PART 2

The Policy Ingredients of Growth Strategies

We do not know the sufficient conditions for growth. We can characterize the successful economies of the postwar period, but we cannot name with certainty the factors that sealed their success, or the factors they could have succeeded without. It would be preferable if it were otherwise.

Nonetheless, the commissioners have a keen sense of the policies that probably matter— the policies that will make a material difference to a country's chances of sustaining high growth, even if they do not provide a rock-solid guarantee.

Just as we cannot say this list is sufficient, we cannot say for sure that all the ingredients are necessary. Countries have grown, for a time, on the back of a much shorter set of policies than this. But we suspect that over the course of 10 or 20 years of fast growth, all of these ingredients will matter. Low inflation, for example, will not compensate for poor education or rickety infrastructure. To sustain growth over a long period, a set of things needs to come together. Doing some subset of them may produce beneficial results. But the items the policy maker neglects will eventually haunt the economy's progress.

A list of ingredients is not a recipe, and our list does not constitute a growth strategy. We identify possible constraints on the economy's performance. A fully fledged growth strategy would identify which of these constraints demands immediate attention and which can be deferred. It would

"We shouldn't slip into the mistake of equating something useful, like financial-sector development or anything else, with a sufficient condition for growth."

—Michael Spence

specify what to do, when, and how much money, expertise and political capital to devote where. Given limited resources, governments should focus their effort in those areas with the highest incremental payoff to growth. But setting these priorities requires subtle judgments made with limited information. It is not a job for this Commission, but for a "reform team" of applied economists and policy makers with a deep knowledge of a particular country's circumstances. Nonetheless, such an exercise would surely benefit from paying close attention to the policies listed here. Our framework may not provide policy makers with all the answers, but we hope at least to help them ask the right questions.

The policies we explore fall into several loose categories: accumulation, innovation, allocation, stabilization, and inclusion.

The first set of policies on the list falls into the category of "accumulation." It includes strong public investment, which helps the economy to accumulate the infrastructure and skills it needs to grow quickly. The next group of measures promotes "innovation" and "imitation." They help an economy to learn to do new things—venturing into unfamiliar export industries for example—and to do things in new ways.

"Checklists of reforms are not helpful. The implicit message to policy makers is: if price control is difficult, why not do education? There is no element of strategy in that approach, no sense of the time lags or horizons involved."

—Ngozi N. Okonjo-Iweala

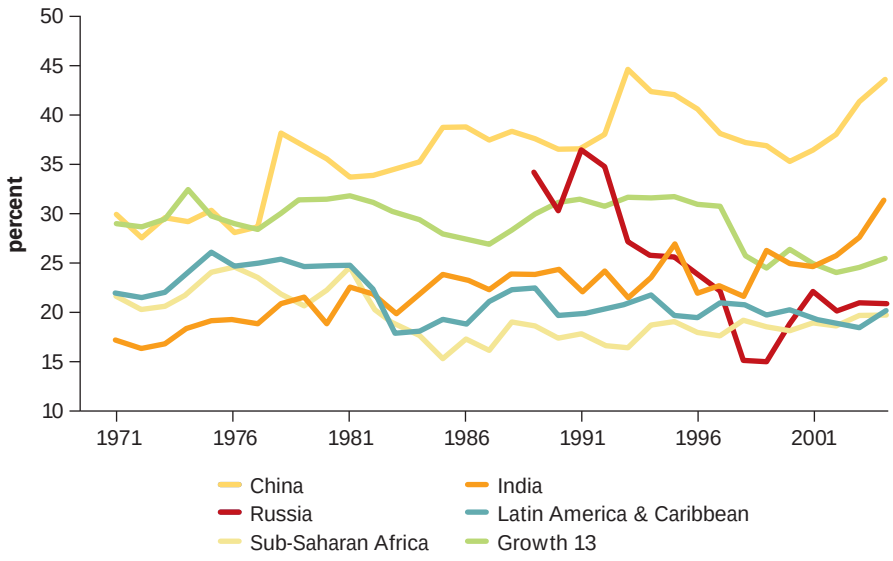
In any successful period of growth, relative prices have a lot of work to do, attracting investment into certain industries, deterring it from others. Thus, the third set of policies concerns the "allocation" of capital and, especially, labor. They allow prices to guide resources and resources to respond to prices. This microeconomics cannot unfold if it is rudely interrupted by debt crises or wild fluctuations in the general price level. The fourth group of policies therefore ensures the "stabilization" of the macroeconomy, safeguarding against slumps, insolvency, and runaway inflation.

We also recommend a set of policies to promote "inclusion." The commissioners prize equity and equality of opportunity for their own sake. But they also recognize that if a growth strategy brings all classes and regions of a society along with it, no group will seek to derail it.

High Levels of Investment

Strong, enduring growth requires high rates of investment. By investing resources, rather than consuming them, economies make a trade-off between present and future standards of living. That trade-off is quite steep. If the sustained, high-growth cases are any guide, it appears that overall investment rates of 25 percent of GDP or above are needed, counting both public and private expenditures (see figure 4). They often invested at least another 7–8 percent of GDP in education, training, and health (also counting public and private spending), although this is not treated as investment in the national accounts.

Figure 4 Percentage of GDP, Investment Rates by Growth 13, 1971–2004



Source: World Bank.

Infrastructure

In fast-growing Asia, public investment in infrastructure accounts for 5–7 percent of GDP or more. In China, Thailand, and Vietnam, total infrastructure investment exceeds 7 percent of GDP. History suggests this is the right order of magnitude for high and sustained growth, although it is difficult to be precise.

The data on public investment in infrastructure is surprisingly patchy. The numbers one can find suggest that spending is disturbingly low on average. Many developing countries invest on the order of 2 percent of GDP, or less—and this is reflected in their growth rate.

These two deficiencies—the shortage of data and the lack of spending—may be connected. What gets attention gets measured and what gets measured gets attention. Macroeconomic data are collected mostly for the purpose of stabilizing the economy in the short run. For that purpose, what matters is the overall level of government spending—the distinction between current outlays and capital investment is of little importance. But for growth, the distinction is essential.

Too often, both the composition and the size of public spending constitute a victory of the short run over the long run. Immediate claims for current spending—to pay wages, benefit politically powerful groups, or protect the population against declines in consumption—take away resources from what is important for the longer term. If the government's budget is too large, it can also crowd out private investment in the future. Spending, after

"International financial institutions, the IMF in particular, have tended to see public investment as a short-term stabilization issue, and failed to grasp its long-term growth consequences. If low-income countries are stuck in a low-level equilibrium, then putting constraints on their infrastructure spending may ensure they never take off."

—Montek Singh Ahluwalia

all, must be financed by taxes, fees, or inflation, all of which deprive the private sector of resources it might otherwise have invested in growth.

On the other hand, public spending on infrastructure—roads, ports, airports, and power—crowds private investment in. It expands investment opportunities and raises the return to private investment. By paving the way for new industries to emerge, it is also a crucial aid to structural transformation and export diversification.

Telecommunications infrastructure (and the pricing of services) is of particular importance. Telecommunications plays a variety of crucial roles in the public and private sector. It can aid education, transparency initiatives, and the delivery of government services. It can also raise productivity by disseminating price information to farmers, fishermen, and other producers. Telecommunications promotes widespread access to financial services. It also enables trade in services (a rapidly growing area of commerce) and links to global supply chains.

Given the great importance of infrastructure and the tight constraints on their resources, governments have increasingly sought to tap private sources of finance. Although most investment in infrastructure is still public, the private sector has increased in importance as governments have gained experience in regulating it.

These public-private partnerships can help a government stretch its budget further. They also spare the public sector the burden of running projects. But if the partnerships are to work, governments must be prepared to bear other responsibilities instead. They must establish autonomous regulatory agencies to oversee the activities of the private agents. The terms of the partnership must be written and monitored carefully, so that the private investor can earn an honest return but not a monopoly profit. It is also important for commercial risks to be borne by the private party. In too many cases, the division of labor has put profits in private hands, and risks in the public lap. There is now a great deal of accumulated, international experience with these partnerships. Some have been extremely successful in a wide variety of infrastructure areas, including telecommunications, roads, power generation, port management. But there have been equally numerous failures. Lessons should be drawn from both.

Governments must also resist the temptation to see infrastructure as a source of revenue. In telecommunications, for example, governments often allow private monopolies or quasi-monopolies to earn excessive profits, which the government can then tax to fill its coffers. This transfer from the consumer to the government, via the telecommunications giant, results in overpriced services, out of reach to large parts of the population. It may seem like a second-best solution for a cash-strapped government. But the damage to growth is likely to outweigh any fiscal benefits.

In short, governments should recognize that their own infrastructure investments are an indispensable complement to private efforts. If they

abrogate the public investment function, it will not be replaced by private providers. Growth and delivery of basic services to the public will suffer as a result.

Human capital[14]

Investments in the health, knowledge, and skills of the people—human capital—are as important as investments in the more visible, physical capital of the country. Few economists would dissent from that statement. But they find it surprisingly hard to prove it statistically.

This is partly a problem of measurement. Empirical exercises usually try to find a connection between, say, education spending and growth. But spending on education should not be confused with the ultimate objective of education, which is to impart knowledge, the ability to learn, and noncognitive skills such as curiosity, empathy, and sociability. The same financial outlay can yield very different amounts of learning.

But even if researchers had better measures of education, they may have the wrong model of growth. Education may influence the economy in subtle ways, interacting with other factors. For example, India turned out world-class engineers and scientists for decades before its economy took off. This investment in skills yielded limited economic results until India discovered a global demand for software services (a demand which has since broadened to include outsourced research-and-development and a wide array of services delivered over the Internet). India, in short, had to solve a demand and supply problem, not just a supply problem.

Investments in human capital will generate opportunities for growth, including opportunities unforeseen at the time of the investment. But as India's experience demonstrates, those investments do not translate mechanically into growth. Other factors can intervene.

Education

Every country that sustained high growth for long periods put substantial effort into schooling its citizens and deepening its human capital. Conversely, considerable evidence suggests that other developing countries are not doing enough.

Education makes a legitimate claim on public money for at least two reasons. First, the Commission believes the social return probably exceeds the private return. (The research literature is full of controversy and disagreement on this point—debates that were aired during the Commission's workshops.) In other words, educated people contribute more to society

14 The Commission invited papers and held workshops on health, education, and growth. This section draws on those papers and discussions. There is, of course, a vast amount of research underway. As governments and donors focus attention and resources on health and education, the body of relevant experience is also growing quickly.

than they get back in higher pay, although the social return is notoriously difficult to measure.

Second, some families are credit-constrained and cannot borrow as much as they would like to spend on schooling, even if the higher wages a diploma or degree would fetch could more than repay the loan. Thus public spending on education is justified on the grounds of efficiency and equality of opportunity. It corrects the failure of the market to allocate enough resources to education, and it also widens access to education beyond those who can pay for it upfront.

The timing of education spending matters as well as the amount. Investments in early childhood raise the returns to investments later in life—children must learn how to learn. If they do not, they may never regain the lost ground, leaving a society sapped of potential and scarred by inequality.

How, then, should governments divide their budgets among primary, secondary, and tertiary education (that is, universities, colleges, and the like)? Developing countries, including the high-growth cases, have answered this question in a variety of ways. This suggests policy makers need not worry unduly about fine-tuning the mix in any precise way, provided they do not tilt it to one extreme or the other.

It seems reasonable to us to focus first on preschool and early childhood education, then on elementary education and literacy, and then increase the numbers in secondary school. Nor should governments forget the importance of a small tertiary sector that should grow as incomes rise and the demand for human capital sharpens. It is mostly from the tertiary sector, after all, that the government and private sector will fill its more senior, managerial ranks.

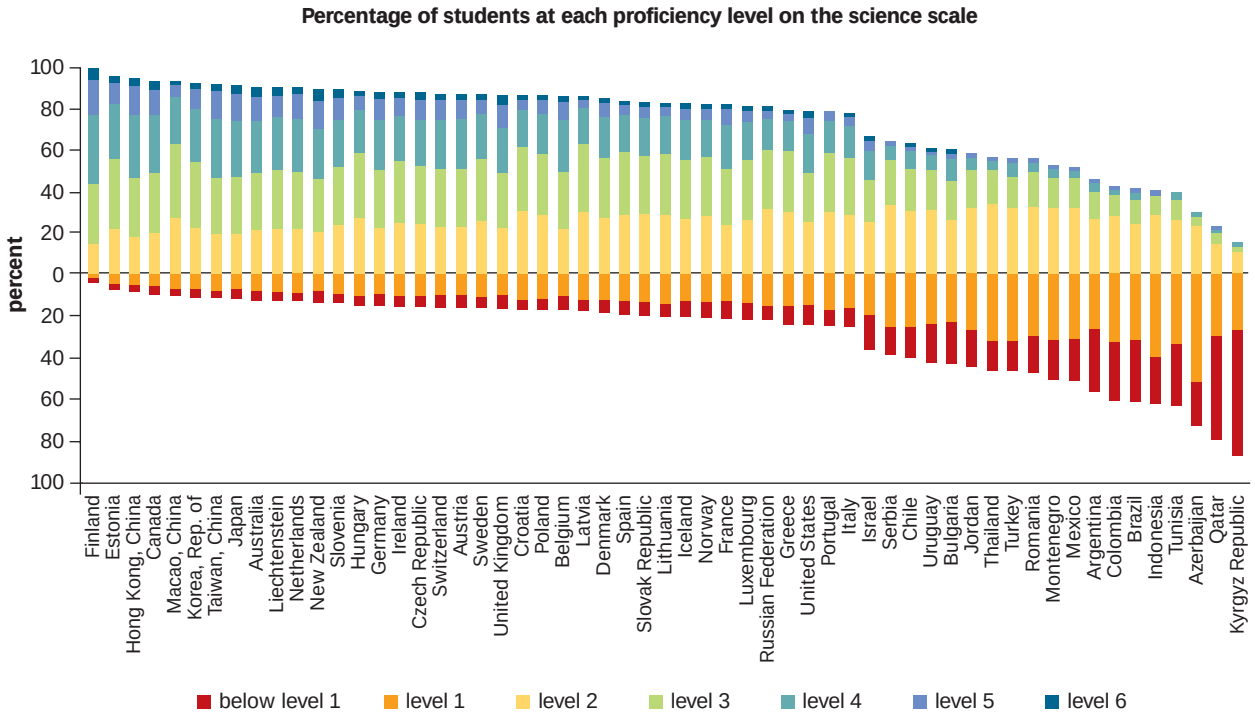
Researchers in this field have settled on "years of schooling" as a convenient, summary indicator of education. This is the measure they most often cite in debate, and it is much envied by their counterparts in health policy, who lack a single, "vulgar" measure (to use their term) in their field.

But years of schooling is only an input to education. The output—knowledge, cognitive abilities, and probably also social skills and other noncognitive skills—is often not captured. When it is measured, the results are often quite worrying. International tests in OECD countries, and also some developing countries, show that secondary school students vary enormously in what they actually learn (see figure 5).

Why do results vary so much? It is much too early to venture a strong opinion. We know that family background matters a lot, especially the parents' level of education and interest in schooling. In addition to demanding parents, demand from the market matters. When growth accelerates and demand for skills expands, the higher return to education strengthens incentives for schooling.

On the supply side, a combination of national exams and school autonomy works best, according to some experts. The ministry of education

Figure 5 PISA Results



Source: OECD PISA 2006 database, Table 2.1a. StatLink http://dc.dod.org/10.1787/141844475532.

Note: Countries are ranked in descending order of percentage of 15-year-old at Levels 2, 3, 4, 5, and 6. Above the zero line one finds the proportion of students in the country that has higher ratings than level 1. Below the zero line, one finds the proportion of students with level 1 and below.

should set centralized exams, but leave schools relatively free to decide how to meet those national tests. In particular, schools should enjoy autonomy in deciding their teachers' salaries and training.

Such a combination may explain Finland's success, relative to other OECD countries. But in poorer countries the reasons for success and failure may be less subtle. Some countries, for example, face a simple shortage of qualified teachers. The schooling budget may not be big enough to attract highly educated people, who enjoy more lucrative options in the private sector.

Moreover, once hired, teachers do not always face strong incentives to do a good job—or even to show up in class. In some countries, teaching positions are handed out as a form of political patronage. If people owe their jobs to a political favor, they are unlikely to do it well.

This is a knotty problem to solve, and some families decide they cannot afford to wait. Even those in poor households send their children to private schools, at the elementary and secondary levels, despite the financial sacrifice this entails. We have been surprised to learn how widespread private education has become in many developing countries, even among the poorest parts of the population. Most iniquitous are systems in which

elite universities, financed from the public purse, set demanding entrance standards, which can be met only if people are wealthy enough to pay for high-quality private schooling.

We still need to know much more about education—how to get the most out of the government's budget, and how to get the best out of teachers and their students. We recommend this as a high priority for policy research. One place to start is measurement. The abilities of students—their literacy and numeracy—need to be gauged far more widely around the world. In other areas of government and business, measuring things and disclosing the results are known to change outcomes even without further intervention.

More research would help. But on the basis of the evidence we have already seen, it is hard to resist the conclusion that educational spending in many countries is marred by waste and inefficiency, even as the return to human capital is rising around the world. This inefficiency is a constraint on growth and a threat to equality of opportunity.

Health

Health is justifiably viewed by many as a right. It is an end in itself, which is deeply valued whether or not it also contributes to economic goals. The fact remains, however, that health does also affect economic performance in multiple ways.

For example, the threat of disease can deter investment in human capital. If households fear their children will not survive infancy, they are likely to have more offspring. But with lots of children to care for, they may not invest in educating each one.

Researchers are refining their estimates of these effects. Take malaria, for example. Where the disease is endemic, workers can expect to suffer two bouts of fever each year, losing 5–10 working days each time. That is a substantial loss of labor supply. Much worse is the damage childhood malaria may do to the cognitive development of infants.[15]

But one area stands out as critical. Indeed, ill health and poor nutrition in early childhood seems to have a first-order impact on both growth and equality. It does so by causing lasting harm to a child's ability to acquire cognitive and noncognitive skills as he or she moves up through school—harm that is impossible or very difficult to reverse. In a world where cognitive skills are rising in value, this damage will jeopardize equality of opportunity, and, if widespread, impair a country's economic potential far into the future.

It is not easy, however, to make this insidious problem a pressing political issue. The payoffs to interventions in early childhood emerge only in the

15 See Bloom, David, and Canning, David. 2008. "Population Health and Economic Growth." Background Paper, Commission on Growth and Development.

very long run. Moreover, children do not have a voice of their own, and cannot show their discontent with policy.

The recent run-up in food prices has highlighted the vulnerability of low-income groups to undernutrition. The potential consequences on their children may be severe. Prompt action to protect poorer groups is urgently needed; otherwise malnutrition will cause suffering and also reduce long-term growth prospects in a manner that is deeply unfair. The world does have the resources to deal with this problem, to which later parts of this report return.

Technology Transfer

In all the cases of sustained, high growth, the economies have rapidly absorbed knowhow, technology, and, more generally, knowledge from the rest of the world. These economies did not have to originate much of this knowledge, but they did have to assimilate it at a tremendous pace. That we know. What we do not know—at least not as well as we would like—is precisely how they did it, and how policy makers can hurry the process along. This is an obvious priority for research. As highlighted at the beginning of this report, economies can learn faster than they can invent. Knowledge acquired from the global economy is thus the fundamental basis of economic catch-up and sustained growth.

"Knowledge," in the language of economics, refers to any trick, technique, or insight that allows an economy to generate more out of its existing resources of land, labor, and capital. It includes the codified knowledge that can be set out in books, blueprints, and manuals, but also the tacit knowhow acquired through experience. The concept is a broad one, as Paul Romer, a member of the Commission's working group, has emphasized. It extends from abstract ideas, such as scientific formulae, to eminently practical ones, such as the traffic circle or roundabout.

Knowledge does not only consist of ideas for making more things, cheaper things, or new things. It includes the accumulated wisdom of human and social experience—as historians and social scientists interpret and reinterpret it. For example, the "invention" of the separation of powers between three branches of government, and the checks and balances it ensures, is possibly one of the most creative and influential innovations of the last few centuries. Many other institutional innovations have been tried and refined through trial and error, and have helped achieve economic and social goals more efficiently and fairly.

To economists, these ideas all share one characteristic: they are "nonrival." If you use or "consume" an idea, it does not stop me from also using it. Thomas Jefferson made a famous analogy with the light of a candle: If you light your candle with mine, it does not darken my flame.

"In this globalized world, physical capital and technology are always available. But human capital is still very immobile, so you should have good education and job-training programs to acquaint people with the necessary technology. Then capital and technology can be easily transferred to the developing economies to jump-start growth."

—Han Duck-soo

The value of knowledge in the global economy is high and rising. Indeed, the progress of the advanced economies depends mainly on innovation and new ideas. Technology also spreads more quickly now from the countries where it is invented to other parts of the world. For example, it took over 90 years after its invention for the telegram to spread to 80 percent of developing countries. It took only 16 years for the mobile phone to do so.[16]

What can developing economies do to ensure that they learn—to ensure that productive and institutional knowledge is transferred to the public and private sector?

One known channel is foreign direct investment (FDI). As well as money, FDI can bring a familiarity with foreign production techniques, overseas markets, and international supply chains. This expertise may be worth more than the capital itself. (China, which has recently experienced an excess of saving over investment, would probably prefer FDI without the "I"—although China is admittedly a unique case.) In developing countries, FDI is a small fraction of total investment. But because of the knowledge transfer it normally carries with it, its importance is much larger than its fractional contribution to total investment.

Foreign investors find it hard to keep their knowledge and expertise entirely to themselves. A multinational may train a local recruit, who later leaves to join another firm. It may share technology with a supplier, who then serves rival customers. Because know-how leaks beyond the borders of the firm into the wider economy, there is a natural tendency for the social return to FDI to exceed the private return. This creates some justification for government policies to encourage it.

Such policies fall into two categories: measures to attract more FDI, and measures to extract more knowledge from a given amount of investment. A common example of the first is a simple information campaign designed to introduce a country's investment opportunities to potential foreign investors. These can make a difference if foreign investors imperfectly perceive the opportunities and the risks of a potential location. They can also help if potential investors are all waiting for each other to be the "pioneer," who incurs the costs of finding out about a country.

Examples of the second type of policy—those that glean more knowledge from FDI—include obligations on the foreign investor to hire and train local staff as managers, even letting them advance to positions beyond their home country. A common organizational form for doing this is the joint venture. However, if such provisions are too onerous ("involuntary technology transfer" is the commonly used term), they will deter investors, especially those with valuable proprietary knowledge to lose. FDI occurs in a highly competitive international environment, and countries need to keep

16 World Bank. 2008. *Global Economic Prospects 2008: Technology Diffusion in the Developing World*. Washington, DC: World Bank.

the demands they put on foreign investors in balance with the alternatives offered by other potential hosts competing for the same knowledge and investment.

Whereas in most countries FDI is a relatively small fraction of total investment, in some cases, a single foreign investor looms large. This is more likely in small states where economic activity is concentrated in a few industries, such as mining or plantation agriculture. In these cases, care must be taken to prevent the foreign investor from exercising undue political influence. Excessive clout can undermine domestic governance, destroy trust, and sometimes opens the door to large-scale corruption.

Foreign education, particularly higher education, has proved to be an important channel of knowledge transfer. One of the first actions Japan took during the Meiji Restoration was to bring experts from the United States and Europe, and to send Japanese students to Western universities. A more recent and well-known example is China when it started reforms. At the invitation of leaders and officials from the Chinese government, a stream of foreign experts started to visit the country to help them learn about the workings of a market economy, the institutions underpinning it, and its responses to change. At the same time, a stream of Chinese students left to be trained in U.S. and European universities.

"Technology comes with trade. So trade plays a very multidimensional role."

—Han Duck-soo

In general, higher education in advanced countries has figured prominently in the training of senior managers, policy makers, and political leaders in a wide range of countries. The results in terms of growth vary considerably. Notwithstanding ambiguous results, foreign education, ideally subsidized by advanced countries, is an underused channel for knowledge transfer in many countries. By studying abroad, students acquire international contacts, which will help them remain abreast of new thinking long after they have left the classroom.

Governments should expand such placements and international donors should fund them. Furthermore, these opportunities should not be limited to scientists and engineers, but should also include young people who are likely to serve in policy making and the civil service. We recommend that donors, including the international financial institutions, support a program of international exchanges for civil servants, so that government personnel from one developing country can visit and learn from their counterparts in another. Such programs now exist in some countries, particularly in Africa. Developing countries would gain if these programs were expanded, made more systematic, and extended beyond Africa.

Competition and Structural Change

As it expands, an economy changes its shape and composition as well as its size. New industries emerge, older ones eventually fade. The growth

"Being exposed to competition brings out the best in institutions. A famous economist once said that the best of all monopoly profits is a quiet life. You don't want a quiet life for a firm; you want it forever trying to improve its productivity."

—Robert Solow

of GDP may be measured up in the macroeconomic treetops, but all the action is in the microeconomic undergrowth, where new limbs sprout, and deadwood is cleared away. From an economic point of view, this process is natural. As workers become better educated, better equipped, and better paid, some industries become newly viable; others cease to be so.

Joseph Schumpeter described this process as "creative destruction." Governments can hasten the process by encouraging the entry of new firms and the emergence of new industries. But what perhaps matters more is that they do not resist it.

They will certainly be called upon to do so. Some companies, for example, will argue they should be sheltered so that they can attain a big enough size to be efficient. The case is thought to be more compelling the smaller the economy. But it is a static argument. It dwells on the unit costs of big firms compared with small ones in an otherwise unchanging world. While incumbent firms press this case with the government, new companies or technologies may be waiting in the wings that will overturn the industry's cost structure or supplant the industry altogether. The static analysis, so commonly deployed, is simply misleading and a poor approach to productivity gains and growth.

In fact, some empirical studies suggest that economies owe most of their progress to the entry of new, more productive firms, and the exit of ailing ones. Improvements in the efficiency of incumbent firms play a smaller role. The dynamic productivity gains from entry and exit can overwhelm the static efficiency gains from scale. This means that entry and the threat of entry are important to ensure competition.

Just as the entry and exit of firms invigorates industries, so the rise and fall of industries breathes life into whole economies. Structural change under competitive pressure is what propels productivity growth. It is counterproductive to cling to stagnating industries, even industries that were once responsible for the country's growth. One of the most common mistakes, we have learned from a range of experiences, is to find a successful constellation of policies and industries, then stay with them for too long. When it comes to growth, very little if anything is permanent.

While creative destruction is economically natural, it doesn't feel natural to those displaced in the process. If these casualties of growth are simply disregarded, they will seek ways to slow the economy's progress. In intervening on their behalf, governments should be guided by two principles. First, they should try, as far as possible, to protect people, not jobs. Unemployment insurance, retraining, and uninterrupted access to health care are all ways to cushion the blows of the market, without shutting it down.

Second, if governments cannot provide much social protection, they may have to tread more carefully with their economic reforms. The speed of job destruction should not outstrip the pace of job creation.

Labor Markets

In poor, populous countries, labor is in surplus supply. Jobs are hard to come by, wages are low, and many people are self-employed out of necessity. This unhappy situation is what 7 percent growth sustained for decades is supposed to solve.

The solution starts by creating gainful employment, often in export industries, for people otherwise underemployed in the traditional or informal sectors. In the next stage, the economy creates better jobs, worthy of better educated, more skilful workers. For these stages to unfold, labor must be mobile. It must move from field to factory, and from one industry to another.

Perhaps the greatest analyst of a labor-surplus economy was Sir Arthur Lewis. In his models, the fields were so overmanned that the "marginal product" of agricultural labor was close to zero. In other words, if one field hand left the farm to work in an export factory, the farm would lose nothing. By the same token, if the worker were to add even one cent to the economy in his or her new factory job, society would gain.

The problem is that an export factory cannot tempt workers from the fields for one cent. They have to pay more than this. Therefore, the cost to the factory of hiring workers from the fields is greater than the opportunity cost of their labor. As a result, the social return to factory employment can be higher than the private return for a period of time. This period persists until the surplus labor is absorbed and the wages in the export sector converge to the opportunity cost in the traditional sector. This is one justification for the industrial policies, including the exchange rate policies, described in a subsequent section. They make investment in the export sector more profitable, bringing the private returns more into line with the social benefits.

There is much governments can do to increase labor mobility. For example, workers find it easier to pick up new skills and enter new trades if they are literate and educated. In addition, they will leave the countryside more readily if the cities are prepared to accommodate them. In a later section, we will discuss what governments can do to ease the strains of urbanization.

Beyond these outlays, governments can also try to overhaul labor market institutions and regulations. These institutions are complicated and various. Unsurprisingly, researchers disagree about how to reform them.

Some rules and institutions exist to safeguard the rights of labor, defending workers against exploitation, abuse, underage employment, and unsafe working conditions. In some countries, these rights are protected by unions or government regulations. But in others, no such protections are in place. The Commission feels strongly that these rights should not be sacrificed to achieve other economic objectives, including growth. Besides, labor viola-

"There's no doubt that sustained growth needs well-functioning labor markets. Today, we all know that the right approach is not to protect jobs in existing industries, but to protect employment by giving people the chance to get training and retraining. This kind of mobility is absolutely essential."

—Danuta Hübner

tions can have a commercial cost, thanks to growing international scrutiny of employment conditions and the threat of consumer boycotts.

In many economies, a formal labor market coexists with an informal one. Formal jobs typically offer better wages and terms than informal jobs, even if the jobholder is no better qualified. They can do so because they are fenced off by regulations or unions' agreement or a combination of the two, which prevents the vast pool of "outsiders" bidding down the wages of the "insiders." It is understandable that workers in the formal sector will fight to defend their privileges and resist competition from outside. In a surplus-labor economy, they are playing something close to a zero-sum game: there are only so many well-paid, tightly regulated jobs to go round. If you gain, I lose.

If demand for labor is strong enough, high costs and heavy regulations in the formal sector pose few problems. Firms that are enthusiastically hiring workers may not worry about restrictions on firing. Likewise, if the labor market is tight enough, the going wage rate will exceed any minimum wages stipulated by law. Many supposed regulatory impediments to growth decline in significance or vanish altogether in the face of excess demand for labor.

It is also not uncommon in policy debates in developing countries to hear that the problem is on the supply side: it is a matter of weaknesses in the labor force, not the weakness of labor demand. The underemployed population lack skills, the argument goes, therefore the solution is to train them. The aim is to upgrade labor supply, rather than stimulating labor demand.

There is a certain theoretical sense in which this argument is true. In principle, if workers were sufficiently educated and heavily trained, they would be worth the cost of hiring them, even with the full panoply of benefits and wages that prevail in the formal sector. But it is difficult, not to say extremely expensive, to upgrade the skills of workers before finding employment for them, partly because workers learn so much on the job. Thus, while there is no disagreement about the need for education and human capital investment, as a matter of strategy in many countries, this supply-side approach will often not be sufficient.

In most cases, the high cost of labor in the formal sector will deter investment, especially in export industries that must compete in the global marketplace. But any attempt to breach the divide between the formal and informal sectors will meet insurmountable resistance. How, then, can a country resolve this conundrum? What policies will simultaneously create jobs for the underemployed poor, permit a viable return to industry, and mollify the influential minority of workers already employed in the formal sector?

A pragmatic compromise is one possibility. Rather than imposing the full costs of the formal sector on employers, or inflicting unbridled wage

competition on workers, governments could create an alternative employment track. They should allow export-oriented industries to recruit workers on easier terms than those that prevail in the formal sector. The government could, for example, create special economic zones with less onerous employment obligations. The virtue of this approach is that it creates room for employment to grow without threatening participants in the formal sector. The aim is to turn something close to a zero-sum game into a positive-sum one.

It should be emphasized that this alternative employment track would not be free of regulation. It would not be exempt from rules on health, safety, working hours, environmental conditions, and child labor. These rights are not negotiable.

Nonetheless, this approach to the labor market will not appeal to some. It will seem to exacerbate, rather than solve, the existing problem of "dualism," whereby the labor market is split into segments, each governed by different rules and different prices. In a way these charges are true. But the alternative is worse. It is to leave large fractions of the population blocked from higher productivity employment, consigned to breaking bricks or opening doors, rather than assembling toys or stitching garments.

The compromise suggested here should be a temporary one. If successful, wages and benefits in the new industries will eventually catch up with those in the formal sector. As the labor surplus declines, special provisions in the export zones can be removed. This is often exactly what happened in countries that have tried this approach. The country case studies contributed to the Commission show that special labor provisions and export zones were phased out over time as the need for them declined, and the distortions they created in employment, investment, and wages became more worrisome.

Even if they back this temporary compromise, governments should continue their efforts to reform the formal labor market. An overhaul would certainly be desirable. In India, for example, labor contracts that permit seasonal work in cyclical industries are problematic even though arguably in the interest of all parties. Our conclusion, born of experience, is merely that such reforms are politically difficult. Although worthwhile, they do not solve the underlying problem of the misalignment of the formal and informal sector. Therefore governments should not wait to win these battles before exploring other ways to jump-start job growth and export diversification.[17]

It is worth noting that China did not face quite the same problem. At the time of its reforms in 1978, there was no formal sector, just the state-owned sector, which spanned most of the industrial economy. The new enterprises and joint ventures in the export zones were no immediate threat to work-

17 The alternative employment framework for informal jobs may also be useful for things like part-time work, which would allow greater female labor force participation.

ers in the state-owned enterprises. And the government did not require the emerging export sector to offer the same wages or terms of employment as the state companies. Thus the exporters had direct access to the surplus labor in China's vast agricultural sector.

Getting the labor market right is vital to both the economics and politics of growth. In too many developing countries, a portion of the population has not enjoyed the benefits of economic advance, and does not anticipate enjoying them in the future. If they are forever blocked from employment, the economy will miss out on their labor and any growth strategy will lose their support.

Export Promotion and Industrial Policy

All of the sustained, high-growth cases prospered by serving global markets. The crucial role of exports in their success is not much disputed. But the role of export promotion is. Many of them tried a variety of policies to encourage investment in the export sectors in the early stages of their development, and several of these measures would qualify as industrial policies. They tried to promote specific industries or sectors through tax breaks, direct subsidies, import tariff exemptions, cheap credit, dedicated infrastructure, or the bundling of all of these in export zones.

Nonetheless, the significance of these policies is hard to prove. Even though most of the high-growth successful economies tried industrial policies, so did a lot of failures. Nor do we know the counterfactual: whether the high-growth cases would have succeeded even without targeted incentives.

All sides of this debate were reflected in the Commission's workshop on industrial policies, and in its own deliberations. The cut-and-thrust of the argument usefully clarified some of the virtues and risks of export promotion.

Some in the broader debate argue that industrial policies are not necessary. The private sector, in pursuit of profit, will discover where a country's comparative advantage lies and invest accordingly. Others argue that markets fall short in certain respects. Outside industrial investors (entering via FDI) may not know how to do business in a new location, for example. Those that enter first, regardless of whether they are successful, provide a benefit to other potential entrants. Their rivals and successors will learn from their experiment, without having borne the costs or risks. This can lead to a suboptimal level of experimentation, unless the government steps in to encourage it.

To take another example, in countries where large numbers of workers are underemployed in agriculture, the social return to factory employment may exceed the private return. It may be necessary to subsidize employment

or investment outside agriculture to compensate for this gap. (This point is explained in greater detail in the section on labor markets.)

Some skeptics might concede that markets do not always work, but they argue that industrial policies don't either. This is either because governments do not know what they are doing—they lack the expertise to identify successful targets for investment, and will waste resources on plausible failures—or because they knowingly subvert the process to their own ends, dispensing favors to their industrial allies. There is, of course, considerable variation across countries in the competence of government and in the undue influence of special interests. But those who worry about government competence or capture would prefer to rule out promotional activities altogether. The risk of failure or subversion is too great, they say; better not to try.

But there are also risks to doing nothing. A flourishing export sector is a critical ingredient of high growth, especially in the early stages. If an economy is failing to diversify its exports and failing to generate productive jobs in new industries, governments do look for ways to try to jump-start the process, and they should.

These efforts should bow to certain disciplines, however. First, they should be temporary, because the problems they are designed to overcome are not permanent. Second, they should be evaluated critically and abandoned quickly if they are not producing the desired results. Subsidies may be justified if an export industry cannot get started without them. But if it cannot *keep* going without them, the original policy was a mistake and the subsidies should be abandoned. Third, although such policies will discriminate in favor of exports, they should remain as neutral as possible about which exports. As far as possible, they should be agnostic about particular industries, leaving the remainder of the choice to private investors.[18] Finally and importantly, export promotion is not a good substitute for other key supportive ingredients: education, infrastructure, responsive regulation, and the like.

Exchange Rates

In the developing world, most governments and central banks feel they cannot afford to take their eye off the foreign value of their currency. But efforts to shepherd exchange rates are as controversial as industrial policies. Indeed, they can be thought of as a form of industrial policy. If a government resists an appreciation of the currency, or if it devalues, it is, in effect,

18 This last is not a rigid rule. For example, training for particular industries may be warranted, especially if private companies underinvest in transferable skills, because they fear that workers will carry those skills with them to a rival firm. But these types of sector-specific support work best when they follow rather than lead private investment.

imposing an across-the-board tax on imports and providing a subsidy to exports.

Economists have lined up equally passionately for and against such policies. Max Corden describes them as a kind of protectionism. Others, such as Bela Balassa, thought they held the key to development. This is how John Williamson, a fellow at the Peterson Institute for International Economics, has described Balassa's position: "give [a country] an exchange rate sufficiently competitive that its entrepreneurs are motivated to go and sell on the world market, and it will grow. Give it too much easy money from oil exports, or aid, or capital inflows, and let its exchange rate appreciate in consequence, and too many people with ability will be diverted from exporting to squabbling about the rents, and growth will be doomed."[19]

"Fixed exchange rates can lead to all kinds of imbalances, pent-up problems and ultimately duress and even crisis, as happened in the 1990s. So I think it is very much in the interest of each developing country to move toward a flexible exchange rate. Obviously if you have a relatively fixed rate to begin with, you've got to find some way to do that at a pace that enables the rest of your financial and economic system to adjust to the change."

—Robert Rubin

Many of the countries that enjoyed sustained, high growth have shared Balassa's exchange rate convictions at various times. To keep the currency competitive, they have regulated the amount and type of capital flowing across their borders. They have also accumulated foreign reserves in the central bank. A mixture of the two policies was normal.

The use of exchange rates for "industrial policy," that is to maintain export competitiveness, has the advantage of being neutral between industrial sectors. It does not make big demands on government discretion and expertise. However, it has its own costs and risks.

For one thing, these policies can limit the amount of capital a country imports from overseas. This raises the cost of capital, which will tend to reduce investment. Indeed, these policies create an interesting trade-off. They make investment in the export sector more appealing. But they simultaneously make capital less readily available.[20]

Second, management of the exchange rate is sometimes used as a substitute for productivity-enhancing investments in education and human capital or for other crucial elements of a growth strategy, such as inbound knowledge transfer. When used in this way, it results in growth, purchased at the price of very low wages commensurate with equally low productivity levels.

Third, where surplus labor is no longer available, or labor unions are strong, an undervalued exchange rate may lead to higher pay demands and a wage-price spiral that is detrimental to sustained growth prospects.

At best, management of the exchange rate can be used for two purposes. One is to tip the balance slightly in favor of exports in the early stages of growth, to overcome informational asymmetries and other potential transitory frictions. The other is to prevent a surge of capital inflows (which may be transitory) from disrupting the profitability and growth of the export sectors.

19 Williamson, John. 2003. Review of "Too Sensational" by Max Corden. *Journal of Economic Literature* 41(4): 1289–90.

20 Williamson, John. 2003. "Exchange Rate Policy and Development." Initiative for Policy Dialogue.

If pursued to extremes, holding the exchange rate down will result in a big trade surplus. This is not in the country's own interest, as it involves forsaking current consumption in order to lend to foreigners. Nor will surpluses go down well with the neighbors. By keeping its currency cheap, a country makes its trading partners' currencies more expensive. When a large country like China does this, it does not escape notice. Trade partners, who feel China's exporters enjoy an unfair advantage, may threaten to retaliate with tariffs. That is in no one's interest.

Is "export promotion" a polite term for crude mercantilism? In the 18th century, some European powers thought the goal of economic statecraft was simply to sell more to foreigners than you bought from them, resulting in a trade surplus and an inflow of gold bullion.

The case of high-growth economies is different. To catch up with the advanced economies, countries will need to increase the size of their export sector, so that exports as a percentage of GDP will increase. But that is only one side of the ledger. On the other side, imports can and should also increase. The goal of an export-led strategy is not to increase reserves or to run a trade surplus. It is to increase exports to enable incremental productive employment, larger imports, and ultimately faster growth. (See also our discussion of the "adding-up" problem in part 4.)

The more a country earns from its exports, the more it can afford to benefit from imports, especially the equipment and machinery that embody new technologies. If, on the other hand, exports flag, the shortage of foreign exchange will limit what a country can buy-in from abroad and hamper its progress.

As with other forms of export promotion, exchange rate policies can outlive their usefulness. If the currency is suppressed by too much or for too long, it will distort the evolution of the economy by removing the natural market pressure for change. The cheap currency will tend to lock activity into labor-intensive export sectors, reduce the return to upgrading skills, and eventually harm productivity as a result. Like other industrial policies, a keenly priced currency is supposed to solve a specific, transitory problem. Eventually, as an economy grows more prosperous, domestic demand should and usually does play an increasingly important role in generating and sustaining growth. Exchange rate policy should not stand in the way of this natural evolution.

"The East Asian experience since the 1960s—the tigers, the dragons, and now China, Vietnam, and others—demonstrates the role of a competitive exchange rate in rapid growth. In all cases, this was achieved through a combination of restrictions on capital inflows and monetization of inflows."

—Zhou Xiaochuan

Capital Flows and Financial Market Openness

Economists would readily agree that financial openness is beneficial in the long run. No one now advocates capital controls for America or the European Union. But analysts will also confess to considerable uncertainty and some disagreement about the timing and sequencing of moves to open up.

None of the sustained, high-growth cases that we know about were particularly quick to open their capital accounts. Yet developing countries have come under considerable pressure from international financial institutions and economic commentators, urging them to unlock the financial gates. Whether this is good advice seems to us to depend heavily on whether the economy is diversified, its capital markets mature, and its financial institutions strong.

Even if one thinks controls on capital inflows and outflows are desirable at certain stages of growth, are they feasible? Can they be effective? There are indeed many ways of circumventing capital controls, and financial markets have proven exceptionally creative in exploiting them. But policies that actively discourage speculative, short-term capital inflows have proven useful in turbulent times. The fact that controls may be leaky and imperfect does not seem a decisive argument against them. Many other policies—taxes, for example—are also leaky and imperfect. That is not a reason to abandon them altogether; merely a reason to implement them better.

Developing countries like to exercise some control over the exchange rate, both to maintain the competitiveness of their exports, and also to offset damaging bouts of exchange rate volatility. Capital controls allow a developing country to do this while also controlling inflation. Absent controls, large capital inflows give central bankers no choice but to let the currency strengthen or to accumulate reserves, a policy which implies a loss of monetary control. To put the same point slightly differently: every country wants and needs to control inflation. If it also wishes to exercise some independent control over the exchange rate (for competitive reasons or just to control volatility), then it needs capital controls.[21]

"Keeping exchange rates competitive should be a principal objective of policy in emerging economies. Central banks should stand ready to buy up to the last dollar. The pressure on central banks can be relieved by placing controls on capital inflows. Yes, capital controls are leaky, but so are taxes, and that does not stop governments from trying to tax their citizens."

—Pedro-Pablo Kuczynski

This is why many countries favor capital controls until such time as the structural transformation of the economy is well advanced. It is difficult to be precise as to when exactly the point of "well advanced" is reached. And the exact timing of when the controls should be lifted is a controversial matter. Some believe that middle-income countries, economically diversified, and with diversified and deep local financial markets and strong links to the world economy are better off with an inflation-targeting regime, allowing relatively free capital flows and flexible exchange rates ("dirty floats"). But to avoid damaging currency overvaluations, such economies would be well advised to maintain a strong fiscal position that would permit them to accumulate international reserves without loss of monetary control.

21 The proposition more precisely is that if a country has an open capital account and manages its exchange rate it will not be in control of the money supply. Thus, it is dependent on other instruments to manage inflationary pressures; fiscal policy being the obvious candidate. Fiscal policy is a very imperfect substitute for monetary policy in dealing with inflation.

Macroeconomic Stability

No economy can flourish in the midst of macroeconomic instability. Wild fluctuations in the price level, the exchange rate, the interest rate, or the tax burden serve as a major deterrent to private investment, the proximate driver of growth. Economists and policy makers, however, disagree about the precise definition of stability and the best way to preserve it.

For example, very high inflation is clearly damaging to investment and growth. Bringing inflation down is also very costly in terms of lost output and employment. But how high is very high? Some countries have grown for long periods with persistent inflation of 15–30 percent.[22] With central banks in Europe, the United States, and developing countries now targeting much lower rates, this threshold appears excessive. The consensus now is that inflation should be kept stable and in single digits. However, the benefits of bringing it to very low levels are unclear.

There is widespread agreement that central banks can best fight inflation if given a degree of autonomy from political imperatives. In particular, a central bank should be insulated from the potentially irresponsible behavior of politicians, who may want it to relax its grip on inflation before elections, or to bankroll their spending plans. As they have become more autonomous, central banks have become much better at controlling inflation all over the world, without harming growth.

At the same time, central banks have sometimes been criticized for appearing indifferent to the need of the real economy and unresponsive to political demands. In a mature market economy, the downsides of central bank independence seem pretty modest. The central bank's commitment to price stability does not greatly endanger any of the economy's other objectives. And if its commitment results in higher interest rates or a more volatile exchange rate, the private sector has the flexibility and the financial instruments to cope.

In a developing economy, the issue is more complicated. The desirable effects of independence do not go away. But the economy must also maintain a coherent economic strategy. High-speed growth relies on export growth and a rapid integration into the global economy. That process is affected by exchange rates, interest rates, and inflation. Thus the central bank's choices in all three areas bear heavily on the implementation of a growth strategy. Judgment is required to balance the benefits of autonomy and the need for coherence. In some countries this balance is achieved by having the Minister of Finance set the objectives and broad parameters of macroeconomic policies, and then leaving the Central Bank free to operate within these parameters.

22 Fischer, Stanley. 1993. "The Role of Macroeconomic Factors in Growth." *Journal of Monetary Economics* 32(3): 485–512.

Fiscal policy poses similar dilemmas. Rigid fiscal rules, which set ceilings for deficits, debt, current spending, and the like, help policy makers avoid costly mistakes. There are certainly times and places in which avoidance of mistakes is the first priority and rigid rules can be essential for this purpose. However, these rules can become counterproductive if applied too strictly for too long. In the words of one of the workshop participants, fiscal and monetary rules need to be left with an element of "creative ambiguity."

The concern is that the rules may be too rigid. They may set a fixed ceiling on fiscal deficits, for example. But deficits are more or less reckless depending on how quickly an economy is growing. If GDP is increasing quickly enough, then the government can run quite a big deficit without the ratio of debt to GDP ever growing. The ambiguities do not end there. Growth may itself depend on government investment, which may relieve infrastructure bottlenecks, for example. If the government cuts this investment to meet a fiscal deficit target, growth may falter, leaving the medium-run debt-to-GDP ratio no better off than before.

Thus, pragmatism suggests that any assessment of the public finances should take account of the economy's growth rate, and the effect of public expenditure on that growth.

Savings

Just as growth depends on investment, investment depends on a country's ability to finance it—out of its own savings or from foreign sources. There are limits to the latter, however, because foreign borrowing is risky. These limits are not very precise. But when they are breached the consequences can be very costly as many debt crises remind us. What is important to keep in mind is that there is no case of a sustained high investment path not backed up by high domestic savings. This raises the question, what drives savings? There is an old controversy which remains unresolved: do savings drive investment? Or do investments generate their own savings? Probably the causation runs in both directions. It depends on whether the economy has underutilized resources that can be transformed into investment, but the truth is that experts in this area have not yet come to firm conclusions.[23]

Savings have three components: household, corporate, and government.

Government saving is the percentage of its investment that is financed out of revenues (that percentage can exceed 100 when the government covers its investment and also pays back debt). The number can be less than zero if the government is financing its current expenditure, which can include redistribution programs, with debt. To sustain adequate levels of public investment,

23 Deaton, Angus. 1999. "Saving and Growth," in Luis Serven and Klaus Schmitt-Hebbel, *The Economics of Savings and Growth.* Cambridge, UK: Cambridge University Press.

government revenues need to be high enough to support current expenditures on service delivery and a part of the investment program.

But governments are often short of revenues, and wary of imprudent borrowing. As a result, public investment is commonly crowded out by demands for current expenditures and redistribution. This partly reflects a political process that places a higher value on current consumption relative to future consumption, which is both more distant in time and less certain to materialize.[24] For public sector investment to survive, government revenue needs to be adequate to the task.

The second element of savings is corporate. Companies retain profits, rather than distributing them to shareholders, and reinvest them in the business, wherever they think the return is likely to exceed the cost of capital. This component of saving, then, is largely driven by the returns to private investment.

Companies also turn to external financing to pay for investment projects. Start-up companies, for example, often have little in the way of retained earnings to finance new ventures. Some of this extra financing can come from abroad, as is the case with FDI. But experience suggests that most of it needs to come from domestic saving.

The determinants of household savings are complex and not fully understood. They are affected by income levels, demographics, the presence or absence of social insurance systems. There may also be cultural differences that show up in the propensity to save.

Household savings may be too low to finance high levels of private investment. One reason may be the lack of secure and accessible vehicles for saving. Many poor households lack a bank account. They store their wealth in jewelry, or by investing in their own tiny businesses. In neither case is the household's saving available to other, more productive firms to invest. This lack of saving vehicles could have a first-order negative impact on growth.

Conversely, another cause of high savings can be the lack of social insurance, pensions, and public funding of social services. In many countries, households, including poor ones, save for their own retirement, their children's education, and to insure themselves in the event of ill health. These choices represent socially very costly incentives for high savings. They should not be taken as having prescriptive value.

There are very few developing countries in which savings exceed investment by large amounts, with the notable exception of oil exporters and other resource-rich countries. China's excess savings, as measured by its

24 Government saving is a matter of collective but not individual choice, and hence is determined by somewhat different factors from those that affect household saving choices. There are a few cases of required (by law) individual or household savings. Singapore is one example. It does not seem to us that this model is likely to have wide applicability.

current account surplus, recently grew from modest levels (about 3 percent of GDP) to quite high (12 percent of GDP) in 2007. That is an unusual configuration, even for China, which has had a high rate of saving and investment since its 1978 reforms. Generally, running savings well above investment levels is a bad idea except for resource-rich countries, especially during times of booming resource prices. The deferred consumption would be better enjoyed in the present. And large countries that sustain high surpluses expose themselves to the charge of mercantilism.

Countries with large oil reserves often invest a large portion of their export earnings abroad. If their resource rents are very large, it normally doesn't make sense to consume or invest them domestically. But the scale of their overseas investments has aroused concern in some quarters. It is hard to know what other options oil-exporters have. If they were not permitted to invest their oil earnings abroad, their next best strategy would be to leave the oil in the ground. That would probably not be in anyone's interest.

Financial Sector Development

A well-developed financial system can help an economy grow by mobilizing savings, allocating funds to investment, and redistributing risk. But the pattern of financial sector maturation varies considerably among countries. Here we focus on a few key issues.

If the financial system fails to reach large portions of the population, household savings will be stunted. People need a secure, accessible vehicle for storing their wealth. If the banks do not provide it, people will save less, or store their money in less liquid forms that do not serve the wider economy well.

The absence of savings channels is inequitable as well as inefficient. The same can be said of the uneven provision of other types of financial services, including credit and secure transactions at reasonable cost. The burgeoning field of microfinance is addressing these issues with beneficial effects in many countries.

Deprived of savings accounts and bank loans, the poor also often lack secure title to their physical assets. Without property rights and the means to enforce them, they may struggle to obtain a loan from a formal financial institution. This reduces their access to credit, which makes it harder for them to start a business or expand one.

As the 2007–08 credit crunch demonstrates, even well-developed financial sectors are prone to shocks and crises. In emerging economies, financial crises can have devastating consequences for growth. Multiple banks can fail and whole swathes of industry can go bankrupt. Private liabilities quickly become public ones.

Financial crises can originate at home or overseas, and they can play out within a country's border or across them.

One common cause of internal crises is unsustainable public spending. Unable to raise the resources to pay its bills, a reckless government may order the central bank to print money instead. This will end in hyperinflation, unless the central bank has enough autonomy to refuse the government's demands.

Internal crises can also result from imprudent banks. In the early stages of development, the banking system provides most of the credit in an economy. (Bond markets emerge only later, as the capacity to issue, rate, and trade these securities develops.) Careful regulation and supervision are required to prevent banks from expanding credit too far.

The worst financial crises are often those that have an external dimension, involving foreign as well as domestic capital. Indeed, the threat of such conflagrations is one reason why countries impose capital controls. There are no precise guidelines for opening up to foreign capital and minimizing the risk of financial crises. But there is now a consensus that countries should open up, removing capital controls, only in step with their financial market maturity. Excessive speed introduces unnecessary risk and excessive slowness raises the cost of capital.

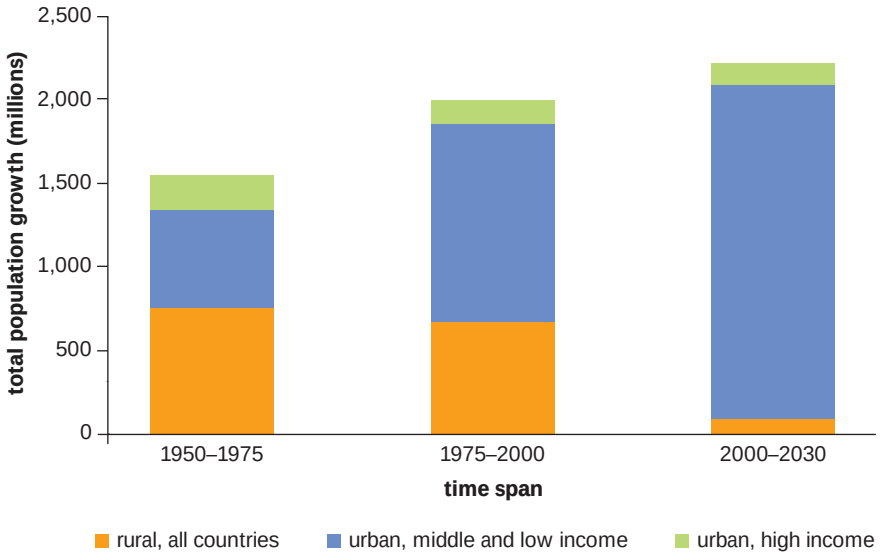
However, openness and maturity are linked. One way to speed up financial sector development is to invite foreign financial firms to invest in the sector. Just as FDI brings expertise to domestic industry, so the entry of foreign banks might raise the game of domestic ones, making them more robust. Governments will naturally want foreign banks to meet the same regulatory demands as domestic financial institutions. However, foreign banks may be reluctant to set up shop in a developing economy if they cannot conduct financial transactions fairly freely across borders. Again there are interesting trade-offs and dilemmas. The more open a financial system, the more mature it will become. But the more open a financial system, the more mature it needs to be. The quality of regulation has a direct bearing on the speed of safe capital market opening.

Urbanization and Rural Investment

This year, the world will pass an important threshold: half the world's people will live in cities. Over the next two decades, as the global population increases, most of that growth will take place in cities in the developing world (see figure 6).

People migrated from the countryside to the towns during Britain's industrial revolution, and they have done so in every industrial revolution since. It is extremely rare to achieve per capita incomes above $10,000

Figure 6 Population Growth to 2030: Low- and Middle-Income versus High-Income Countries



Source: United Nations Urbanization Prospects.

(in purchasing power parity terms) before half of the population lives in the cities. Urbanization is the geographical corollary of industrialization: as workers leave the farms for the factories, they leave the fields for the cities.

Although no country has industrialized without also urbanizing, in no country has this process been entirely smooth. Many fast-growing cities in the developing world are disfigured by squalor and bereft of public services. It is easy to conclude that urbanization is an unpleasant side effect of growth, best to be avoided. But this is a mistake. The proper response is not to resist urbanization, but to make it more orderly.

Cities thrive because of what economists call "agglomeration economies." When activities are clustered closely together, they can reap economies of scale and scope. Information also flows more efficiently. Valuable tricks of the trade seem to leak into the air, as Alfred Marshall, the great Victorian economist, observed.

But if cities thrive on scale and density, they also choke on congestion and pollution. In Cairo, the average daytime noise is 85 decibels, according to a report by Egypt's National Research Center.[25] That, *The New York Times* reports, is louder than a freight train 15 feet away.

To an economist, both the advantages of cities and their drawbacks represent "externalities" that are difficult to measure or price. (Your noise deafens me, but you do not compensate me for it. Likewise, I benefit from

25 Slackman, Michael. 2008. "A City Where You Can't Hear Yourself Scream." *The New York Times*, April 14.

copying your techniques or poaching your workers, but I do not compensate you for it.) That may be one reason why they are so hard to manage.

The traditional response to these externalities is planning and regulation. Zoning laws, for example, keep factories at a civilized distance from homes, where their noise, commotion, and pollution are less bothersome. But a delicate balance needs to be struck. Unrealistic regulations can fail or backfire. Some cannot be enforced. Others do bite, but make matters worse. If building codes are too strict, for example, cheap housing will be illegal. Nor should governments resort to planning regulations to mask what is really an underlying shortage of infrastructure. If water is not reaching every household in a dense urban area, the answer is to lay more water pipes, not to clear some households out.

Fast-growing cities need to extend infrastructure quickly. But city authorities cannot raise the money to build it at the pace required. The growth of economic activity in a city's limits often far outstrips the growth of its tax base. Therefore money will have to be provided by the central government. An alternative is to sell land or lease it. This has risks—public land can be sold too cheaply in transactions that are not arm's-length and at market prices—but the opportunity to raise large sums outweighs the dangers. In the absence of municipal financing mechanisms and an established tax base, land is one of the principal assets that can be sold and converted to needed infrastructure. Defining suitable guidelines and parameters would be a useful area of research.

As others have noted, the financial system can be as important to the growth of cities as cranes or earthmovers. Financial institutions make it possible for municipalities or private buyers to borrow the money for real estate purchases. As financial liberalization has spread, so too has housing finance. This is to be welcomed: mortgages allow property buyers to spread the cost of housing over longer periods, making it more affordable. But home lenders can be reckless, as recent events in America and Britain show. Mortgages are also the wrong answer if home building is constrained. In this case, mortgage finance will only increase the demand for a fixed supply of houses, resulting in pricier homes, not more homes.

As property prices rise in booming cities, so do the political demands for housing subsidies. Singapore used subsidized housing to narrow inequality and instill a sense of nationhood in its citizens. But it would be hard for other governments to emulate the experience of this city-state, which is small and unusually well administered. Rent subsidies distort private decisions. They also rapidly become very costly. Even America does not reach more than a fraction of eligible people with its rent subsidy.

Some people believe the problems of the cities can be solved out in the fields. Investment in rural areas might slow the tide of migrants to the cities, allowing for a more orderly urbanization.

"Ten or more years ago, the Chinese central government resisted urbanization, which the authorities thought was too rapid. This deserves to be on the list of 'bad ideas' because it ignores the importance of agglomeration efficiencies. The Chinese government has since reversed policy. It now understands the key role of urbanization in structural transformation. But urbanization poses a number of challenges. One is to develop an urban tax base and revenue system. Land rights are also extremely important: land is the most valuable asset in urban settings; how it is allocated determines how urbanization takes place. Another problem is how to subsidize housing efficiently. The pressure to subsidize housing through rent controls needs to be resisted."

—Zhou Xiaochuan

There are many good reasons to invest in agriculture. The rewards can be impressive. Agricultural research and extension yield returns of around 35 percent in Sub-Saharan Africa and 50 percent in Asia, according to the latest *World Development Report*. Moreover, in many developing countries, rural areas are where the bulk of the poor still live and work. To find jobs for this population in the urban economy will take several decades, even in the most dynamic economies. India, for example, is still about 70 percent rural. In China, which has been growing at 9–10 percent a year for almost 30 years, 55 percent of the population still lives in the countryside. Rural populations are often underserved by public services, which prompts some to seek better education or health care in the cities. The evidence also suggests that agricultural growth reduces poverty faster than growth in manufacturing or services.

Governments should invest in agriculture, then, insofar as such investments are justified on their own merits. But as a way to slow the growth of cities, rural investment is likely to disappoint. In many countries, especially in Africa, the growth of cities is mostly due to natural population increases and not migration. In addition, if rural investment raises the productivity of agriculture, it may simply reduce the demand for farm labor, adding to the pressure to leave the land.

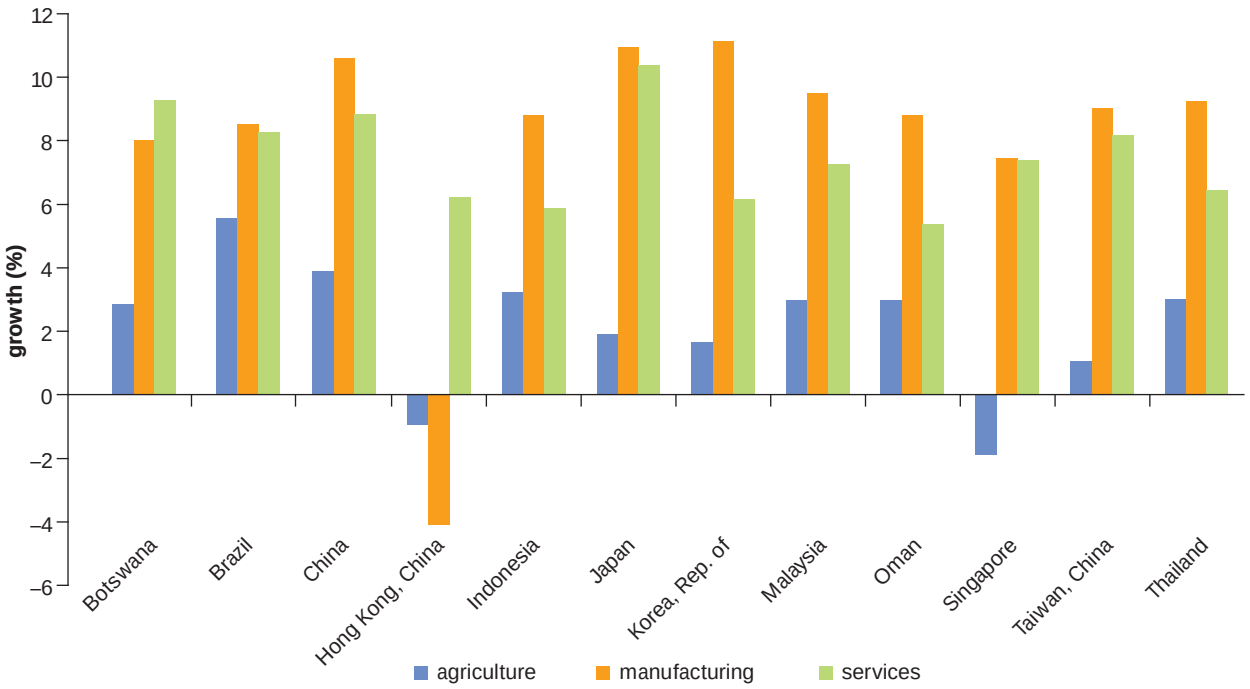
If history is any guide, large-scale migration to the cities is part and parcel of the transformation economies must go through if they are to grow quickly. No country has ever caught up with the advanced economies through farming alone. In countries that in the last 50 years sustained episodes of 7 percent growth or more over 25 years or longer, manufacturing and services led the way (see figure 7). In a few cases agriculture actually shrank. Of course, prior gains in agricultural productivity may have freed up workers to fill the factories. But by the same token, the outmigration of surplus workers from agriculture will, at a certain point, allow land to be consolidated into larger plots. This should permit more capital-intensive and productive farming.

Ultimately a successful city will need urban planning, building codes, and robust property rights. It will need drainage, sewerage, rapid transit, and a sophisticated financial system capable of mobilizing the funds for these. But accumulating this infrastructure, expertise, and sophistication takes time. Governments should avail themselves of whatever shortcuts they can find, including the experience and expertise of other cities that have gone through this turmoil before them.

Equity and Equality of Opportunity

It is our belief that equity and equality of opportunity are essential ingredients of sustainable growth strategies. The evidence from both high and low

Figure 7 Growth Rates by Sector



Source: See appendix, p. 114.

cases supports this view. The benefits of brisk growth are spread widely but not evenly. The rural poor do gain. But the experience of sustained growth in the modern era clearly suggests city-dwellers gain more—and to some extent this is inevitable. In the early stages of development, measured productivity in the cities is often 3–6 times that in the rural areas. As people move across this divide, measured inequality increases. This rise is not permanent, but it can take decades to run its course. The extent of inequality needs to be managed.

Albert Hirschman, the great development economist, compared this process to a two-lane traffic jam. If one lane begins to move, drivers in the other at first take comfort, inferring that their lane will also move soon. But the longer they remain stuck, the more frustrated they will become. The other lane becomes a provocation, not a consolation.[26]

The workshop on this topic made an important distinction between equity and equality of opportunity. The former concept refers to outcomes or results: people differ greatly in the incomes they earn, the health they enjoy, the security they possess, and so on. The latter idea, equality of opportunity, refers to starting points. It turns on such things as access to nutrition, education, and job opportunities.

26 Hirschman, Albert. 1981. "The Changing Tolerance for Income Inequality in the Course of Economic Development," in *Essays in Trespassing*. Cambridge, UK: Cambridge University Press.

People care about both kinds of equality. But they understand that markets do not produce equal outcomes. They will tolerate this inequality, provided governments take steps to contain it. Generally, this means two things. One is making sure that income and essential services are extended to the poorer part of the population. The second, more controversial, is addressing the upper end of the income distribution, which in many cases exhibits vast accumulating wealth and appears to be living in a different, much richer country. Sharing this wealth through the tax system, and appropriate spending programs, including the funding of service provision and public sector investment, is an important part of social and political cohesion, and hence of the sustainability of the growth process. Judgment is required here. Carried to excess, redistribution can damage incentives and deter investment and risk taking.

"In many ways, the more equitable the growth, the more sustainable it's likely to be, because there will be less controversy, less disagreement, less resistance, and also there's an enormous amount of talent in populations that needs to be tapped. Excluding some parts of the population, whether by gender, age, or ethnicity, from the benefits of growth loses the talents that they have. So in my view, it is not only desirable that they go together, it's useful that they go together."

—Robert Solow

Inequality of opportunity, on the other hand, does not involve trade-offs and can be toxic. This is especially so if opportunities are systematically denied to a group due to its ethnicity, religion, caste, or gender. Such injustices undermine social peace and spark political unrest. They will ultimately jeopardize buy-in and derail the economy's growth strategy.

The distribution of income in successful, high-growth economies varied a lot: Botswana had a Gini coefficient of 0.61 in 1993, Indonesia 0.34. But all showed a commitment to equality of opportunity. Failure on this score harms the economy directly, by leaving talents underexploited. It also distorts the pattern of investment. According to a paper for the Commission by Abhijit Banerjee of the Massachusetts Institute of Technology, the middle ranks and the poor underinvest in their businesses, because they are denied equal access to capital. The rich, on the other hand, invest too much.[27]

Inequality of opportunity also sows longer-term dangers. If one group is persistently and flagrantly excluded from the fruits of growth, the chances are they will eventually find a way to derail it. To extend Hirschman's metaphor, they will try to force their way into the other lane, disrupting traffic in both. Conversely, evidence from many countries suggests people will make great sacrifices for the sake of economic progress if they believe *their* children and grandchildren will enjoy a fair share of the rewards.

How can governments safeguard equality of opportunity and contain inequality of outcomes? The latter goal may be served by redistribution, over and above the informal sharing arrangements that often prevail in extended families and tight-knit communities. Equality of opportunity is best served by providing universal access to public services like health and education, and by meritocratic systems in government and the private sector.

27 Banerjee, Abhijit. 2007. "Investment Efficiency and the Distribution of Wealth." Background Paper, Commission on Growth and Development.

It is also served by building what might be called the infrastructure of popular capitalism. Titling programs, inspired by the work of the Peruvian economist Hernando de Soto, give poor people secure rights to their property. Microfinance and "mesofinance" allow small- and medium-scale entrepreneurs to invest more than they can save, loosening the knots identified by Banerjee. Over the past 15 years, donors, businesses, and social entrepreneurs have embraced these ideas and made considerable progress on the ground.

Some of the sharpest divisions fall within the household, where women lack the opportunities their male relatives enjoy. Some countries still struggle to get girls through school: almost one out of five girls who enroll does not complete primary school. They are encumbered by domestic chores or deterred by the lack of basic facilities like bathrooms. This denial of opportunity can be passed on to the next generation: women who lack a primary school education are less likely to send their children to school. Indeed, their children are only about half as likely to survive infancy.[28] It seems to us that the logical place to try to break this cycle is to focus on the obstacles (financial, safety, employment opportunities, sanitary facilities, and other) that prevent girls from completing the journey from school entry to productive employment. Young women play a pivotal role in education, health, and fertility rates; they are also potentially successful economic agents. Therefore enabling women to move successfully through education to productive employment will have a very high payoff in terms of long-term growth and poverty reduction.

"There is no contradiction between equality, redistribution and growth. Quite the contrary. Prosperity that is shared is not only morally right, it also gives people a chance to lift themselves out of poverty, creates legitimacy for responsible economic policies and can have an enhancing effect on long-term growth and prosperity."

—Carin Jämtin

Regional Development

Just as the impact of growth is felt unevenly across the population, so it falls unevenly across regions. Some states, provinces, and cities prosper rapidly, whereas others can lag behind. These spatial patterns can reflect the fundamentals of geography—a harbor or an ore deposit, for example—or the history of agglomeration: firms migrate to a location because others have moved there.

Governments can influence these forces, by deciding where to invest and build infrastructure, thus making the spatial distribution of opportunity more equal. But they should resist the temptation to counteract them, however politically demanding it can be at times. Regional policies should not try to produce uniformity across space in the pattern of growth and development.

"Unity, not uniformity" is a guiding principle of the European Union's regional development programs, which will amount to €347.4 billion over

28 UNICEF. *The State of the World's Children 2007: The Double Dividend of Gender Equality.*

the seven years to 2013. These programs try to reduce income and wealth gaps across countries and regions over time. As a result of recent enlargements, the most prosperous member of the union, Luxembourg, is now seven times richer than the poorest one, Romania. The EU's regional policies try to add to its "cohesion," which includes a sense of belonging to the union and owing obligations to it. It is ready to collaborate with developing countries to share experiences. China, Brazil, and India have already taken up this offer.

Firms base their location decisions on the provision of infrastructure, delivery of public services, and other public policies. A sound regional policy will invest in less developed areas to make them more competitive and thus more attractive to private investors.

If workers are also mobile, they can and do move away from depressed regions where labor is in excess supply. Thus, labor mobility is a partial substitute for regional policy. It is not a full substitute because some people, such as the elderly, will never be very mobile. And in many countries languages place a limit on mobility, as in the EU. Over time, the educational system should reduce these barriers to mobility. Nevertheless, the priority attached to regional investments should depend on the mobility of the people they are trying to help.

Such policies will also have a greater impact if they seek to improve labor mobility. In the EU, mobility is a long-term goal. Some obstacles, such as language barriers, are harder to remove than others. The EU is, for example, striving to ensure that credentials and licenses awarded in one member state are recognized in another.

Governments should try to make sure that workers move for the right reasons—in pursuit of a better job, for instance—but not the wrong ones—fleeing substandard education or health care, for example. The central government will need to invest in urban infrastructure, because emerging cities cannot raise money, either from taxes or borrowing, sufficient to the task. Investments in roads, rail, and telecommunications make it easier for labor to move, albeit in some respects less necessary. Indeed, many services can now be delivered at a distance, thanks to advances in communications technologies.

One important aspect of regional policy is fiscal. Developing countries raise the bulk of their taxes at the national level. Thus, the central government's fiscal powers dwarf those of state or local governments. And yet responsive government often requires a decentralized administration, in which decisions are taken close to home.

How, then, should the central government share its tax receipts with states, provinces, and municipalities? Countries vary enormously in how they divide revenues and responsibilities. In China, for example, the central government appoints governors and mayors, who are rotated from one

province to another. Their performance is judged against objectives set by the central government. Compared with more formally democratic systems, there is less local input to objectives and policies. This can create problems if local information is required to guide a policy.

Democracies usually give more voice to localities. But even in democracies, some local governments perform far better than others. This rich variation should give social scientists plenty to say about what works and what does not. Unfortunately, that is not the case: thus far, the variety of cases is bewildering rather than revealing.

Regional diversity has its advantages, however. If different parts of the country try different things, they can learn from each others' successes and mistakes. Demonstration effects can be a powerful stimulus for reform, as can competition between regions. For this reason, the spread of the mobile phone and the extension of information technology to large numbers of people may have an enormous influence on governance. This technology makes it easier for people to know what is happening next door, or on the other side of the country, inviting them to draw comparisons.

The Environment and Energy Use

It is only a slight exaggeration to say that most developing countries decide to grow first and worry about the environment later. This is a costly mistake. Developing economies are diversifying quickly and investing heavily. In doing so, they respond to price signals. But those prices rarely reflect environmental costs. As a consequence, their investments will be misguided. Industry will install the wrong equipment and locate in the wrong places. Buildings will be designed without due regard to the energy they consume. It is costly to reverse or ameliorate these mistakes; cheaper not to make them in the first place.

It is important to emphasize that developing countries do not have to adopt the most advanced environmental standards immediately. These standards may be unaffordable. But they should plan the evolution of the economy with the environmental costs in mind.

In many parts of the developing world, energy is subsidized. This is also a mistake. According to research by IMF economists, Indonesia and Yemen spent more on fuel subsidies in 2005 than on health and education combined.[29] Although removing the subsidies is politically difficult, the costs of not doing so are high—and rising as the price of energy climbs. The cost is not only fiscal. These subsidies also distort the evolution of the economy, making energy-intensive industries artificially attractive. Moreover, as the

29 Coady, David, et al. 2006. "The Magnitude and Distribution of Fuel Subsidies." IMF Working Paper 06/247. International Monetary Fund, Washington, DC.

world mobilizes to combat climate change, these subsidies contribute to the problem. They may also hamper countries in their trade negotiations with the developed world, where some people now argue for higher tariffs to offset these carbon subsidies.

Environmental safeguards should not be seen simply as a concession the developing world makes to the developed. The poor suffer the most from many kinds of pollution. Effluents contaminate rivers in which the poor bathe and obtain drinking water; particulates thicken the air in neighborhoods where the poor live. Early attention to environmental standards serves the interests of equity as well as growth.

Once governments have decided to tackle this problem, they face a choice of how to do it. They can impose quantitative limits on effluents, raise prices on pollution, or issue a fixed number of tradable licenses, which give their holder the right to emit a given amount of pollution, sulfur dioxide, for example. Prices or tradable permits are efficient: they encourage polluters to find the cheapest way to cut effluents. The disadvantage is that it may take several iterations before acceptable targets are hit. Direct, quantitative caps have the opposite advantages and disadvantages: they limit effluents with greater certainty, but also at a greater cost.

Effective Government

In the first part of this report we dwelled at some length on the art of policy making. But government is not only a policy maker. It is also a service provider, an investor, an arbitrator, and an employer, often a big one. And while a government's choice of policies matters a great deal, it is also important that it implement those policies well. That is the issue to which we now turn.

The effectiveness of government depends on the talent it can attract, the incentives it fosters, the vigor of its debates, and the organizational structures it imposes. Some of the fast-growing economies prided themselves on their cadres of highly trained, well-paid civil servants, often recruited by competitive selection. An elite civil service may not come cheap. But poorly motivated, ill-prepared civil servants are tremendously costly.

Recruiting the right people is a start. Those recruits must then be given the right incentives. Otherwise, their carefully selected talents will be devoted to turf wars, office politics, or self-dealing.

That last vice—corruption—must be fought vigorously and visibly. Government leaders send powerful signals about values and the limits of acceptable behavior when they decide on how to respond to cases of misbehavior. Mild responses send the clear signal that while the misbehavior is not right, it is not all that serious. In other cases, leaders go out of their way to name and shame offenders, thus sending a clear message to others.

One way to sharpen incentives for good performance is to award promotions and salary increases on merit. But how is a civil servant's merit to be judged? If too much discretion is left to his or her superiors, they will be free to dispense promotions as patronage to their favorites. This is a legitimate concern, which explains why many bureaucracies spurn meritocracy in favor of rigid seniority systems that hand out promotions based on years of service. Such a system leaves no room for favoritism, at the cost of leaving little room for initiative either.

A better solution is to develop more objective measures of a civil servant's performance, which can be used to confirm or question a superior's judgment. Such metrics are being devised. India, for example, has invented a quality standard for bureaucracies similar to the business quality standards formulated by the International Organization for Standardization. This is one of several areas in which civil services around the world could probably learn from experiments in other countries. Although they may be reluctant to believe it, taxpayers might benefit from allowing their public servants the occasional trip abroad to exchange ideas at international training institutes and the like.

The civil service as a whole should also be held to regular account. Unlike other professions, the bureaucracy does not face a competitive test in the marketplace each day. As a result, none of its functions or lines of activity are weeded out by competitive failure. They can instead survive long into obsolescence.

Where the government provides a service, it should be forced to compete with alternative providers from the private or nonprofit sectors. In addition, it should collect feedback from the citizens it serves. Where this is not possible or not sufficient, bureaucracies should also be subject to periodic scrutiny by an independent evaluator.

These evaluators should aim to identify and remove some of the redundant layers that bureaucracies collect over the years.

The Quality of Debate

A country's fortunes depend on stopping bad policies as well as implementing good ones. Fallacies and follies must be identified, criticized, and rejected. Judging by the experiences of the members of the Commission and other leaders, the importance of this function should not be underestimated. Successful countries owe a lot to an environment in which all ideas, good and bad, are exposed to review and vigorous debate.

The policy-making process need not be confined to government circles. In many countries, the cast of actors is much larger, encompassing think tanks, the academy, the press, and independent review commissions. More autocratic countries may lack some of these elements, such as a fiercely

independent press. This can leave such regimes vulnerable to policy mistakes that a freer debate might have uncovered and resisted.

However, there are many examples of highly successful autocracies that nonetheless encouraged vigorous debate. The high-growth cases include a number of countries that were dominated by a single party for at least part of their growth process. In all of these countries, the quality of the debate was high, although it was sometimes hidden from the public and outside world. It seems fair to conclude that successful countries differ more in the visibility of their policy debates than in their vigor.

Bad Ideas

Debates help clarify good ideas, subjecting them to scrutiny and constructive criticism. But debates can also be infected by bad ideas. This poses two difficulties for policy makers. First they must identify bad ideas, because specious proposals can often sound promising. Then, they must prevent them from being implemented. An illustrative list of "bad ideas", which are nonetheless often brought into the debate and should be resisted, is offered below. We hasten to add that just as our recommendations for good policies are qualified by the need to avoid one-size-fits-all approaches and to tailor the policies to country-specific circumstances, our list of bad policies must also similarly be qualified. There are situations and circumstances that may justify limited or temporary resort to some of the policies listed below, but the overwhelming weight of evidence suggests that such policies involve large costs and their stated objectives—which are often admirable—are usually much better served through other means.

- Subsidizing energy except for very limited subsidies targeted at highly vulnerable sections of the population.
- Dealing with joblessness by relying on the civil service as an "employer of last resort." This is distinct from public-works programs, such as rural employment schemes, which can provide a valuable social safety net.
- Reducing fiscal deficits, because of short term macroeconomic compulsions, by cutting expenditure on infrastructure investment (or other public spending that yields large social returns in the long run).
- Providing open-ended protection of specific sectors, industries, firms, and jobs from competition. Where support is necessary, it should be for a limited period, with a clear strategy for moving to a self-supporting structure.
- Imposing price controls to stem inflation, which is much better handled through other macroeconomic policies.
- Banning exports for long periods of time to keep domestic prices low for consumers at the expense of producers.

- Resisting urbanization and as a consequence underinvesting in urban infrastructure.
- Ignoring environmental issues in the early stages of growth on the grounds that they are an "unaffordable luxury."
- Measuring educational progress solely by the construction of school infrastructure or even by higher enrollments, instead of focusing on the extent of learning and quality of education.
- Underpaying civil servants (including teachers) relative to what the market would provide for comparable skills and combining this with promotion by seniority instead of evolving credible methods of measuring performance of civil servants and rewarding it.
- Poor regulation of the banking system combined with excessive direct control and interference. In general, this prevents the development of an efficient system of financial intermediation that has higher costs in terms of productivity.
- Allowing the exchange rate to appreciate excessively before the economy is ready for the transition towards higher-productivity industry.

The list above is illustrative and not exhaustive. Individual countries will have their own list of practices that appear to be desirable but are ineffective. Relentless scrutiny of policies should be an essential element in rational policy making. This due diligence needs to be doubled for policies of the type listed above.