International Development: Is It Possible?

by Joseph E. Stiglitz & Lyn Squire

Is development possible? Yes. Despite continuing concerns arising from the currency crisis in East Asia, the evidence of the last 25 years is unequivocal: the developing world has made dramatic advances on many fronts. Two examples illustrate this progress. One benefit of being born in the developing world in 1995 rather than 1970 is 10 years of extra life. Another is that per capita annual incomes are 50 percent higher. Thus, even with conservative assumptions about future growth, someone born in 1995 can expect to enjoy four times the lifetime income of someone born in 1970.

Of course, averages for the entire developing world hide marked regional differences. Per capita annual income in sub-Saharan Africa actually fell during the 25 years following 1970 [see chart on page 143]. In contrast, the people of East Asia saw theirs rocket, with an increase of almost 400 percent. These huge differences support the claim that development—indeed, rapid development—is possible. They also show that growth does not simply occur with the passage of time.

Many of the grand theories of development originated in the 1950s and 1960s, when information about the development process was scarce. We now know more about the mechanics of development, by which we

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mean the broad relationships between growth, inequality, and poverty, and the relationship between these economic variables and other dimensions of development such as life expectancy and literacy. We are also in a better position to identify key policy lessons by analyzing the broad strategies and policies that lie behind recent success stories. Finally, we can identify the remaining gaps in knowledge that reflect the need to seek deeper insights into three areas: particular markets, especially complex and critical ones such as the financial market; particular policies such as an industrial policy that favors one sector over another—an idea that remains controversial; and particular issues such as pollution.

THE MECHANICS OF DEVELOPMENT

Almost everyone agrees that development cannot be equated solely with reductionist economic measures such as GDP. Nevertheless, higher output and hence higher incomes are important because they expand the choices available to individuals, families, and societies. Where higher incomes are used for military aggression, the enrichment of a small ruling class, or the oppression of the population at large, growth is clearly seen as socially harmful. Strategies that exhibit these characteristics usually contain the seeds of their own destruction—witness recent events in Congo. But where parents choose to use higher incomes to clothe their children and improve their nutrition, or governments use higher revenues to provide primary healthcare and expand educational opportunities, most observers acknowledge the social value of economic growth—witness Chile. The fact of the matter is that the record of the last quarter century demonstrates two points: Aggregate economic growth benefits most of the people most of the time; and it is usually associated with progress in other, social dimensions of development.

Growth, Inequality, and the Poor

One of the most famous propositions in development economics, the Kuznets Hypothesis—named after Simon Kuznets, the 1971 Nobel Prize laureate in economics—claimed that in the early stages of development, increases in income would be associated with increases in inequality. Although it was based on just a few observations of three industrialized countries (West Germany, Great Britain, and the United States), the hypothesis attracted much attention and led to concerns
that growth in GDP might actually impoverish the poor. Related work—for example, Arthur Lewis’ model of a dual economy in which growth in a small modern sector was gradually supposed to help lift a larger traditional sector—provided a theoretical underpinning for the view that growth could take a long time to “trickle down” to the poor. Worse yet, models by Nicholas Kaldor and others concluded that high inequality was not just a consequence of development but a necessary condition. Savings adequate to finance the investment necessary to generate rapid growth would only be forthcoming if a small part of the population controlled a large part of national income.

None of these views is consistent with the evidence now available:

- We now know that aggregate growth usually benefits the poor. Indonesia is a classic case where GDP per capita increased by more than 170 percent in only 20 years (between 1975 and 1995), and the share of the population in poverty declined from 64 to 11 percent—a dramatic reduction in less than a generation. A recent compilation of cross-country evidence confirms the point. In 88 decade-long spells of growth drawn from across the world, the poorest fifth of the population benefited in 77 of the cases.

- We also know why growth benefits the poor. Changes in inequality are modest and not systematically related to growth as the early theorists suggested. Thus, for the same 88 growth spells, inequality worsened in about half the cases and improved in the other half, but in most cases the changes were small. Consequently, even when inequality worsened, the beneficial impact of overall growth usually dominated. As a crude rule of thumb, per capita growth in excess of 2 percent almost invariably benefits the poor.

- Finally, we know that egalitarian societies can generate high levels of saving and investment. Indeed, some of the most successful economies in East Asia—Indonesia and Japan, for example—had relatively low levels of inequality but generated high savings and investment rates and, until recently, enjoyed rapid growth for more than 25 years.

**Growth and Other Dimensions of Well-Being**

In the 1970s, a different set of concerns arose regarding the “quality” of development. Growth, it was argued, need not translate into improvements in nonincome measures of well-being such as life expectancy and literacy; in fact, even low-income countries could achieve substantial progress on these fronts. Thus, it was claimed, growth in
income was neither sufficient nor necessary for improvements in non-income measures of development. Well-known examples provide support for this view: Today, less than one-quarter of females are literate in Pakistan, despite a growth rate of almost 6 percent between 1975 and 1990. And although Sri Lanka had a modest GNP per capita of only $280, by 1980 it had achieved one of the highest life expectancies—68 years—in the developing world. This way of thinking led to a call for approaches that played down the role of growth and emphasized the direct provision of “basic needs” to the poor.

The evidence shows that although there is no automatic link between income and other measures of development, there is a strong association. Using the World Bank classification of countries, low-income countries have a life expectancy of 63 years and an adult literacy rate of 66 percent. The corresponding figures for middle-income countries are 68 years and 82 percent, and for high-income countries 77 years and over 95 percent. Moreover, and more important, countries such as South Korea have made progress on both income and nonincome measures of development. Indeed, the two are complementary and mutually reinforcing: “Investment” in people stimulates growth, which in turn provides the resources for people-focused investment. In the two examples cited above, Sri Lanka has not seen a return—in terms of income growth—from its investment in human capital, and Pakistan has chosen not to translate its income growth into improvements in literacy and life expectancy.

WHAT HAVE WE LEARNED?

If we accept that aggregate economic growth benefits most people most of the time and provides the means to achieve many of society’s goals, then we should question how some countries have managed to grow much more quickly than others. An obvious answer is that countries that invest more will grow faster. This answer is only partially correct. Both East Asia and the former Soviet Union have achieved high rates of investment, but only East Asia has managed to translate this into increasing levels of income. Although investment may be necessary for growth, it is not sufficient.

What caused the difference in these outcomes? In an almost tautological sense, the answer is that in one case funds were invested at far higher returns than in the other. The question is why. The clear, negative lesson from this comparison and other evidence is that highly cen-
Centralized state planning has failed as a development strategy. Indeed, it led to many well-known failures and not just in the communist countries. Early development theorists and practitioners, especially in the former colonies, embraced a strategy of heavy state involvement in industrialization, in particular, and the economy, in general. In Tanzania in the 1980s, subsidies to state-owned enterprises were one and a half times public spending on health. State planners cannot process the information required to make millions of decisions involved in producing and distributing goods and services. The market may not be perfect in dealing with all informational requirements, but it has clearly demonstrated its superiority over central planning.

The alternative to state-directed investment is greater reliance on the decentralized decisions of private entrepreneurs through the marketplace. The positive message emerging from the experience of the successful East Asian countries is that we now know the broad package of policies that lead to high rates of private investment and enhance the likelihood that investment is well used. The empirical evidence is, in fact, nothing more than a corroboration of common sense. Three conditions are critical: a stable and credible policy environment, an open and competitive economy, and a focused public sector.

**Credibility**

Entrepreneurs will not invest in countries where the policy regime is unstable—investors require a degree of certainty. Countries that do not manage the fundamentals of macroeconomic policy well will inevitably become unstable. Thus, basic fiscal and monetary discipline, including a properly managed exchange rate, helps establish the credibility of economic policy that gives entrepreneurs the confidence to invest. Two statistics illustrate the point: Almost 40 percent of Africa’s wealth is held abroad, evidence that, in this case, investing overseas is safer and more profitable than investing at home. Worldwide, 80 percent of total foreign direct investment has gone to just 12 developing countries in the period 1990–95, countries that, at least until recently, have been well managed and highly stable.

Credibility is also served by a transparent and effective legal and judicial system. If there is no accepted recourse in the event of failure to honor a contract, business relationships will remain confined to family members and close acquaintances, resulting in lower levels of investment and less efficient allocation. A recent study, prepared for the International
Finance Corporation, compares the quantitative impact of various sources of uncertainty on investment in 58 countries for the period 1974–89. It finds that high levels of corruption, volatility in real exchange rate distortions, and a lack of rule of law are the most detrimental to investment. One example from the study shows that if the level of corruption in Nigeria could be reduced to that prevailing in Hong Kong, Nigeria's yearly investment rate would increase by more than five percentage points, which, given the right policies, could increase the country's growth rate by as much as one percentage point.

**Competition**

Entrepreneurs are interested in making profits. If market circumstances (absence of competition either from domestic or foreign sources) allow them to benefit at the expense of consumers, they will do so. In the 1950s and 1960s, many development experts, especially Latin American scholars such as Raúl Prebisch, thought that industrialization could only be achieved if domestic manufacturing was protected from foreign competition while it grew from infancy to maturity. Given the small size of Latin American domestic markets, this strategy of import substitut-
tion often resulted in monopoly profits for those lucky or persuasive enough to capture the rights to produce.

We now know that competition is a powerful force for ensuring that investment is well directed and yields the greatest possible benefits. Competition among domestic producers helps, but for many countries domestic markets may not be large enough to support many firms, so competition with foreign producers is also important. On almost any measure of openness—share of trade in GDP or average levels of tariffs—the successful East Asian countries have been much more open than the slow-growing economies of Latin America, South Asia, and sub-Saharan Africa. But openness—trade and foreign investment liberalization—is not enough to ensure a competitive economy. In some cases, monopoly importers have used the opportunity of lower tariffs simply to garner higher profits for themselves, with consumers benefiting little.

Openness serves another purpose. Acquiring knowledge and adapting it for local use is generally seen as an important part of the East Asian experience. Not only did the East Asian countries invest a lot and well, they also benefited from closing the “knowledge gap.” True, it is difficult to establish empirically how much of growth is due to new technology, because measurement of the contributions of other factors—physical and human capital—is subject to a host of problems, and because new technology itself provides the impetus for additional investment. But fortunately, the best mechanisms for closing the knowledge gap—competing in foreign markets and attracting foreign investment—are encouraged by the same policies of openness mentioned above. Indeed, the East Asian countries have consistently promoted exports in sharp contrast to the strategy of import substitution pursued by many other countries. This strategy, combined with limited domestic competition, impeded both efficiency and the transfer of advances in global technology that are so critical to the emergence of a modern industrial sector.

**Public Sector Focus**

The failure of extensive state production of goods and services in the former Soviet Union and elsewhere, and the success of private investment in East Asia, provide a clear message for the public sector: It should focus its efforts on those areas where the private sector fails. Macroeconomic policy is one example where government involvement is pivotal. Stable macroeconomic policy has been a key ingredient of past East Asian success. Defense, redistribution, the legal and judicial system, regulation of
financial markets, and protection of the environment are all areas in which the public sector has to play the central role.

The public sector has also traditionally been a supplier of goods and services in such areas as health, education, infrastructure, power, water, and telecommunications. Each of these sectors has characteristics that have led to public provision. Some—telecommunications, for example—were regarded as natural monopolies; others—health and education—were thought to generate social benefits that the private sector would not be interested in supplying. Indeed, public provision of these services has been a critical aspect of East Asia's success. For example, thanks to almost universal public education at the primary level, more than 95 percent of the population was literate in South Korea in 1995.

But the principle of focus also applies to telecommunications, power, and even education and health. Recent experience suggests that private provision of these goods and services may be feasible and in some instances desirable. Where one draws the line, however, remains an open question when social objectives are not fully reflected in market prices.

LESSONS FOR THE FUTURE

We have learned much in the last 25 years about the mechanics of development and about the broad strategies and policies that support rapid and equitable growth. But there is still more to learn about the particulars of development. We need a much deeper understanding of how certain key markets function; why some policies work in some situations and not in others; and how to deal with new issues generated by the process of development.

Markets

The failure of state enterprises and the success of market economies have led to strong efforts to privatize and liberalize markets. But sometimes these efforts are motivated more by ideology than economic analysis and may proceed too far, too fast. When that happens, the economy may suffer. Privatizing a natural monopoly before an effective regulatory framework is in place may lead to higher, not lower, prices and may establish a vested interest resistant to regulations that encourage competition. Striking the right balance between unfettered markets and state regulation is difficult and requires a thorough understanding of how markets work. Nowhere has this become more apparent than in
the current crisis in East Asian financial markets.

Financial markets are key to the success of a market economy, yet in virtually every successful economy, financial markets remain highly regulated. Regulations are required to ensure fair competition, protect consumers, provide for the safety and soundness of financial institutions, and ensure that underserved groups have access to capital. Attempts at unregulated or weakly regulated banking systems in Chile, Indonesia, Thailand, and Venezuela have universally ended in disaster. Investors lose confidence in insufficiently regulated capital markets that fail to serve their roles in raising capital and spreading risk. Thus, Thailand's relaxation of restrictions on lending to the real estate sector in the early 1990s contributed to overextension and to the current collapse of not only the Thai market but of other markets in East Asia as well.

Interpreting this evidence requires an understanding of the critical ways in which financial markets differ from other markets. There are substantial informational requirements arising from the fact that what is exchanged is money today for a promise to pay tomorrow, a promise which may or may not be fulfilled. Bank management may choose a risky asset portfolio because they benefit from high profits if the gamble succeeds, but their depositors or insurers bear the costs if the gamble fails. Liberalization exacerbates this situation because it increases competition, erodes profits, and reduces franchise values, thereby reducing incentives to make good loans.

Thus, both evidence and theory suggest that mild financial restraint, which increases the franchise value of banks, will lead to better risk decisions and a more stable financial system. But identifying the best location on the continuum between highly regulated and completely free is difficult. A better understanding of the specifics of individual financial markets is required before moving too quickly down the path of liberalization.

**Policies**

Understanding which policies work is complicated by the significant role that implementation plays in their success or failure. For example, industrial policy—the provision of special incentives to particular industries or firms—has been an unquestionable failure in Latin America, South Asia, and sub-Saharan Africa. It has led to inefficient manufacturing as well as the establishment of vested interests sufficiently powerful to prevent the abandonment of these policies once introduced. Not so in East Asia. There, industrial policies led to a rapidly
growing and competitive industrial sector. Indeed, some of the most successful steel mills and shipyards anywhere in the world were established in East Asia as government enterprises.

The close links that developed between key ministries and major industries as part of East Asia’s industrial policy were seen as a way to overcome difficult problems of coordination. Moreover, where the incentives failed to achieve the desired outcomes, East Asian countries, especially Japan and South Korea, had the capacity to withdraw them.

The close collaboration between government and business inevitably risked collusion and corruption. While there were always allegations, the economic benefits, as evidenced by rapid growth, seemed to outweigh the problems. Although the current financial crisis in East Asia is often attributed to this “cronyism” (witness the allegations in Indonesia), the real source seems to lie elsewhere—real estate lending in Thailand and high indebtedness in Korea, for example. While government intervention cannot be blamed for the former—if there is blame, it is insufficient regulation and misguided foreign exchange policies—questions have been raised about the extent to which high debt-equity ratios in the Korean chaebol were a result of government pressure on banks.
Industrial policy offers one of the clearest examples of how implementation can be as important as the policy itself. But the point extends well beyond industrial policy. Understanding the structure of incentives that govern the implementation of public policy, the delivery of public services, and public management in general will be key to future development.

Unresolved Issues
The successes of East Asia over the past three decades are not a house of cards, no matter what critics may say in the midst of the current currency turmoil. However, the East Asian experience raises four sets of issues:

- To what extent are its lessons replicable? How can we achieve comparable levels of savings elsewhere? How can we ensure that such high levels of savings can be well invested? How do we close the knowledge gap with such rapidity? How do we minimize the potential for collusion and corruption that seems endemic in the collaboration between government and business, which is sometimes described as the hallmark of the success of East Asia?

The Price of Development?
Air Pollution Levels in Cities Violating International Standards

Source: Based on GEHS (Global Environmental Monitoring System) Database, United Nations, 1993.
To what extent are the lessons drawn from East Asia’s “miracle” relevant to the globalized economy of the twenty-first century? Do the problems these countries face today reflect a fundamental flaw in their strategy to deal with the demands of globalized capital markets, or do they arise from a too rapid departure from the principles of sound economic management that had long contributed to their success?

While the East Asian countries addressed major lacunae of earlier development efforts—in particular, they succeeded in achieving equitable growth—their environmental record has been less than stellar. Some of the major cities in East Asia have severe levels of urban pollution that are much higher than those found elsewhere and sufficient to cause serious health problems [see chart on previous page]. Massive forest fires in Indonesia not only present a health hazard but have taken a major toll on the country’s natural resource base. What are the strategies that are most effective in achieving sustainable development—development that protects the environment as it raises living standards?

By the same token, can we combine rapid growth with a more rapid transition to democracy? Moreover, how can we construct more effective governments that feature greater transparency and less corruption? South Korea seemed to have made a successful transition to democratic government; were it not for the currency turmoil, South Korea’s peaceful change of government with the election of President Kim Dae Jung in December 1997 would have been hailed as a major victory. But citizens in these countries had to wait for decades to achieve democracy. And as recent government revelations about South Korea’s economic travails show, only now is it beginning to embrace the standards of openness and transparency necessary for a healthy political and economic system.

**How Far Have We Come?**

There has been considerable progress in our knowledge and understanding of development. Some of the grand debates of the past have been resolved. In particular, the evidence reveals that growth in national income can ultimately benefit all members of society and is strongly associated with progress on many other measures of well-being, including health, nutrition, and education. The great experiment with central planning has decidedly failed. Markets are not
perfect and cannot be left completely uncontrolled, but they are an essential ingredient of a modern economy.

We have broadened the development agenda to include democratic, equitable, sustainable development that raises living standards on a broad basis, and we have brought to bear a wider set of instruments—not just sound macroeconomic policies and trade liberalization, but also strong financial markets, enhanced competition, and improved public services. There have been major advances in our understanding of development.

But some words of caution seem in order. Simple ideologies will not suffice; indeed, they are likely to be dangerous. Neither of the extremes advocated—state-run development or unfettered markets—will likely lead to success. Developing nations must aim for a balance, with governments and markets working together as partners. The solutions to Latin America’s macroeconomic crises, characterized by high inflation, large public deficits, and high levels of public indebtedness, may not work in East Asia, with its low inflation, low public deficits (or actual surpluses) and, at least in some cases, low public indebtedness. Where Mexico and other Latin American and African countries faced a crisis in public debt, East Asia’s crisis was primarily a problem of private indebtedness.

The need to tailor our thinking about development strategies and our policy recommendations to the distinctive problems of each country, coupled with the continuing evolution of the global economy, requires that we keep learning and adapting our views. Otherwise, yesterday’s truths may well become tomorrow’s mistakes.

WANT TO KNOW MORE?

tember 1989). An easily accessible summary of recent work on inequal-
ity and development can be found in Klaus Deininger & Lyn Squire’s
“Economic Growth and Income Inequality: Reexamining the Links”
(Finance and Development, March 1997). For a broad summary of the
policies associated with successful development, see the World Devel-
University Press, 1991). Development Macroeconomics by Pierre-
Richard Agenor & Peter Montiel (Princeton, NJ: Princeton University
Press, 1996) provides a recent survey of macroeconomic policies. A
review of public sector management is presented in the World Devel-
Oxford University Press, 1997). An account of the East Asian experi-
ence is provided in Joseph Stiglitz’s “Some Lessons from the East
Asian Miracle” (World Bank Research Observer, August 1996).
Sources dealing with the “remaining gaps” mentioned in this article
are less well developed. Readers interested in financial markets might
look at Gerard Caprio, Izak Atyas, & James Hanson, eds., Financial
Reform: Theory and Experience (Cambridge: Cambridge University
Press, 1995); Alison Harwood & Bruce Smith, eds., Sequencing?
Financial Strategies for Developing Countries (Washington, DC: Brookings, 1997); and Stiglitz & Marylou Uy’s “Financial Markets,
Public Policy and the East Asian Miracle” (World Bank Research
Observer, August 1996). For a range of views on industrial policy, read-
ers might consult Albert Fishlow, et al., “Lessons or Design: Lessons
from the East Asian Experience” (Overseas Development Council Policy
Essay, no. 11, 1997); and Robert Wade’s “East Asia’s Economic Su-
cess: Conflicting Perspectives, Partial Insights, Shaky Evidence”
(World Politics, January 1992). And sources dealing with urban pollution
include Peter Rogers, et al., Measuring Environmental Quality in Asia
(Cambridge, MA: Harvard University Press, 1997); and André Dua &
Daniel Esty’s Sustaining the Asia Pacific Miracle: Environmental
Protection and Economic Integration (Washington, DC: Institute for
International Economics, 1997.)

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