

# **DEVELOPMENT POLICIES IN A WORLD OF GLOBALIZATION**

**JOSEPH E. STIGLITZ**

**COLUMBIA UNIVERSITY<sup>1</sup>**

Throughout Latin America today, the question is being debated, has globalization failed us, or has reformed failed? What is clear is that there is disappointment in the policies that have been pushed for the past two decades, the policies focusing on liberalization, privatization, and stabilization which collectively have come to be called the Washington consensus policies. The data for the 90s, the first true test of these policies, when the countries were freed from the shackles of overhanging debt, helps explain the sense of disillusionment. Growth during that decade was just over half of what it was in the pre-reform and pre-crisis decades of the 50's, 60's, and '70s. Even in those countries which have seen significant growth, a disproportionate share of the gains have gone to the better off, the upper 30%, or even the upper 10%, with many of the poor actually becoming worse off. Little if any progress has been made in reducing inequality, already the highest of any region of the world, and the percentages, let alone numbers, in poverty actually increased. Unemployment, already high, has increased by three percentage points. And the performance in the last half decade has been, if anything, even more dismal; with income per capita stagnating or declining, it is beginning to be known as the lost half-decade.<sup>2</sup>

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<sup>2</sup> See ECLAC [2002].

In my Prebisch lecture, delivered last month at Santiago<sup>3</sup>, I argued that there was a clear connection between these failures and the policies that were pursued. The outcomes should not have come as a surprise. They reflect both what was on the agenda and what was left off the agenda. The seeming success of the first two thirds of the decade was but a mirage, partly a surge in growth caused by an unsustainable inflow of foreign capital, partly, as so often happens after a period of stagnation, a “catch-up” from the lost decade. The growth was not sustained. A convincing argument can be made that it was not sustainable.

A closer look at the one often repeated success case, Chile, shows that in the years of its phenomenal performance, with growth of 7%, it did not simply succumb to following the dictates of the Washington consensus willy-nilly. Like the success cases of East Asia, it was selective, adding and subtracting to the standard recipes in ways that allowed it to shape globalization for its purposes. For instance, it did not fully liberalize its capital markets, retaining what amounted to a tax on the inflow of short-term capital, a tax which prevented surges into the country, which in turned dampened the surges out of the country in the aftermath of the East Asia crisis. It privatized, but selectively, even with IMF pressures, including accounting frameworks that tilt the deck unfairly and strongly against government enterprises; today, something like 20% of exports still come from one government owned enterprise, CODELCO. The social democratic governments emphasized education and health expenditures, especially for the poor; in this world, one often has to run to stand still: though there was little progress in reducing inequality, at least it did not increase as it did elsewhere. Perhaps most importantly, there was put into place a virtuous circle: the growth allowed the government to provide these vital social expenditures without deficit financing, so that today, Chile’s debt-GDP ratio stands at around 15%, making

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<sup>3</sup> See Stiglitz [2002]. See that paper for sources of the data cited in the previous discussion.

that country less subject to the whims of the international markets which have had such devastating effects on other Latin American countries.<sup>4</sup>

### **Globalization: Opportunities and Challenges**

Increasingly, the basic tenets of the Washington consensus have come to be challenged.

- Stabilization policies do not ensure economic growth. Countries that have followed the recipes of the IMF, from Bolivia to Mongolia, are asking: we have felt the pain, we have done everything you have told us to do: when do we start to reap the benefits? Meanwhile countries that have taken an independent course, like China, or that have been selective, like Chile, have fared far better.
- Stabilization policies—defined as fiscal stringency and “sound” monetary policy—do not even ensure stability, as sudden changes in investor sentiment can, with open capital markets, lead to massive outflows, leaving in their wake economic havoc, even in countries with moderately strong institutions, but especially in those countries in which financial sector regulation is weak and safety nets are absent. The repeated financial crises of the past six years have provided ample evidence.
- Capital market liberalization—sequenced wrongly, done prematurely—does not lead to faster economic growth, but does expose countries to high levels of risk: it is risk without reward.

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<sup>4</sup> Most of that debt can be traced back to the cost of recapitalizing the banking system after the financial crisis in the Pinochet period. For excellent accounts on the Chilean failed liberalization and crisis see Diaz-Alejandro [1985], Edwards and Edwards [1991] and de la Cuadra and Valdés [1992]

- The benefits of trade liberalization are more questionable than the free trade mantra would suggest, particularly when the free trade agenda is the kind of asymmetric one which has characterized the world in recent years, with developed countries insisting that the developing countries take down their trade barriers to the goods that they produce, but developed countries maintaining their barriers to the goods of the South. The United States, under the Bush Administration, had led the way in this hypocrisy: with agriculture subsidies reaching new heights, and with its newly imposed tariffs on steel. If the United States, the richest country in the world, a country where, even in a recession, less than 6% of its workers face unemployment, and where those who do lose their jobs are protected by a safety net, says that it must resort to “safeguards,” to protectionist measures, what must be true in the developing countries, where there are no safety nets, where unemployment is already high, where those who are thrown out of a job as a result of liberalization and their families may face truly bleak prospects? To make matters worse, in the face of austerity policies, the promised new jobs are not created: how could they be with interest rates as high as they often are with IMF policies which worry more about inflation, and what it would do to the value of investor bonds, than they do about those thrown out of work? As a result, instead of workers moving from low productivity jobs to high productivity jobs, the “promise” of liberalization, workers move from low productivity jobs to unemployment, or poorly paid jobs in the informal sector, which does not enhance growth but does increase poverty. As the United States and other developed countries resort increasingly to non-tariff protectionist measures, while they continue to espouse the rhetoric of free trade and globalization, a natural question is beginning to be repeatedly asked: Why are there two standards for what is a “fair” or “unfair” trade practice, one for goods

produced by manufacturers within one's country, the other for producers outside?

Internally, the United States has clearly defined standards for "dumping," for predatory behavior, under the anti-trust laws. Why shouldn't they be applied more generally?

- The last round of trade negotiations, the Uruguay round, amply demonstrated the inequalities in the global regime. The intellectual property regime was dictated by commercial interests in the United States and elsewhere, paying little attention either to the concerns of the developing countries or of the research community throughout the world. It was unbalanced. Some of the problems, such as those arising from access to drugs, have already come to the fore. Others will only emerge more gradually. Similarly, in the areas of services: while the extension of trade agreements to services is often lauded as one of the great achievements, it is noteworthy that it was financial services, of concern to the United States, that was on the agenda, not construction or maritime services, which would have been of greater interest to the developing countries.
- Privatization—done wrongly, and it is very hard to do well—may lead to higher prices of utilities, not lower, thereby undermining further a country's competitiveness, and, through the high levels of corruption which often accompany it, can further corrupt political processes and increase inequality, as Russia so amply demonstrated. But the difficulties that Britain experienced in both rail and electricity show that even countries with highly sophisticated institutions may find it difficult to "get it right," and the problems of electricity deregulation in the United States not only demonstrate that without adequate government regulation, massive manipulation by private firms cannot only disrupt the economy and destroy public finances, but that it is extremely difficult to get the regulatory framework "right."

- Ignoring the social and political dimensions—as the IMF and the Washington consensus has done—is not only bad social policy, it is also bad economic policy. It will take years for Indonesia to recover from the riots to which IMF policies contributed in that country, just as one can argue that much of Latin America has suffered from urban violence and guerrilla activity that, in part, are a result of the mistaken policies that were pushed on those countries. In those countries with huge inequalities in land ownership, where sharecropping is a common form of tenancy, the 50% of the crop that is turned over to the landlord acts as a heavy tax on the peasants, with enervating effects on growth.

### *More on the Globalization of Ideas and Global Hypocrisy*

One powerful aspect of globalization is that those in developing countries can see the disparity between what is said and done in the North, and especially in the United States, and the policies which are recommended for, or imposed upon, them. I have already mentioned the hypocrisy in trade. I have touched briefly upon the problems of privatization and regulation in the North, which is leading to a rethinking of those issues there, including initiatives for renationalization. The widespread discussions of accounting, both in the public sector and the private, has drawn attention not only to these problems, but also to the inadequacies of the accounting frameworks imposed on developing countries by the IMF and the differences between those and the ones conventionally used in Europe and elsewhere.

In the United States, in the recession of 2001, both Democrats and Republicans agreed on the need for a fiscal stimulus to restore the economy; yet throughout the developing world, the IMF forces contractionary fiscal policies on countries facing downturns—just the opposite of the mission for which they were created.

While the IMF has pushed privatization of social security, that initiative even for partial privatization in the United States has (except for Wall Street) received a lukewarm reception. The efficiency of America's public system, the fact that it has virtually eliminated poverty about the elderly, combined with studies which show that, in the case of Britain, transactions costs under privatization have reduced benefits by as much as 40% and the recognition of the risks for old age security posed by stock market volatility have dampened enthusiasm.<sup>5</sup> (Of course, what from a societal point of view is called transactions costs to others looks like a good source of income, and, not surprisingly, those who would gain from these costs remain ardent advocates.)

### *Learning from others mistakes*

Globalization has had another advantage: those all over the world have the opportunity to learn not only from the mistakes of others, but to look at the analytic studies which attempt to interpret those experiences. That the transition from Communism to a market economy in those countries which followed the Washington consensus policies was a disappointment, to say the least, is clear.<sup>6</sup> They can follow the lively debate over the failure. They can read too the raging debate about the consequences of inflation. While there is a consensus that high levels of inflation have significantly adverse effects on growth, empirical and theoretical research (including that by George Akerlof, who won the Nobel prize in economics with me last year) suggests that not only may the benefits of pushing inflation lower and lower be limited, but there may actually be adverse effects from pushing it too low.<sup>7</sup> This was not the problem facing Latin America a quarter century ago. But one has to be careful about the straitjackets into which the past puts one: Today, Europe is facing a major problem. As it faces a major slowdown, it is unable to respond effectively, because of a monetary authority whose sole objective is inflation

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<sup>5</sup> Murthi, et al [1999] calculates that in Britain, these transactions costs will result in benefits being 40% lower than they would otherwise have been (for the privatized part of their social security system.)

<sup>6</sup> Stiglitz [2000, 2001].

<sup>7</sup> See Akerlof et al [1996]

(unlike that of the United States, which also is concerned with unemployment and growth) and because of a stability pact which constrains the size of deficit financing. France, Germany, Italy, and Portugal all recognize the potential disastrous consequences, and are looking for ways of reinterpreting these commitments.

### ***Challenges posed by globalization***

Focusing more narrowly on the economy, globalization has three distinct advantages: the demand for a country's products is no longer constrained to its own markets; a country's investment is no longer constrained to what it can save itself; and country's producers can have access (at a price) to the most advanced technology. But corresponding to these opportunities are some important challenges: the developed countries have learned how to use a variety of non-tariff barriers to keep out the goods of the developing world; while foreign direct investment (FDI) does bring with it not only access to capital, but access to markets and technology, this is not so for short term financial capital, which exposes a country to enormous instability. China, which has been the most successful in getting foreign direct investment, has shown that the assertion by advocates of capital market liberalization that one cannot get FDI without at the same time opening up oneself to short term capital flows is simply wrong. Countries have been misled too into thinking that foreign purchases of existing capital goods (e.g. associated with privatizations) as foreign direct investment. In some cases it may be, but the contrast between Greenfield investments, where a foreign firm creates new jobs, and these other forms of foreign investment should be clear. In many cases, the foreigners may make the purchase simply for purposes of asset stripping, not wealth creation; and in the long run the country will be poorer, not richer.

Globalization poses other challenges: while there is not a free movement of labor, highly trained labor is more mobile, forcing a dilemma on developing countries: either they pay internationally

competitive wages, which they can ill afford, and which leads to massive inequality, or they lose these skilled workers. In some countries in Eastern Europe, the outflow of skilled labor has been massive, leaving behind those who are too old to move and those without skills, contributing to the downward spiral in those countries.

Similarly, the asymmetries in mobility between labor and capital has forced reductions in the taxes imposed on capital, leaving more of the burden on labor, adding still another force to those leading to increasing inequality around the world.

In this paper, I have time to address only two of the challenges posed by globalization, those associated with borrowing from abroad, and in particular, with sovereign bankruptcy; and those associated with industrial policies.

### **Sovereign Bankruptcy**

The access to capital when things are going well has proved irresistible to too many countries. There is a compelling economic argument for borrowing: the rate of return on these investments exceeds the cost of capital. And there is a corresponding compelling political argument: the gains from borrowing will be felt now, the problems of repayment will occur under someone else's watch, as the case of Argentina forcefully showed

The problem is that banks and lenders more broadly are, to use an American expression, fair weather friends. While they are willing to lend when you don't need the money, they want their money back just when you need it most. That is one of the reasons that throughout the continent,

countries have pursued countercyclical policies.<sup>8</sup> It is not that the economists have not taken their basic course in macro-economics, where they should have learned about counter cyclical policies. Rather, this lending acts almost as an automatic destabilizer. (As an economy goes into a downturn, banks become weaker; as confidence in the country's banks weakens, people look for safer havens abroad; as they pull their money out of the country, and as defaults increase, strict enforcement of, let alone tightening of, capital adequacy standards and reserve requirements leads to a contraction of lending, further contributing to the economic downturn.)

Even country's with moderate debt to GDP ratios may not be able to service that debt, if the international capital markets suddenly decide that the risk premium they demand for emerging market debt in general, or that county in particular, must be increased dramatically. It is easy to show that there may be multiple equilibria. If the interest rate were reasonable, the country would have no problem servicing the debt, the default probability would be low, and accordingly, the interest rate should remain moderate. But if the interest rate soars, the country will have a problem servicing the debt, the default probability will be high, and accordingly, the high interest rate is perfectly rational.<sup>9</sup>

These problems are exacerbated by the design of debt contracts, which violates basic principles of efficient markets. The rich countries are more able to bear the risks associated with interest and exchange rate volatility, and the debt contracts should be designed accordingly, or would be in efficient capital markets. But this is not so in practice. With poor countries left to bear this risk, when matters get bad (or are simply *perceived* to be bad) a vicious cycle begins: fear of default leads to capital flight, leading to lower exchange rates and interest rates, which increases the debt burden to the point where it is not serviceable.

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<sup>8</sup> Easterly et al [2001] and the references cited there

<sup>9</sup> See Greenwald and Stiglitz [2003]

These problems are exacerbated by the fact that the world has no good way of handling sovereign defaults. There is no Chapter 11, no Chapter 9, speedy and equitable ways of resolving defaults which pay attention not only to the interests of creditors but also of other stakeholders, such as pensioners and those dependent on the government for vital services like health and education. To be sure, we have made some progress in the past hundred years.

A hundred years ago, in 1902, Dr. Luis Maria Drago, then foreign minister of Argentina, announced the Drago Doctrine, in response to the bombing of the parts of Venezuela by European powers with the express consent of the United States, which had followed upon Venezuela's default on its international debt. He stated

...what the Argentine Republic supports is the principle, already accepted, that there can be neither European territorial expansion in America nor oppression of the peoples of this continent because of an unfortunate financial situation that could bring one of them to defer the payment of its obligations; that the public debt cannot bring about a military intervention or give merit to the material occupation of the soil of the American nations by a European power.

He went on to say, what is as true today as it was a hundred years ago,

...The creditor knows that it is contracting with a sovereign entity and it is an inherent condition of every sovereignty that no executive proceedings can be initiated or carried out against it, since the manner of collection would compromise its very existence, making the independence and the action of the respective government disappear. The acknowledgment of the debt, the settlement of its amount, can and must be made by the Nation without diminishing its essential rights as a sovereign entity, but the compulsive and immediate collection at any given time, by means of force, would not bring anything other than the ruin of the weaker nations and the absorption of their governments with all their inherent faculties, by the strong ones of the Earth.

A hundred years ago, Argentine rose to the defense of its fellow Latin American state. As Drago stated

...we are not moved by any selfish sentiments, nor are we seeking profit for ourselves, as we express our wish that the public debt of the states would not serve as a reason for military aggression; it is because of that sentiment of continental fraternity and by the strength that always emanates from the moral support of a whole nation....a nation that has faith in its destiny and in that of this whole continent.

This was not the first time nor the first place that the military and financial powers of the world—the G-7 of those days—had used military means in an attempt to enforce debt—in the middle of the century, they occupied Mexico. Their occupation of Egypt was to last for decades. Nor was it to be the last.

Views of default have, in some ways, changed considerably in the course of a century. At the personal level, we no longer have debtor prisons. All the major countries of the world have passed bankruptcy laws that provide for the restructuring and discharge of debt. In the United States, our bankruptcy law also provides for the bankruptcy of local governments and other public authorities (Chapter 9).

So too have views about how to respond to the inability or unwillingness of a sovereign to repay its debt. The Drago Doctrine is now universally accepted. But at the international level, there are no bankruptcy proceedings. And there is a concern that economic pressure brought by the large and powerful nations of the world, sometimes through the international economic institutions, can be every bit as oppressive as that of the military measures of the nineteenth century, and possibly even more destructive of life and political freedom. To many within the developing world, the picture of Suharto signing the so-called Letter of Intent appeared no less a signing over that country's economic sovereignty as those that followed upon military intervention. (Indeed, in the international arena the distinction between private and public debts is sometimes obscured, as pressure is exerted for the nationalization of private liabilities. Such nationalizations occurred both in the Latin American crisis of the early 80s and in the more recent East Asia crisis.)

There are many that believe that the travails that Argentina has been forced to go through are, in part at least deliberate: debtors are being put on notice that there will be serious consequences to default. Policies could (and I would argue should) have been designed to reactivate the economy,

It was moral outrage that stopped the military interventions, moral outrage that stopped the debtors' prison. Perhaps it will be our moral sensibilities that will bring on a new era in dealing with international debts. The good news is that there are glimmerings of a recognition that something is amiss in the current arrangements. In the East Asian crisis (as they had after the last Latin American crisis), critics of the IMF bail-outs argued that there needed to be greater reliance on standstills and bankruptcies, and that there needed to be improvements in bankruptcy procedures, a super-chapter 11 as I called it. But the long debate about bankruptcy reform in the United States should have made clear that there is not a single "best" bankruptcy code. The fact that every government among the advanced industrial countries has taken a statutory approach (rather than relying on market mechanisms, modified by, for instance, mandatory collective action clauses) should have made it clear that the position of the U.S. Treasury (which seemed to claim that *all* that was required was collective action clauses) makes little sense, reinforcing the results of theoretical and empirical research on bankruptcy and bargaining.

Thus, it *is* good news that the IMF, after the failure of six bail-outs in as many years, finally recognized that an alternative approach was needed, and that some sovereign debt restructuring mechanism was desirable. They are right too that one cannot rely on market-based approaches (a fact which they failed to recognize in East Asia), that some version of a statutory approach was desirable. It should have been obvious that in any bankruptcy procedure which is viewed as fair, a major creditor (such as the IMF) cannot simultaneously play the role as the bankruptcy judge,

nor even have a central role in the process, other than as one of the claimants. To many, the IMF's attempt to give itself such a central role says much about its political insensitivities.

But these reforms, if they occur, will be a long time in the making. In retrospect, it is clear that the discussions about reforming the global financial architecture were more about calming frayed nerves than about anything else: one suspects that the hope on the part of the U.S. Treasury was that the impetus for reform would pass before issues related to the off-shore banking centers or hedge funds, or even deeper issues like bankruptcy and capital market liberalization, would be effectively addressed

Thus, countries in the developing world today need to face three harsh realities: first, capital markets are highly volatile; countries can be punished not only for mistakes that they have made, but for events for which they have no responsibility; countries may be punished not just for mistakes that they have made, but for mistakes that the capital market might think that they might make. Subjecting oneself to the so-called discipline of international capital markets does not ensure growth or efficiency; it does risk countries being forced to give up important elements of their sovereignty. This is especially true because short term capital focuses, quite naturally, on the short term.

Secondly, when there is a crisis, the costs are enormous, and even when a crisis is averted, the costs of dependence on foreign capital are great, as they, for instance, force contractionary policies exactly when expansionary policies are necessary. These costs more than offset the benefits that accrue earlier, when the borrowing was undertaken.

Thirdly, well functioning capital markets would have rich countries bear the risks of exchange rate devaluations and interest rate increases; a well functioning global financial architecture would have arrangements which limited the costs of bankruptcy, whether of sovereigns or firms

engaged in cross border borrowing. But we have neither well-functioning international capital markets nor a well functioning global financial architecture (at least in this—and other-- crucial respects).

Yes, the costs of not borrowing are high—in terms of education or health projects not undertaken, roads not built—but the costs of borrowing are even higher. Countries facing these realities must trim expenditures, and increase taxes.

## **INDUSTRIAL POLICIES**

Globalization has confronted countries with the challenge of how to compete in the global market place. Today, we recognize that what separates developed from less developed countries is not just a disparity in capital and other resources, but also a gap in knowledge. Countries are asking, what can they do to promote technology, to enhance their competitiveness, to increase their exports and their ability to compete with foreign imports.

Of late, industrial policies have obtained a bad reputation. As my predecessor at the Council of Economic Advisers put it, it makes no difference whether the economy produces potato chips or computer chips—the economy should produce whatever maximizes GDP, and the market is in the best place to make those decisions.

### ***Economic Theory and industrial policy***

The argument against industrial policies is based on a naïve reading of economic theory and a misreading of economic history. Standard economic theory trumpets the efficiency of competitive markets, but Adam Smith's invisible hand theorem, asserting market efficiency, is based on extremely stringent conditions. It assumed, for instance, that information was perfect, that there were no information asymmetries, and that markets were complete—capital markets

were perfect and one could obtain insurance against all risks. These assumptions clearly do not apply even to the best functioning market economies. Of course, economists realized that information was imperfect and markets were incomplete, but the hope was that if information was not too bad, or information was not too imperfect, then the economy would be well described by the perfect information models. My research, and that of others, showed that that hope was not well founded: even small amounts of information imperfections could have marked effects. Work with Bruce Greenwald<sup>10</sup> showed that perhaps the reason that the invisible hand was invisible was that it was simply not there, or if it was there, it was falsified. In principle, there was a role for government: government could, in principle, enhance the efficiency of markets.

These arguments are even more compelling when it comes to innovation. Knowledge can be thought of as a particular form of *information*, and as such, the results of the economics of information apply to the realm of the economics of innovation. The standard theories *assumed* a fixed technology, but of course at the center of growth and development is the change in technology, the development and adoption of new modes of production and new products. The standard theories about the efficiency of markets thus have *nothing* to say about this arena. On the contrary, there are strong reasons to believe that in general markets do *not* by themselves produce efficient outcomes. Knowledge has the attributes of a public good (that is, there are high costs to exclusion and low or zero costs to an additional individuals enjoying the benefits of the good), and innovation generates enormous externalities. Moreover, there are large uncertainties associated with innovation, so that the consequences of the absence of insurance markets are likely to be particularly severe. Long ago, Schumpeter emphasized the importance of capital market imperfections, since investments in research are typically not collateralizable. Thus, modern economic theory has created a strong presumption for a role for government.

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<sup>10</sup> Greenwald and Stiglitz [1986]

### ***Economic history and industrial policy***

This brings me then to the question of economic history. The two cases of successful development that I have studied most closely, that of the United States and East Asia, provide compelling evidence for the importance of industrial policies. The telecommunications industry was, in a sense, created by the government. The first telegraph line was built in 1842 by the Federal Government between Baltimore and Washington, and the modern Internet, which has done so much to create the New Economy, was itself created by the U.S. government. The major *industry* of the nineteenth century was, of course, agriculture, and the U.S. government, through its research and extensions services, transformed this industry, leading to the productivity increases that were the necessary precursor to the modern world. A central ingredient in the successful policies of the East Asian countries was a deliberate attempt to close the “knowledge gap.” These countries realized that what separated them from the more developed countries was not just a gap in capital, but a gap in knowledge, and they worked hard, and successfully, to bring modern technology to their societies. Today, in many areas, they stand at the forefront.

### ***Making Industrial policy work better: new instruments and approaches***

Critics of industrial policy cite the failures and the abuses, and there have been failures and abuses. Sometimes, political pressures have brought huge subsidies to favored industries. Government, it is claimed, does not have a credible record at “directing” the economy. Japan’s pressuring Honda not to produce cars—saying there was already enough car manufacturers—is repeatedly cited as a (fortunately for Japan unsuccessful) attempt at misguided government intervention. But the successes noted earlier suggest that societal benefits far outweigh the costs. Indeed, with optimal risk taking, there should be failures: if there were none, clearly the government would have been taking a too conservative strategy. Research at the Council of

Economic Advisers while I was Chair showed convincingly that in fact government support for research had an enormously high return, far higher than that for typical private investments.<sup>11</sup>

### *Principles*

Still, we have learned from the mistakes, and I believe we are in a position to make an even more effective industrial policy. *Modern* industrial policy focuses on attempting to identify areas in which market failures are most likely to be most successful. For instance, it looks for areas in which *coordination* failures may loom large, or where there are large spill-overs, or significant problems of appropriability. The research on the internet illustrates all of these problems. It would have been difficult for a private firm to appropriate the full benefits of the internet; the value of the internet has risen with the usage, but if a potential internet developer were to have waited for the internet application companies to demand the creation of the internet, the internet would never have been developed. The internet has had enormous spillovers to all firms, and not just to those directed engaged in marketing over the internet.

The economics of information has also helped us understand why capital markets are often imperfect, and why therefore government may need to play an important role in this arena. In the United States, in one recent year, 25% of all finance was provided either by the government, with government guarantees, or through government sponsored enterprises. The government helped create the national mortgage market, which has lowered the cost of capital for homeowners. Government loans to small businesses (through the Small Business Administration) have, in recent years, had a remarkable record. Every large business begins, of course, as a small business. Among the major ones that today play a major role in our economy that began with an SBA is Federal Express.

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<sup>11</sup> Council of Economic Advisers, Executive Office of the President, 1995

In some sense, the government cannot avoid addressing issues of industrial policy. The government plays a central role in our economy. In addition to the large role just described in finance, it is pivotal in research and education as well. Infrastructure is another area where government is dominant. Decisions it makes in these areas—which areas of research to support, how to design the curriculum, where to build roads and airports—help shape the economy and its competitiveness. It is better that these decisions be made with a view of where the economy is going. Similarly, tax policies help shape the economy. Special tax treatment of real estate and energy is a form of industrial policy—it directs resources into these areas. But is this where the government should be directing resources? Again, thinking about these issues from a more global perspective can enhance the economy’s performance.

Modern industrial policy is not involved in micro-management of the economy. Critics of industrial policy say that government is not in the best position to “pick winners.” And it should not do so. But this misses the point, in two respects. The government intervenes in the market not because it does not have faith in the markets’ ability to pick winners (though the misallocation of resources in the American technology bubble might raise questions), but rather because it recognizes that there are market failures, of the kind noted earlier. The inventors of the laser, the internet, the transistor appropriated but a small fraction of the societal benefits associated with their innovation. Thus, today, industrial policy is based broad gauged interventions, attempting in particular, to address these market failures.

It begins by focusing on education and research. Countries like Costa Rica have recognized that if they are to be successful in the modern era, everyone must have mastery of computer skills and education. It identifies other areas where government naturally plays a large role, such as infrastructure, and asks how should they be shaped in ways that enhance the development of the economy.

By the same token, modern industrial policy is often “broad gauged” and, so far as possible, attempts to employ market like mechanisms in implementation. Thus, it may make

more sense for the government to encourage “energy efficient technologies,” allowing competition among alternative approaches, then ex ante selecting a particular technology to push. In this competition, it may require those seeking support to contribute substantial sums of their own, so that their own money is at risk as well as that of the government. Similarly, in loans (such as those for small and medium sized enterprises) the government may use commercial banks to help screen applicants, but require the originating banks to risk some of their own capital. In science and technology projects, peer review should be employed. (Some of America’s experiences with these improvements carry with them a warning: as rents get eliminated, so too did political support for these programs wane!).

#### *Labor markets and education*

A key part of this broad gauged industrial policy will be working to enhance the economy’s flexibility, e.g. through active labor market policies, life-long education, and education aimed at learning to learn. There will need to be changes in the curriculum, and closer links between universities and industry. In the nineteenth century, public education was directed at developing the trained and disciplined labor force needed for industrialization. In the twenty first century, education needs to be directed at developing entrepreneurship and the ability to cope with a fast changing world.

Some countries will face a challenge in keeping skilled and well educated populations at home. This is especially true of the economies in transition, which have seen an enormous outflow. Unless this outflow is stemmed, it is hard to see how a new modern economy can be reconstructed on the ashes of the remains of the old Communist one.

#### *Negative industrial policies*

Modern industrial policy may entail “negative” policies as much as positive, recognizing that speculative real estate may contribute less to employment and growth than other sectors, and may expose the economy to greater instability. Thus, it may make sense to restrict

the extent of bank lending for speculative real estate. While such restrictions are not normally viewed as part of industrial policy, in a very real sense they are.

### ***Small businesses and venture capital***

While there are some instances of small economies developing large businesses (Nokia), it is more likely that small businesses will continue to predominate, and industrial policies will need to be particularly attentive to their needs, through the establishment of industrial and research parks and incubators. There may need, too, to be specialized financial institutions, venture capital firms, that go beyond traditional approaches for providing credit to small and medium size enterprises.

### ***Vision***

While broad gauged industrial policies reduce the necessity of the government “picking winners,” there is no way that government can avoid forming a “vision” of where the economy is going. Indeed, some might argue that forming that vision—in consultation with those in the private sector—was one of the important roles performed by the governments of East Asia. They were not engaged in the detailed planning associated with government *control*, but they were performing a perhaps more important *catalytic* role. Within Latin America, both the public and the private sector will need to ask, what will be the comparative advantages in the future, how can they, how should they, alter those comparative advantages through investments? I cannot even begin to provide an answer to this central question, but I want to touch upon some aspects that relate to the questions of globalization.

Modern economies are increasingly service sector and knowledge economies. The transformation from agriculture to industry was a major transformation, and it is clear that the transformation from manufacturing to the New Economy will be no less dramatic. There are no easy answers to the questions of what are a country’s *dynamic* comparative advantages. But this

much should be clear: in the New Economy, these are likely to be markedly different from what they were in the past. This will require rethinking government strategies in every one of the areas in which it is involved.

China, with its enormous pool of low wage labor, increasingly well educated, will pose a challenge to manufacturing everywhere in the world, especially if that country continues policies which result in low exchange rates (partly through ever increasing reserves, which, given the instabilities associated with modern globalization, may make enormous sense, especially for a country which has experienced the risks of instability.) Even the United States can, of course, find niches in which it can compete: computer driven apparel manufacture provides a made-to-order product that, at the upper end, can compete with clothes produced in China. The globalization of technology has changed the nature of competition in fundamental ways. As much as America would like to claim that it is other country's unfair subsidies which have put its steel industry at a competitive disadvantage, the fact is that Korea, only a quarter century ago a less developed country, can produce with *higher technical efficiency* (even in a state run firm) than the old American steel behemoths.

There are niches that a country like Brazil can find, and some of these will be high technology niches, like airplanes to serve a regional market. While new technologies in some areas have considerably reduced the advantages of proximity to the market, there are some areas in which these advantages remain. These will have to be identified, and the opportunities exploited.

There have been advances in trading services, and since these typically are highly labor intensive, countries like Brazil may find opportunities in this arena. At the same time, many services will remain highly non-traded, and improvements in the efficiency of this part of the economy can bring real increases in standards of living.

We should not forget that in many developing countries, many of the poorest people remain in the rural sector, and are likely to remain there for several decades. If poverty is to be

reduced, something must be done about this sector. Even if it does not directly contribute much to exports, it is the right thing to do. The experiences in the successful country have demonstrated the importance of social stability, and one cannot maintain social stability if large fractions of the population remain left behind. Education for the children in these areas cannot just be a way out, but also must be a way up. It must be designed so that those remain see their productivity rise, both by attuning them to better production technologies and sensitivizing them to the products that are most valued by the market. But this will not be enough, if they are not at the same time equipped with resources—capital and land—to put their knowledge to work. In short, industrial policies cannot ignore agriculture, and the rural sector more broadly. (Indeed, China and Taiwan’s early success was built on a rural-based development strategy.)

### **Concluding Remarks**

There are no easy formulae for success in the modern world. Ireland and Portugal show clearly, however, that countries that were on the periphery of Europe, and whose income levels were towards the bottom, can go a long way in catching up. Finance, education and industrial policies all were central to their success. Markets—entrepreneurship—will be vital, but government has the responsibility, and the opportunity, for shaping the economic environment. There are some who sound the simplistic mantra of lower taxes and deregulation, suggesting that if only taxes were lowered and regulations eliminated, growth would come. There is no evidence in support of that approach. Yes, overbearing taxes and regulations can stifle an economy, and to some, *any* tax or regulation is by definition overbearing. But a more balanced approach recognizes the vital role that government can, and must play, and that includes *both* regulation and the provision of service public services, like education. The problems that brought about the East Asia were too little regulation, not too much, and the problems facing the U.S. economy too come from under regulation, not over regulation. Industrial policies, when well constructed and

well thought out, can be an important part of a more comprehensive strategy for economic management, one which can produce economic growth and stability with social justice. We may need to invent new names—like productivity enhancing investment and technology strategies—and we need to be aware of the pitfalls, but such policies are essential for long term growth.

A short while ago, there was discussion in Latin America about the second generation reforms: the first generation reforms, focusing on liberalization, privatization, and stabilization were well on their way; it was *assumed* that they would be successful. It was time to build further reforms on the basis of those past successes. Today, the inadequacies of the Washington consensus reforms are apparent, though some say it is too soon to pass judgment, some say things would have been even worse but for the reforms. It is clear that some have benefited from the reforms, and it is also clear that some of the reformers have a stake in the reforms being judged to be a success. The reforms were supported too by free market, market fundamentalist ideologues, and they will continue to proclaim the success, whatever the evidence with which they are confronted.

Many of the old policies had to be changed. Governments cannot continue to mount large deficits without facing consequences. High levels of inflation are deleterious. Many of the state run enterprises were inefficient. Rampant protectionism had enormous costs. We cannot go back to the past. But neither should we fail to recognize the failures of the present. Reform has to be reformed. In my Prebisch lecture, I spelled out several elements of such a reformed reform strategy. Here I focused more narrowly on the consequences of globalization.

Globalization has enhanced the opportunities for success, but it has also posed new risks to developing countries. The rules of the game have been designed for the most part by the advanced industrial countries, or more accurately, by special interests in those countries, for their own interests, and often do not serve well the interests of the developing world, and especially the poor. Countries like Brazil need to take an aggressive position in advocating a more balanced regime, not only for their own good, but for the benefit of the entire world.

But this will take a long time. In the meanwhile, countries have to learn to live within the rules of the game, as unfair as they may be. Even within these rules, I believe that countries like Brazil can help shape globalization, to make it work, not just for the rich within the country, but for everyone. But if they are to do this, they must choose their own course, free of the simplistic mantras that have played such a central role in guiding economic policy in Latin America over the past decade. It will not be easy, but there is no alternative.

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