around, but either way there was a dominant view that there was nothing to worry about. 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 last decade we have rejected most of these “trickle-down economics” conclusions. 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 others with comparable incomes. Thus, if one is particularly concerned with improving the plight of the poor, one should not simply focus on growth. The experiences in East Asia show that one does not need to have huge inequality to achieve high savings rates. Indeed, the experiences in East Asia suggest that (at least within a range) rather than there being a trade-off between equality and growth, the two might be complements. Egalitarian education policies have, for instance, played a pivotal role.¹⁴ Increased equality has led to enhanced political and social stability, thereby creating a better investment environment.

At the same time, both theory and evidence argue that distribution matters—and not just for who gets what, but also for how much there is to get. Sharecropping is an inefficient economic institution that

¹¹ It is, of course, not surprising that the fraction of those in developing countries who are living in poverty would be far larger than in more developed countries, simply because incomes are lower. In addition, in many developing countries, inequality is greater. The average Gini coefficients of developing countries are approximately 10 points higher than those of developed countries (around 0.4 versus 0.3). See Deininger and Squire (1996).

¹² Kaldor (1956) was one of several articles to put forth the idea that wage-earners and profit-earners had different propensities to save, leading to different investment-growth paths for different economies.

¹³ Lewis (1954) set out the dual economy theory of development, which led to Kuznets (1955) describing how an economy that drew more and more people from (low-income) agriculture into (higher-income) industry would first increase, then decrease the inequality of incomes in the population.

¹⁴ For a more complete articulation of this view, see Birdsall, Graham, and Sabot (1998) and World Bank (1993).

arises out of the huge inequalities in wealth (land) distribution.¹⁵ The extent of credit rationing (and more generally the extent and consequences of imperfections of capital markets) also depend on distribution.¹⁶ A large-scale study of sugar cooperatives in India showed that inequality of assets affects relative control rights of different groups of members in the cooperatives, which in turn affects the extent to which the cooperatives depress prices paid for inputs supplied by members and divert resulting retained earnings.¹⁷

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 more to the center of discussion. Not long ago, it was argued that it did not matter how privatization occurred in the economies in transition—so long as there were clear “owners,” Coasian arguments held that they would have an incentive to ensure that the assets were deployed in the most efficient way. Going one step further, according to an argument that I have referred to as the “political Coase theorem,”¹⁸ the new owners would also demand any missing institutional infrastructure through the political process. Needless to say it is *not* oligarchs, who intend to do better for themselves negotiating special deals behind closed doors, who demand the rule of law, but the middle classes. It was hardly John D. Rockefeller who strongly supported competition policy at the turn of the previous century, nor is Bill Gates doing so today.

On another tack, there is a growing recognition that the institutions set up by so many societies that govern gender and race relations—including those that support discrimination in pay and access to education—have adverse effects on overall efficiency.¹⁹ Similarly, even today, in many parts of the developing world, institutions exist that preserve feudal power relations, institutions that simultaneously interfere with overall inefficiency as they increase inequality. While neoclassical skeptics of a quarter-century ago used to assume that it would be impossible to sustain and enforce such inefficient discriminatory equilibria, modern game theory has shown clearly how this can be done.²⁰

Features of developing countries that impede development

One of the reasons 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

¹⁵ This was 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 (1984, 1994, 2000).

¹⁶ See Aghion and Bolton (1997) and Piketty (1997).

¹⁷ See Banerjee et al. (1998).

¹⁸ See, for example, Shleifer and Vishny (1998). 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.”

¹⁹ See for example North (1990).

²⁰ See for example Abreu, Pearce and Stacchetti (1990) and Akerlof (1984, 1985). This discussion should be contrasted with the earlier approach to discrimination of Becker (), and the somewhat later analysis of discrimination based on models of imperfect information and multiple equilibria. See Arrow (), Stiglitz (1973, 1974).

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 development be brought about—and these were daunting challenges. I shall return to this theme later in Part II. The neo-classical 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, 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, when evidence mounted that one of the reasons for the seeming failure of capital to flow to the capital poor countries was that the return to capital was not high, there was an obvious response: those countries lacked complementary factors such as skilled labor. This led to an emphasis on the increase in education.²¹ But despite the shortage of skilled labor in many developing countries, they have experienced an alarming level of brain drain, suggesting that the returns to education as well as to physical capital are still higher in developed than in developing countries.

At this juncture, economists began to think that the problem was not market failure but government failure, in the form of predatory states engaging in rent seeking activities that interfered with the efficiency with which resources were allocated. In some developing countries, such interventions seem indeed to be part of the problem—but only part. Those seeking rents, however, do not waste the volume of resources in their quest that would account for the differences in production,²² nor does their interference seem to create a sizeable enough amount of dead-weight loss. Moreover, the standard arguments for rent dissipation²³ assumed perfect competition. All of the rents were expended in an attempt to get special treatment (e.g. 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 epsilon sunk costs can enable an incumbent monopolist to maintain his monopoly power; the monopoly rents need neither be dissipated nor competed away.²⁴

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

²¹ 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, in spite of its huge return. The inherent problems in correcting this market failure meant that in most countries, there was a presumption for a large role for the state.

²² That is, much of what is spent in rent-seeking are just transfer payments.

²³ See Krueger's (1974) seminal article on government rent-seeking and Bigsten and Moene (1997) for an example of rent dissipation.

²⁴ See Stiglitz (1989) and Malueg and Schwartz (1991).

the elimination of market distortions would be a move in the right direction. Not surprisingly, countries that have moved in this direction have seen an increase in standards of living—but hardly the closing of the gap with the more advanced industrialized countries.

The literature also helped focus attention on issues of political economy. There was, however, a certain intellectual inconsistency in the stance of the critics of the predatory state who argued for a minimalist role for the state. Their moral injunctions would presumably not suffice: why 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?²⁵ I shall return to this theme later.

As the century comes to an end, and the disastrous results in the economies in transition 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 in an effective and efficient manner. The articulation of the theory of market failure, especially as applied to developing countries, allows a more precise articulation of the appropriate roles of the state.²⁶ An enhanced understanding of agency theory in general and the ways in which the state is different from the market²⁷ enables a better understanding of some of the mechanisms by which the efficiency and effectiveness of the state can be improved.²⁸

Besides ensuring that the state at the national level performs its own functions well, the state 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, then a new rationale for collective action arises: not just to correct market failures, but to alter non-market 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 level. But to alter arrangements at one level might require interventions arising from another level, a point to which I shall return later in this essay.

Role of the state

So far, we have followed the development debate as it has cycled. First institutions and culture explained everything, then were irrelevant, then were explicable themselves and efficiency enhancing, then they are partially inexplicable and possibly even dysfunctional, and finally now there is a recognition that

²⁵ Michael Finger (1998) has discussed the notion of “political fungibility.”

²⁶ See, e.g. Stiglitz et al. (1989), Stiglitz (1997), and Stern and Stiglitz (1997).

²⁷ See Stiglitz et al. (1989).

institutions, rather than being efficiency promoting and filling in the gaps resulting from market failures, are possibly even impediments to efficiency as they seek to preserve existing inequalities and power relationships. Also, first inequality was unimportant, then inequality promoted growth, and now we see inequality as having an adverse effect on growth. At the same time, 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, to the view that growth normally improves the plight of the poor, but that some growth strategies are more pro-poor than others.

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

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, then there is a “factor” A that is different in less developed countries than in more developed countries. Let us think of it as a vector of dimensions that characterize countries as being more or less developed.

1. Information

The theories discussed so far suggest that imperfections in information help lead to an equilibrium in which resources are not as efficiently allocated as in more advanced industrial economies. The imperfection information and agency theories and the “market failures” they bring to light suggest four immediate implications for the role of government:²⁹

- Information flows are weaker in developing countries. Government should take actions to improve information flows, which could in turn have impacts on prevalent institutional arrangements.
- Agency problems exacerbate the consequences of information imperfections, and inequalities exacerbate the extent of agency problems. We have already noted how sharecropping reduces production.³⁰ Governments should take actions to collapse agency chains, reducing the consequences of asymmetries in information; one such action would be land redistribution such that farmers own their own land.

²⁸ For practical “manuals” see the discussions of the “reinventing government” initiatives in the U.S., e.g. Osborne and Gaebler (1992). For applications to developing countries, see Stiglitz (1997).

²⁹ See World Bank (1999).

³⁰ The magnitude of the distortions can be enormous. A typical sharecropping contract entailing a share of 50% has an effect similar to a tax of 50%—and this is on top of government-imposed taxes, e.g. on agricultural output. Most economists would argue that such high tax rates can have significant adverse effects.

- Weak information gathering and processing capacity in developing countries prevents the establishment of many market arrangements enjoyed in developed countries, and alternatives need to be developed. Governments should help create institutions that find more efficient ways around information asymmetries, such as micro-credit schemes with peer monitoring.³¹
- In general information is imperfect and consequently markets work imperfectly. Thus governments need to take into account in the design of all of their policies that they cannot simply assume that markets in the rural sector work as they would under the standard “demand and supply” framework.

2. Knowledge

Another dimension of “A” is knowledge: developed countries differ from less developed countries in their knowledge, including that of production processes. Once again government has a role in promoting increases in knowledge generation, acquisition and use.³²

- Knowledge is like a public good, or at least an impure public good.³³ Thus there is likely to be under-investment in production and under-dissemination of knowledge, giving rise to an important public role³⁴ in knowledge production and dissemination.³⁵

³¹ For an overview of micro-credit see, for example, Morduch (1999).

³² 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 practice, differences that cannot be easily explained in terms of the standard factors of production.

³³ There are limitations to appropriability and zero marginal cost for an extra individual to enjoy knowledge.

³⁴ The role would go well beyond trying to define the appropriate boundaries of intellectual property rights. For example, excessively strong intellectual property rights can actually stifle innovation. Intellectual property rights increase incentives to do research, but they may also increase the price of one of the most important inputs into research, “knowledge.” To be sure, the disclosure requirements associated with patents themselves facilitate innovation, relative say to a regime in which intellectual property is protected through trade secrets. It is important to recognize that intellectual property rights are *created* by the state; the state can limit and shape the rights as it will, taking into account, of course, the consequences of alternative regimes. For example, the state could grant intellectual property rights for certain vaccines, in return for the obligation that the drugs be distributed at marginal cost to low income countries.

The definition of intellectual property rights also affects competitiveness in product markets, and competition in the product market itself may affect the pace of innovation. Some have argued for a limitation of the duration of patent/copyright protection for any computer software operating system that comes to have a dominant role since network externalities inhibit entry. Such a regime would, for instance, put enormous pressure on a dominant operating system firm to innovate, for if its new products were not substantially improved over its old, it could no longer profit from the old operating system that would have become publicly available.

³⁵ Governments in technologically leading countries have long assumed an important role in the promotion of innovation. For example, in the United States, it was the Federal government that initiated the telecommunications industry in 1842 by laying the first telegraph line between Baltimore and Washington; and more recently the Federal government financed the development of the Internet, which is changing the modern economy. Also in the nineteenth century, government financed research and government dissemination of research findings are largely credited with the enormous increases in productivity in

- The transfer and adaptation of new technologies, a central concern of developing countries, is no less of a public good, and no less important, than the original production of knowledge. Governments can take a cue from East Asian countries³⁶ and invest in a highly educated, technologically literate labor force (or go even further in promoting technology).³⁷

For its part, the World Bank has increasingly seen the closing of the knowledge gap as one of its central roles.³⁸ The President of the World Bank, Jim Wolfensohn, has often spoken of the Bank as a “Knowledge Bank.”³⁹ Knowledge, including knowledge about development, is a global public good: the benefits of that knowledge can be of value to everyone, and it is therefore appropriate that such knowledge be provided by an international public institution such as the World Bank.⁴⁰

3. Social and Organizational Capital

A third dimension of “A” is a country’s social and organizational capital.⁴¹ Production processes take inputs and translate them into outputs. In that process, more than one individual is typically involved; individuals must 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 within which they work, on the norms and institutions that govern their “public” behavior (that is, their behavior in

agriculture (the central economic activity of the period), beginning with the Morrill Act of 1862. Similarly, much of the innovation that spurred productivity increases in the decades following World War II were associated with war-time research efforts.

³⁶ There were a number of ways through which they tried to facilitate development. See, e.g. World Bank (1993) and Stiglitz (1996).

³⁷ The recognition that governments need to push not only for improved primary education, but also for strong secondary and tertiary education, represents one of the major policy shifts in recent years. See World Bank (1999). To be sure, in the past, some governments often provided excessive subsidies for tertiary education, with such expenditures absorbing an inordinate share of the overall education budget, and to be sure, in the past, often tertiary education was more a continuation of the kinds of classical education preferred by the former colonial masters. The curricula in many developing countries may have to be revised substantially, and the magnitude and forms of subsidies changed. But most observers credit the Korean education system—including the quality of its tertiary education—with playing a pivotal role in its success. See Amsden (1989).

³⁸ See Stiglitz (1999e) for a discussion of knowledge as a global public good.

³⁹ See Wolfensohn (1997).

⁴⁰ 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 (1995, 1999e).

⁴¹ I do not propose here to provide an exhaustive taxonomy. Another set of explanations for differences in output per worker between developed and less developed countries is associated with returns to scale. If there is increasing returns to scale, then wealthier economies will be operating at a higher scale, and therefore have higher productivity on that account alone. But some of the highest per capita countries have been small countries (such as Singapore), and this suggests that returns to scale cannot play an important role at the aggregate level, even if such returns are important at the level of a particular firm. Indeed, a telling criticism of the returns to scale argument is that it does not identify the unit over which the returns are supposed to operate. There may be returns to scale at the level of the city (up to some level), but this only means that each country will be constituted by varying numbers of cities of optimal size.

dealing with others). Typically, within modern societies, we take these forms of “capital”⁴² for granted, though we often appreciate people whose word is their honor (i.e. no contract is required). But in the economies of transition, and in many developing countries, we have seen what happens when social capital deteriorates.⁴³ In some countries, for instance, copper electric lines fall prey to thieves stealing the copper.

There is a large literature emphasizing the importance of contract enforcement; absent that, there cannot be intertemporal trades, 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, e.g. associated with repeated play, and with norms, the breaking of which results in adverse social as well as economic consequences. Modern analyses of organizations have emphasized that the “good” behavior of members of the organization often seems difficult to explain simply by looking at incentives—even long run incentives associated with job promotion and reputation (for more classic analyses see Marshall [1897] and Jensen and Meckling [1996 (1976)]). Organizations seek to change the “preferences” of members, to have them *identify* with the organization.⁴⁴

The level and nature of organizational and social capital certainly differs across countries, and it can change during the development and transition process—often in ways that are adverse.⁴⁵ Some of these effects are an inevitable consequence of development—but even then it is important for policymakers to be aware of them, possibly to try to take offsetting actions. In some cases, governments have some choice over policies (such as having extremely high interest rates) that may produce such additional adverse effects.

Poverty Traps⁴⁶

So far, we have seen how equilibrium in developing countries is affected by norms, the distribution of wealth, and institutions (including political institutions)—there are a host of factors, besides differences in capital per worker, that explain differences in output per worker.

⁴² We call it capital because it takes time to create, but it differs from conventional capital in many important ways. For example social capital may be enhanced by use, unlike physical capital that is more likely to depreciate with use.

⁴³ For a discussion of social capital in the context of a comparison of China and Russia's development, 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 <http://www.worldbank.org/poverty/scapital/library/keyread1.htm>

⁴⁴ See Simon (1991). The theory of endogenous preferences—including the welfare implications—remains an important area for future research.

⁴⁵ 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, also reduce the incentives to maintain organizational capital. Other changes bring us beyond the realm of standard economic analysis.

⁴⁶ This section is based on Hoff and Stiglitz [1999] and the papers cited there.

Still, we must realize that *which* equilibrium a country finds itself in is *not* deterministic. A recent strand of analytical research⁴⁷ has focused on the observation that the major determinant of the environment of each actor (firms and households) in any economy are other actors, and that in general, there may be multiple equilibria.⁴⁸ Therefore the current equilibrium depends on history and environment. Darwin himself observed this in his visit to the Galapagos islands, a set of islands with similar physical characteristics, but that developed markedly different flora and fauna.⁴⁹

This view that development is not deterministic is in direct contrast to the standard neoclassical approach. In the latter, the economy at each date is determined by preferences, technologies, and resources. And the story of its evolution is equally simple: it is simply the story of how today's preferences, technologies, and resources determine those of tomorrow.⁵⁰ The scope for policy is

⁴⁷ Gunnar Myrdal (1944, 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 (rather than curtailed as in negative feedback or decreasing returns) so the process “snow-balls” until it meets some countervailing force. For developing countries, processes of “catching up” or “falling behind” can be respectively accelerated or aggravated (at least in relative terms). These divergence dynamics are sometimes called the “Matthew Principle” or “Matthew Effect”—see Merton (1973)—after the Biblical reference: “For to every one who has will more be given, and he will have abundance; but from him who has not, even what he has will be taken away.” (Matthew 25:29) The “rich get richer” and the “poor get poorer.” “Them that have, gets.” See Kelly (1994, p. 469). 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. There is a “critical mass” in between. To get out of the trap of the low level equilibrium, a comprehensive development effort of coordinated action is needed to achieve the critical mass so that the virtuous dynamics will take hold and drive to the high level equilibrium.

⁴⁸ 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.” 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 *uncivic* 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.”

⁴⁹ Darwin (1859) wrote, in thinking about the Galapagos Islands: “[The plants and animals of the Galapagos differ radically among islands that have] the same geological nature, the same height, climate, etc.... This long appeared to me a great difficulty, but it arises in chief part from the deeply seated error of considering the physical conditions of a country as the most important for its inhabitants; whereas it cannot, I think, be disputed that the nature of the other inhabitants, with which each has to compete, is at least as important, and generally a far more important element of success.” (p. 540)

⁵⁰ For a discussion of this approach, see Lucas and Prescott (1974). Note that there is nothing in neoclassical theory itself that ensures a unique equilibrium, but the simple aggregative models typically had structures that guaranteed that outcome.

accordingly limited: it can only help facilitate the transfer of resources (or technology) or increase the rate of change (e.g. by taking actions that increase the savings rate).

By contrast, in the multiple equilibria models, there is another set of actions: the government can impose policies that help move the economy from one equilibrium to another. There are, for instance, examples where the announcement of a policy eliminates an equilibrium, and in the new equilibrium, no action actually has to be taken. 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 the level at which demand for labor equals supply, then there may be one equilibrium with a low unemployment rate (and so each family sends few workers into the labor force). But if the government were to provide a guaranteed income to each family, then each family would need to send out fewer workers, and the only equilibrium to emerge would be the low unemployment equilibrium.⁵¹

⁵¹ See Basu, Genicot and Stiglitz (1999).

II. DYNAMICS OF CHANGE

We now have a broader understanding of why developing countries may have such a low level of income. The harder question is what drives change, what enables a move 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 part. In the neoclassical vision of developing countries, developing countries were just like developed countries, except they were poorer; they had fewer resources, in particular less capital and human capital. There was little then to development economics: it was simply a question of what one could do to increase the pace and efficiency of the accumulation of capital. From this perspective, Chenery and Krueger had much in common. Both the planning approach and the approach arguing for liberalization 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 doctrines⁵² that saw more to the development process: development is now seen as a *transformation of society, of a move from old ways of thinking, old forms of social and economic organization, to new.*⁵³

The new view argues that there is far more to development and the developmental transformation than improving economic efficiency and accumulating capital. But the greater expansiveness in the vision does not bring with it a corresponding set of obvious strategies for promoting change. It does point to some directions that may have received insufficient attention and gives new reasons for certain development policies. Education is important not just because it increases “human capital” but because education changes the acceptance of change; it introduces individuals to the scientific method, to ways of thinking that are markedly different from traditional ways of thinking. Trade is important, not just because some goods can be purchased at a lower price (or some goods that otherwise would not have been available become available). It is also important because trade brings a country into closer contact with others, and

⁵² For instance, that of Paul Rosenstein-Rodan, one of the first economic advisors of the World Bank. See for example Rosenstein-Rodan (1943).

⁵³ See Stiglitz (1998).

through these contacts, there is a change in ways of thinking.⁵⁴ In this respect, the promotion of exports (making countries understand the nature of the international market place, the importance of standards, etc.) may be far more important than the liberalization of imports. From this perspective too, two investments that have the same short run effect on GDP can have markedly different effects on development: a mine in a remote area may enhance the country's access to resources, but may have little further positive effect, especially when run by expatriates.

Reform

One hypothesis is to “reform” institutions and policies. But this only pushes the question back. How do we change the institutions and policies that govern an economy? In an “equilibrium” framework, the question is what disturbs an equilibrium and cause the economy to move from an underdevelopment equilibrium to a more developmental equilibrium characterized by greater wealth creation and rising standards of living.

I can easily point to a model for change that does *not* work: that underlying strategies of the international financial institutions in promoting privatization. A mission (made up of something akin to missionaries) would go to the country, explain the virtues of privatization and in particular how privatization would increase efficiency⁵⁵ and stem the corruption (often by corrupt government officials) that was bleeding the economy. The government officials (a.k.a. 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.

Of course, in reality 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. As I said before, if government leaders are corrupt, then one should be careful in making inferences about policy reforms. They may be endorsed because they enhance the opportunity for corruption, rather than because they promote the overall efficiency of the economy. All of this, one might say, is elementary economics:

⁵⁴ “It is hardly possible to overrate the value, in the present low state of human improvement, of placing human beings in contact with persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar... Such communication has always been, and is peculiarly in the present age, one of the primary sources of progress.” J.S. Mill, quoted in Hirschman (1981, p. 17).

⁵⁵ There are some state enterprises, however, that have been as or more productive than corresponding private firms. Advocates of privatization treated such success cases as an aberration, and presumed it would be easier to privatize than to reform, that is, to figure out what made the successful state enterprises productive, and to apply those lessons more broadly. Note that agency theory suggested that large enterprises, both public and private, face quite similar incentive problems; the a priori case for privatization is far weaker than most of its proponents were ever willing to admit. See, e.g. Sappington and Stiglitz (1987) and Stiglitz (1992b, 1993). While in some countries, privatization has proven to be a marked success, in others, performance has been more dismal. See, e.g. Stiglitz (1999a) and Black, Kraakman, and Tarassova (1999).

incentives matter, and we should look at the incentives of those in power. While elementary, it seems a principle that all too often has 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 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 coalitions that form among individuals and groups, and examines whether they work to promote or resist change. I also will attempt to identify the *disturbances* that upset the initial equilibrium.

Several examples will help illustrate what I have in mind. In the example I just gave, the “disturbance” to the initial equilibrium was an *idea*, the notion that privatized firms are more efficient than government run enterprises. Unfortunately, this idea was closer to being part of an *ideology*, a primitive (non-scientific) 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.⁵⁶ Thus, the economies in transition that were encouraged both to privatize and liberalize their capital accounts⁵⁷ prior to 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 who were more willing to pay them bribes, and those buyers (acting according to their incentives) promptly stripped the assets from their new firms, and capital market liberalization made it all the easier to send the money out of the country.

The provision of public education illustrates an example of a reform driven by the *incentives* of ruling élites that eventually led to a reduction in their power. Here, the “disturbance” was the development of new technologies that required more trained labor. With a sufficiently high discount rate, it would pay existing power élites to support more mass education, even recognizing that it would imply a loss of power in the future.⁵⁸

During the East Asia crisis, the *idea* of transparency surfaced, cited by some as one of the main causes of the problem.⁵⁹ Several contrary observations⁶⁰ however led to a widespread suspicion that transparency was not at the root of the problem. Perhaps those who raised concerns about transparency

⁵⁶ In spite of the seemingly perverse incentive, in the long run the reform may have beneficial effects if there were some merit in the original idea, and the privatized firm does turn out to be more efficient.

⁵⁷ Capital market liberalization in particular made it all the easier to ship wealth abroad.

⁵⁸ For a more extensive discussion of this example, see Bourguignon and Verdier (2000).

⁵⁹ We need not be detained here with the validity of the argument (as we noted earlier, ideas can have power regardless). See below.

⁶⁰ 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 countries that did not have crises had far less transparency. Finally, note that most of the relevant information (e.g. Thailand's persistent trade deficit, 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).

were themselves trying to hide something!⁶¹ 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 the basic citizens' right to know. It became recognized that a comprehensive disclosure regime was necessary that would embrace hedge funds and offshore banking centers as well as the banks in the developing world. The arguments for transparency seemingly had come full circle, and now some of those (e.g. in the U.S. Treasury) who had spoken so loudly in its favor expressed some misgivings—going so far as even 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 grasp fully the implications of this fundamental *idea*. But it was an idea with enormous power, one that eventually came to attack slavery and discrimination in all of its manifestations, including racial and gender discrimination.

Thus, ideas do have a power of their own. But ideas are *often* linked with incentives, as we have seen. An idea may be more likely taken up or advocated when it serves an interest. It was no accident that the idea of "capital market liberalization" was pushed by capital exporting countries and the international organizations that they dominate.

Evolutionary Change

A complementary approach to the "equilibrium" and "change" dichotomy presented above is the *evolutionary* approach to social change. In this conception, societies are always bombarded by shocks that give rise to change. There are forces for change that arise internally, as well as intrusions from the outside.

Internal sources of change

An example of an internal source of change is the processes of R&D within modern society that themselves generate changes in technology that in turn may 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, changing the ways in which individuals and businesses interact with each other in fundamental ways. Ideas often take on a life of their own, as we have already seen. Ideas evolve over time, an evolution that is both consequence and 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 ideas such as

⁶¹ And 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, what were they to do, given the lack of transparency in the countries. To be sure, there was a certain hollowness in this argument, given that these investment advisers should have, at the very least, been aware of the lack of transparency. Some of the advanced industrialized governments, especially the G-1 (the U.S.), 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 upon these countries.

“assembly lines,” “just-in-time production,” and “replaceable parts” can take years, even decades to play out, and as they do, change affects one part of society, then another, in a never ending progression, until there has been a transformation of virtually every part.

External sources of change

Some of the most profound changes in societies have occurred from events that are at least partially exogenous. The encounters in the nineteenth century between, for instance, Asian and European societies led to major changes, particularly in the Asian societies, as they were confronted with 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 are changes in knowledge and information, or more broadly in beliefs and perceptions. But such changes cannot be forced. They cannot be forced from either the inside or the outside. This is especially true as we think of development as a transformation of society, including ways of thinking. Changes in ways of thinking often take time.⁶² 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 reform⁶³ was no more successful than the Cultural Revolution⁶⁴ and the Bolshevik Revolution.⁶⁵

Many of the most important changes, as we have noted, are associated with encounters with outsiders.⁶⁶ Encounters across cultures have such impacts partly because they indirectly change people's beliefs about what is possible. Outside advisers can thus have the most profound and lasting effects not by forcing change through conditionality (which is unlikely to be sustainable throughout the vicissitudes of changing political currents) but through *persuasion*.⁶⁷ Arguments based on ideology only sway those who

⁶² Though when approached the right way, where the benefits of change are demonstrable—as was the case for the individual responsibility system in China—it is remarkable how quickly change can be affected.

⁶³ As opposed to the shock therapy approach to macro-stabilization, which does have an important and useful role to play. In general a theory of reform must distinguish between discrete stroke-of-the-pen reforms (like a surgery to remove a tumor) from institutional reforms (like changes in behavioral patterns to lose weight or lower cholesterol).

⁶⁴ The devastation of that upheaval may have played an important role in encouraging the gradualist—and more successful—approach to transition in China.

⁶⁵ See Stiglitz (1999c) and Roland (2000), a forthcoming textbook on transition economics that summarizes the literature on this point and advances a critique of the “cavalry approach” to transition.

⁶⁶ For instance, both Slovenia and Albania had borders with west Europe but the borders were not equally open. Slovenia had the most *open* border of the socialist countries and is now also the richest in per capita terms; Albania was the most closed and is now the poorest post-socialist country.

⁶⁷ A growing body of research at the World Bank questions the efficacy of conditionality. See, for instance, World Bank (1998). The failure of conditionality can be seen as an example of inalienable decision-making power as invoked by Martin Luther during the Protestant Reformation: “For no matter how much they fret and fume, they cannot do more than make people obey them by word or deed; the heart

are already converted, not those who have yet to see the light. The developmental transformation we are (supposedly) working toward has, in many parts of the world, already succeeded in changing people's ways of thinking. The scientific method is embraced, and there is little enthusiasm for abandoning one religion only to adopt a new one of market fundamentalism. As I said in my 1998 ABCDE address (Stiglitz [1999b]), an explicit part of the scientific methodology is the recognition of uncertainty. By failing to convey to the developing countries the range of views, 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. Critical reason and scientific methodology go in quite the opposite direction of fostering 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]

For example, in much of the Third World, there is a suspicion of globalization—a suspicion backed up by experience. They can see how capital market liberalization exposed East Asia to risks greater than it had confronted before; they can also see how capital market liberalization *failed* to bring faster growth, greater prosperity, and especially higher wages or lower unemployment. The danger with arguing for policies with greater certitude than the evidence warrants is that the audience, as Bayesians, will have their belief in one's advice affected more by failures. This is especially true when as Bayesians they have reason to suspect the impartiality of the advice.

Openness and Policy Debate

This part of the scientific attitude is translated into the policy domain with such suggestions as *multiple advocacy* [Haas 1990, p. 210], *double visioning* [see Schön 1983, p. 281], or *competitive pluralism*. There is no more important arena for democratic collective decision making than economics. In many (perhaps most) instances, there are uncertainties associated with the consequences of different policies. Different policies will be associated with different uncertainties—and will impose risks on different groups within society. There was uncertainty about the policies pursued in East Asia, as there would have been with alternative policies. But, once one recognizes the risks and uncertainties, it should be obvious that the policy pursued almost surely did not Pareto dominate alternative policies. To be sure, ex post it imposed enormous costs on workers and small businesses, and much of the criticisms of those policies are based on the evident failures. But there is a more fundamental criticism: ex ante, the policies imposed high risks on these groups. Other proposed policies imposed less risk on these groups and perhaps more risks on others. Such trade-offs ought to be a part of the political process—not determined by outside forces. But in any case, outside advisers should present countries with an analysis of the consequences—

they cannot constrain, though they wear themselves out trying. For the proverb is true, "Thoughts are free." Why then would they constrain people to believe from the heart, when they see that it is

the risks to various groups. It is not some wanton perversity that prevents this scientific attitude from being implemented in a large organization such as a major development agency. There are quite human impulses that push for conformity and rigidity.

To hold theories and principles in solution, awaiting confirmation, goes contrary to the grain. Even today questioning a statement made by a person is often taken by him as a reflection upon his integrity, and is resented. For many millennia opposition to views widely held in a community was intolerable. It called down the wrath of the deities who are in charge of the group.... Baconian idols of the tribe, the cave, the theater, and den have caused men to rush to conclusions, and then to use all their powers to defend from criticism and change the conclusions arrived at. [Dewey 1939, p. 146]

Besides the human proclivity for establishing and defending authority, there is another force that shuts down the spirit of inquiry. Because knowledge and information can be such a powerful force for change—and changes in directions that cannot always be fully anticipated—there is a strong penchant by those in power to suppress open discussion, and to conduct public affairs in secret.⁶⁸

Coalition formation

Much of the change in society is effected through political processes. Whether, or what, changes occur depends in no small measure on which coalitions form. But the dynamics of coalition formation is complex—affected by incentives, ideas, and expectations and beliefs, e.g. about what changes are feasible now and in the future. If it is widely believed that there are only two alternative feasible changes, alpha and beta, then the set of coalitions may be markedly different than if it is believed that there are three possible changes or two reforms, alpha and gamma.

In general, participants in political processes recognize the nature of shifting coalitions and the dynamics of change. The dynamics of coalition formation is important, both in understanding resistance to change, and in thinking through the consequences of alternative sequencing strategies. For instance, elsewhere, I have suggested that often some groups recognize that a given reform would result in a political dynamic that at least posed the risk that they would be worse off in the long run, even if they were better off in the short.⁶⁹ Having recognized the dynamic, these groups often block the reform.

As an example, it may be easier to adopt a competition policy before a non-competitive privatization has occurred than after. For a privatization that results in a monopoly firm has created a vested interest against competition. Behind the veil of ignorance—before any party knows who will become the monopolist—all can agree that it is better to have more competition (e.g. a more competitive

impossible?" Luther (1942 [1522], p. 316), with thanks to David Ellerman.

⁶⁸ There are a broader range of incentives for secrecy and suppressing open discussion, discussed at greater length in Stiglitz (1999d). As economists, we should not only look at the incentives international agencies and governments have for giving particular advice, but also for behaving in particular ways (e.g. suppressing open discussion), and we need to ask whether particular “impartial” arguments put in favor of, say, secrecy, are in actuality self-serving.

⁶⁹ Sometimes, the reason for this was closely related to the reason that we advocated the reform. Reforms that brought certain costs (e.g. of subsidies) out into the open and thereby increased transparency we believed to be desirable; but the beneficiaries of these subsidies recognized that increased transparency would threaten the sustainability of those subsidies.

telecommunications sector). Such a policy maximizes ex ante expected utility. Thus, if our ultimate objective is to create a competitive privatized sector, it may be necessary to establish a competition regime before privatization.

CONCLUDING REMARKS

To return to the refrain at the beginning of this essay: We now recognize that development is possible but far from inevitable. Unfortunately, there is no magic formula that ensures success. Surely, we have learned the following lessons: There is more to development than just the more rapid accumulation of capital, though without that, development is not likely to occur. There is more to development than just the more efficient allocation of resources, though poor countries can ill-afford wasting any resources.

The most successful developing countries in the world have not followed the neo-liberal doctrines encapsulated in the Washington Consensus. To be sure, growth is difficult without macro-stabilization. But Turkey has shown that there can be sustained (though precarious) growth even with rather high levels of inflation, and econometric studies have shown that reducing inflation below a critical threshold yields little if any discernible benefits, though it 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 macro-economic policies. Indeed, it is increasingly being recognized that some of the same policies that the international financial institutions pushed in the name of promoting growth increased, at the same, economic volatility.

More generally, all too often there was a confusion between means and ends: liberalization and privatization were pursued as ends in themselves, rather than as means to more rapid, equitable growth or greater economic stability—and unfortunately, all too often they were pursued in situations where the consequences were counterproductive to those more basic objectives.

Experience within the developed countries should itself have provided a clear warning that there was 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—in spite of there being no trade barriers with the rest of Italy (or the rest of the EU). The economic regime—in terms of liberalization, privatization, and stabilization—is essentially the same as in the North, yet the 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 the reform policies: *they cannot be imposed from the outside*, which is part of the reason for the widespread failure of conditionality. Meaningful democratic processes, involving participation and voice, combined with policies that promote equity can enhance consensus building and a sense of inclusion, and even the creation of the “social capital” that is increasingly being recognized as a key ingredient to long term success. The developmental transformation entails more than the solution of the technical economic

problems leading to increased efficiency and resource mobilization—as important as they are. Thus, in our thinking about development, we have gone beyond projects—recognizing that even good projects will only make a difference if they are scaled up—and beyond policies—from good macro-economics 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 sector. Contrary to the neo-classical model, institutions do matter.⁷⁰

One of the important ways that the new theories differ from the old is not only in stressing that institutions do matter, but so does the distribution of income. Thus, issues of poverty—egalitarian development—assume an importance not only as an end in itself, but also a means of achieving stronger economic performance. The forthcoming World Development Report will highlight the multi-dimensional nature of poverty—the poor not only face a chronic shortage of income, but also a sense of voicelessness and powerlessness, and a high level of economic insecurity. While there is continued discussion about the extent to which policies pursued in recent years have promoted economic growth, there is little debate that at least in some instances, the policies, and the manner in which they have been imposed, have increased economic insecurity and a sense of powerlessness.

As we enter the twenty first century, we thus approach development with a more comprehensive framework,⁷¹ an awareness of broader objectives and more instruments, a greater sensitivity to the complexity of the developmental process, a greater sense of humility in the face of the tasks ahead, but a greater sense of optimism about what the future might bring. We do know that development is possible. The challenge now 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.

⁷⁰ Indeed, the irony is that the ascendancy of the neo-liberal doctrines based on the neo-classical model occurred at a time when economic theory itself 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).

⁷¹ See Wolfensohn (1999) and www.worldbank.org/cdf.

REFERENCES

- Abreu, Dilip, David Pearce and Ennio Stacchetti. 1990. "Toward a Theory of Discounted Repeated Games with Imperfect Monitoring." *Econometrica* 58(5) September: 1041-1063.
- Aghion, Philippe and Patrick Bolton. 1997. "A Theory of Trickle-Down Growth and Development." *Review of Economic Studies* 64(2): 151-172.
- Akerlof, George A. 1984. "The Economics of Caste and of the Rat Race and Other Woeful Tales." In George A. Akerlof *An Economic Theorist's Book of Tales: Essays that Entertain the Consequences of New Assumptions in Economic Theory* (Cambridge: Cambridge University Press), pp. 23-44.
- _____. 1985. "Discriminatory, Status-based Wages among Tradition-oriented, Stochastically Trading Coconut Producers." *Journal of Political Economy* 93(2) April: 265-76.
- Amsden, Alice H. 1989. *South Korea and Late Industrialization* (New York and Oxford: Oxford University Press).
- Arnott, R. and Joseph E. Stiglitz. 1991. "Moral Hazard and Non-Market Institutions: Dysfunctional Crowding Out or Peer Monitoring." *American Economic Review* 81(1) March: 179-190.
- Banerjee, A., D. Mookherjee, K. Munshi, and D. Ray. 1998. "Inequality, Control Rights and Rent Seeking: A Theoretical and Empirical Analysis of Sugar Cooperatives in Maharashtra." MIT manuscript.
- Bardhan, P.K. 1984. *Land, Labor and Rural Poverty: Essays in Development Economics* (London, New York: Oxford University Press and Columbia University Press).
- Basu, Kaushik, Garance Genicot and Joseph E. Stiglitz. 1999. *Household Labor Supply, Unemployment, and Minimum Wage Legislation* Policy Research Working Paper No. 2049 (Washington, DC: World Bank), February.
- Berry, R.A. and W.R. Cline. 1979. *Agrarian Structure and Productivity in Developing Countries* (Baltimore: Johns Hopkins University Press).
- Bigsten, Arne and Karl Ove Moene. 1997. "Growth and Rent Dissipation: the Case of Kenya." *Journal of African Economies* 5(2) June: 177-198.
- Binswanger, H., Klaus Deininger and Gershon Feder. 1995. "Power, Distortions, Revolt and Reform in Agricultural Land Relations." In J. Behrman and T.N.Srinivasan, eds. *Handbook of Development Economics* Vol. IIIB (Amsterdam: Elsevier Science), pp. 2659-2772.
- Birdsall, Nancy, Carol Graham, and Richard H. Sabot, eds. 1998. *Beyond Tradeoffs : Market Reforms and Equitable Growth in Latin America* (Washington, DC: Inter-American Development Bank and Brookings Institution Press).
- Black, B., R. Kraakman, and A. Tarassova. 1999. *Russian Privatization and Corporate Governance: What Went Wrong?* Mimeo.
- Bourguignon, F. and T. Verdier. 2000. "Is Financial Openness Bad for Education ? A Political Economy Perspective on Development." *European Economic Review* 44(4-5), forthcoming.
- Cheung, Steven. 1969. *The Theory of Share Tenancy* (Chicago, IL: University of Chicago Press).

- Darwin, Charles. 1993 (1859). *The Origin of Species by Means of Natural Selection* Modern Library Edition (New York: Random House).
- Dasgupta, Partha and Ismail Serageldin. 2000. *Social Capital: A Multifaceted Perspective* (Washington, DC: The World Bank).
- Deininger, Klaus and Lyn Squire. 1996. "A New Data Set Measuring Income Inequality." *World Bank Economic Review* 10 September: 565-591.
- Dewey, John. 1939. *Freedom and Culture* (New York: Capricorn).
- Finger, J. Michael. 1998. *GATT Experience with Safeguards: Making Economic and Political Sense of the Possibilities that the GATT Allows to Restrict Imports* Policy Research Working Paper No. 2000 (Washington, DC: World Bank), October.
- Furman, Jason and Joseph E. Stiglitz. 1998. "Economic Crises: Evidence and Insights from East Asia." *Brookings Papers on Economic Activity* Issue 2: 1-114.
- Greenwald, Bruce and Joseph E. Stiglitz. 1986. "Externalities in Economies with Imperfect Information and Incomplete Markets." *Quarterly Journal of Economics* 101(2) May: 229-264.
- Haas, E. B. 1990. *When Knowledge is Power: Three Models of Change in International Organizations* (Berkeley: University of California).
- Hirschman, Albert O. 1981. *Essays in Trespassing: Economics to Politics and Beyond* (Cambridge: Cambridge University Press).
- Hoff, Karla. 1994. "The Second Theorem of the Second Best." *Journal of Public Economics* 54(2) June: 223-242.
- Hoff, Karla, Avishay Braverman, and Joseph E. Stiglitz, eds. 1993. *The Economics of Rural Organization: Theory, Practice, and Policy* (New York: Oxford University Press for the World Bank).
- Hoff, Karla and Joseph E. Stiglitz. 1999. "Modern Economic Theory and Development." Draft.
- Hussein, Athar, Nicholas Stern, and Joseph E. Stiglitz. 2000. "Chinese Reforms from a Comparative Perspective." Draft for Mirrlees Festschrift.
- Jensen, M. and W. Meckling. 1996. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." In J. Michael Brennan, ed. *The Theory of Corporate Finance* Vol. 1. (Cheltenham, UK: Elgar), pp. 35-90. Previously published 1976.
- Kaldor, Nicholas. 1956. "Alternative Theories of Distribution." *Review of Economic Studies* 23(2): 83-100.
- Kelly, K. 1994. *Out of Control: The New Biology of Machines, Social Systems, and the Economic World* (Reading, MA: Addison-Wesley).
- Krueger, Anne O. 1974. "The Political Economy of the Rent-Seeking Society." *The American Economic Review* 64(3) June: 291-303.
- Kuznets, Simon. 1955. "Economic Growth and Income Inequality." *The American Economic Review* 45(1): 1-28.
- Lewis, W.A. 1954. "Economic Development with Unlimited Supplies of Labor." *Manchester School of Economic Studies* 22, May, 139-191.

- Lucas, Robert E. and E.C. Prescott. 1974. "Equilibrium Search and Unemployment." *Journal of Economic Theory* 7(2): 188-209.
- Luther, Martin. 1942 (1522). "Concerning Secular Authority." In F.W. Coker, ed. *Readings in Political Philosophy* (New York: Macmillan), pp. 306-329.
- Malueg, David and Marius Schwartz. 1991. "Preemptive Investment, Toehold Entry, and the Mimicking Principle." *Rand Journal of Economics* 22(1) Spring: 1-13.
- Marshall, Alfred. 1897. "The Old Generation of Economists and the New." *Quarterly Journal of Economics* 11(2) January: 115-135.
- Merton, R. K. 1973. "The Matthew Effect in Science." In *The Sociology of Science: Theoretical and Empirical Investigations* (Chicago: University of Chicago Press).
- Morduch, Jonathan. 1999. "The Microfinance Promise." *Journal of Economic Literature* 37(4) December: 1569-1614.
- Myrdal, G. 1944. *An American Dilemma: The Negro Problem and American Democracy* 2 Vols. (New York: Harper and Row).
- _____. 1957. *Economic Theory and Underdeveloped Regions* (New York: Harper Torchbooks).
- _____. 1968. *Asian Drama: An Inquiry into the Poverty of Nations* 3 Vols. (New York: Pantheon Books).
- North, Douglass C. 1990. *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press).
- Osborne, David and Ted Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* (Reading, MA: Addison-Wesley).
- Peyton, Young. 1996. "The Economics of Convention." *Journal of Economic Perspectives* 10(2) Spring: 105-122.
- Piketty, Thomas. 1997. "The Dynamics of the Wealth Distribution and the Interest Rate with Credit Rationing." *Review of Economic Studies* 64: 173-189.
- Platteau, Jean-Philippe. 1994. "Behind the Market Stage Where Real Societies Exist—Part II: The Role of Moral Norms." *Journal of Development Studies* 30(4) July: 753-817.
- Putnam, R. 1993. *Making Democracy Work* (Princeton: Princeton University Press).
- Roland, Gilbert. 2000. *Transition and Economics: Politics, Markets and Firms* (Cambridge, MA: MIT Press), forthcoming.
- Rosenstein-Rodan, Paul. 1943. "Problems of Industrialization of Eastern and South-Eastern Europe." *Economic Journal* 53(June-September): 202-211.
- Rosenzweig, Mark R. 1988. "Risk, Implicit Contracts and the Family in Rural Areas of Low-income Countries." *Economic Journal* 98(393) December: 1148-1170.
- Sappington, D. and Joseph E. Stiglitz. 1987. "Privatization, Information and Incentives." *Journal of Policy Analysis and Management* 6(4): 567-582.

- Schön, Donald A. 1983. *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books).
- Shleifer, A. and R. Vishny. 1998. *The Grabbing Hand: Government Pathologies and Their Cures* (Cambridge: Harvard University Press).
- Simon, Herbert A. 1991. "Organizations and Markets." *Journal of Economic Perspectives* 5(2) Spring: 25-44.
- Stern, Nicholas and Joseph E. Stiglitz. 1997. "A Framework for a Development Strategy in a Market Economy." In E. Malinvaud and A.K. Sen, eds. *Development Strategy and the Management of the Market Economy* (Oxford: Clarendon Press), pp. 253-295.
- Stiglitz, Joseph E. 1984. "Price Rigidities and Market Structure." *American Economic Review* 74(2) May: 350-356.
- _____ (et al.). 1989. *The Economic Role of the State* Arnold Heertje, ed. (Oxford, UK: Basil Blackwell in association with Bank Insinger de Beaufort NV).
- _____. 1989. "Monopolistic Competition and the Capital Market." In G. Feiwel, ed. *The Economics of Imperfect Competition and Employment - Joan Robinson and Beyond* (New York: New York University Press), pp. 485-507.
- _____. 1991. "Development Strategies: The Roles of the State and the Private Sector." In *Proceedings of the World Bank's Annual Conference on Development Economics 1990* (Washington, DC: World Bank), pp. 430-35.
- _____. 1992a. "Contract Theory and Macroeconomic Fluctuations." In L. Werin and H. Wijkander, eds. *Contract Economics* (Oxford, UK: Basil Blackwell), pp. 292-322.
- _____. 1992b. "The Design of Financial Systems for the Newly Emerging Democracies of Eastern Europe." In C. Clague and G.C. Rausser, eds. *The Emergence of Market Economies in Eastern Europe* (Cambridge: Basil Blackwell), pp. 161-184.
- _____. 1993. "Some Theoretical Aspects of the Privatization: Applications to Eastern Europe." In M. Baldassarri, L. Paganetto and E. S. Phelps, eds. *Privatization Processes in Eastern Europe* (New York: St. Martin's Press), pp. 179-204.
- _____. 1995. "The Theory of International Public Goods and the Architecture of International Organizations." Background Paper No. 7, Third Meeting, High Level Group on Development Strategy and Management of the Market Economy, UNU/WIDER, Helsinki, Finland, July 8-10.
- _____. 1996. "Some Lessons from the East Asian Miracle." *World Bank Research Observer* 11(2) August: 151-177.
- _____. 1997. "The Role of Government in Economic Development." In Michael Bruno and Boris Pleskovic, eds. *Annual World Bank Conference on Development Economics 1996* (Washington, DC: World Bank), pp. 11-23.
- _____. 1998. *More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus* World Institute for Development Economics Research (WIDER) Annual Lectures 2 (Helsinki, Finland: WIDER), January.
- _____. 1999a. "Quis Custodiet Ipsos Custodes? (Who is to Guard the Guards Themselves?) Corporate Governance Failures in the Transition." *Challenge* 42(6) November/December: 26-67.

- _____. 1999b. "Knowledge for Development: Economic Science, Economic Policy, and Economic Advice." In Boris Pleskovic and Joseph E. Stiglitz, eds. *Annual World Bank Conference on Development Economics 1998* (Washington, DC: World Bank), pp. 9-58.
- _____. 1999c. "Whither Reform? Ten Years of the Transition." *Transition Economics* 3(12) June 18.
- _____. 1999d. "On Liberty, the Right to Know and Public Discourse: The Role of Transparency in Public Life." Paper presented as 1999 Oxford Amnesty Lecture, Oxford, UK, January 27.
- _____. 1999e. "Knowledge as a Global Public Good." In Inge Kaul, Isabelle Grunberg, Marc A. Stern, eds. *Global Public Goods: International Cooperation in the 21st Century* (New York: Published for the United Nations Development Programme by Oxford University Press), Chapter 14.
- Stiglitz, Joseph E. and Lyn Squire. 1998. "International Development: Is It Possible?" *Foreign Policy* 110 Spring: 138-151.
- Wolfensohn, James D. 1997. "The Challenge of Inclusion." Annual Meetings Address, Hong Kong SAR, China, September 23.
- _____. 1999. "A Proposal for a Comprehensive Development Framework." Discussion Draft presented to the Board, Management, and Staff of the World Bank Group, January 21.
- World Bank. 1993. *The East Asian Miracle: Economic Growth and Public Policy* (New York: Oxford University Press for the World Bank).
- _____. 1998. *Assessing Aid: What Works, What Doesn't, and Why* (Washington, DC: Oxford University Press).
- _____. 1999. *World Development Report: Knowledge for Development 1998/99* (New York: Oxford University Press for the World Bank).