us a better appreciation of the role that anticipatory, forward-looking behavior by firms, workers, and consumers plays in shaping economic outcomes. The "efficient market hypothesis," built on the joint supposition of rational expectations *and* frictionless markets, taught us about the good that financial markets can do in the absence of transaction costs. These ideas made useful contributions to economics and to economic policy. But they did not upend everything we already knew. They simply gave us additional tools with which we could anticipate the economic consequences of different circumstances.

An honest practitioner of academic economics should respond with a blank stare when asked what the implications of his work are for policy. "That depends on so many other things," would be the appropriate answer. Frustrating perhaps for the student or the journalist, but correct nevertheless. When economists mistake academic fashions for the real thing, they do considerable damage. When the hedgehogs' highly stylized models become the basis for one grand narrative, the world needs to run for cover.

The antidote to these tendencies requires us to maintain a healthy skepticism toward the reigning economic fad of the day, to keep history's lessons alive, and to rely on local and experiential knowledge in addition to economic theory. The world is better served by syncretic economists and policy makers who can hold multiple ideas in their heads than by "one-handed" economists who promote one big idea regardless of context.[28]

7

Poor Countries in a Rich World

In the first lecture I give them, I confront my economic development students at Harvard with the following teaser: Would you rather be rich in a poor country or poor in a rich country?

The question typically leads at first to a lot of nervous shuffling in the seats and puzzled looks. So I clarify the question. I ask them to consider only their own consumption and not worry about the well-being of others in the society they choose. I then spell out what I mean by "rich" and "poor." I tell them that they should think of a rich person as someone in the top 10 percent of a country's income distribution while a poor person is in the bottom 10 percent. Similarly, a rich country is in the top decile of all countries ranked by average income per person while a poor country is in the bottom decile of that list. Now, I say, you are ready to answer the question. Which would you choose?

The students are graduate students and have been to developing countries, so they have all seen the flashy cars the wealthy drive and the mansions where they live. Most have little hesitation in responding that they'd rather be rich in a poor country.

That is the wrong answer. The correct answer is "Poor in a rich country"—and it's not even close. The average poor person in a rich country, according to my parameters, earns *three times more* than the average rich person in the poor country ($9,400 versus $3,000, adjusted for differences in purchasing power across countries).[1] Disparities in other aspects of well-being, such as infant mortality, go the same way too. The poor in a rich country have it much, much better than the rich in the poor country.

Students get it wrong because they don't realize what a minute share of society those BMW-driving superrich represent—no larger perhaps than one hundredth of 1 percent of the total population. When we expand the numbers to cover the full top 10 percent of a typical poor country, we have come down to income levels that are a fraction of what most poor people in rich countries make. It is an easy mistake to make. I once had one of the world's foremost experts on economic development in the audience when I asked the question, and he gave the wrong answer too!

That it is far better to be poor in a rich country than rich in a poor country tells us something fundamental about today's global economy. Disparities in income (as well as health and other indicators of well-being) are much larger across nations than they are within nations. The country you are born in largely determines your life possibilities.

It wasn't always so. At the onset of the Industrial Revolution, the gap between the richest and poorest regions of the world was of the order of 2:1. Today, the same ratio stands at 20:1.[2] The gap between the richest and poorest *country* has risen to about 80:1. Over time, some parts of the world—Western Europe, America, and later East Asia—took off while the rest grew very slowly, when at all, and often lost ground after bursts of expansion. In the words of my Harvard colleague, Lant Pritchett, the global economy experienced "divergence, big time."[3]

By the middle of the twentieth century the world was divided between a small group of wealthy countries and a large number of others struggling under varying degrees of poverty. The next six decades witnessed extraordinary growth on a global scale. But except for a handful of countries, mostly in Asia, few poor countries were able to close the gap between them and the advanced countries in a sustained manner. Luckily, the successful countries (notably China) were home to hundreds of millions of very poor people, so the development record of the last few decades is in fact quite impressive. Other countries were unable to match this performance, ensuring that the chasm between rich and poor nations would widen to unprecedented depths.

Why so much poverty amidst plenty? What role did globalization play in the "great divergence"? What can countries do to redress poverty? These are the questions that this and the next chapter address.

Globalization and the Great Divergence

The proximate cause of poverty is low productivity. Poor people are poor because their labor enables them to produce too little to adequately feed and house themselves, let alone provide for other needs such as health and education. Low productivity in turn has diverse and multiple causes. It may be the result of lack of credit, which prevents producers from making the investments that would increase their output and hence incomes. It may be result of lack of access to new and better technologies. It may be due to lack of skills, knowledge, or job opportunities. It may be the consequence of small market size, which depresses the profitability of acquiring new equipment and technologies. Or it may be due to exploitative elites, typically in cahoots with the government, who block any improvement in economic conditions that would threaten their power. The ultimate reasons for poverty can be traced to one or more of these causes.

Globalization promises to give everyone access to markets, capital, and technology, and foster good governance. In other words, globalization has the potential to remove all of the deficiencies that create and sustain poverty. As such, globalization ought to be a powerful engine for economic catch-up in the lagging regions of the world! And yet the last two centuries of globalization have witnessed massive economic divergence on a global scale. How is that possible?

This question has preoccupied economists and policy makers for a very long time. The answers they have produced coalesce around two opposing narratives. One says the problem is "too little globalization," while the other blames "too much globalization." At different times in history, each of these narratives has found favor and they have experienced varying appeal in different parts of the world. But the debate on globalization and development ultimately always comes back to the conundrum framed by these competing narratives: If we want to increase our economic growth, should we throw ourselves open to the forces emanating from the world economy, or protect ourselves from them?

Unfortunately, neither of these two narratives offers much help in explaining why some countries have done better than others, and therefore neither is a very good guide for policy. The truth lies in an uncomfortable place, the middle. Globalization does greatly enhance the potential for economic growth, but the best way to take advantage of it is not to remove the transaction costs that block full integration to the maximum extent possible. A "thin" version of globalization, à la Bretton Woods, seems to work best. Consider a metaphor I once heard from a student from China (appropriately enough): keep the windows open, but don't forget the mosquito screen. This way you get the fresh air but you also keep the bugs away.

Globalization's Uneven Impact During the Nineteenth Century

The Industrial Revolution spread from England to the European Continent and to some of the lands of recent settlement (North America, Australia, and New Zealand), but did not go much further. The world economy soon split between an increasingly industrial core and a largely raw materials–producing periphery. Globalization played the parts of both Dr. Jekyll and Mr. Hyde in this. It enabled new technologies to disseminate in areas with the requisite preconditions, but also entrenched and accentuated a long-term division between the core and the periphery.

Those parts of the world which proved receptive to the forces of the Industrial Revolution shared two advantages. They had a large enough stock of relatively educated and skilled workers that could fill up and run the new factories. They also had sufficiently good institutions—well-functioning legal systems, stable politics, and restraints on expropriations by the state—to generate incentives for private investment and market expansion. With these pre-conditions, much of Continental Europe was ready to absorb the new production techniques developed and applied in Britain. Chalk up one for globalization.

Elsewhere, industrialization depended on "importing" skills and institutions. Intercontinental labor mobility was a tremendous advantage here. Where Europeans settled en masse, they brought with them both the skills and the drive for more representative, market-friendly institutions that would promote economic activity alongside their interests. The consequences were disastrous for the native populations, who perished in large numbers courtesy of European aggression and germs. But the regions of the world that the economic historian Angus Maddison has called "Western offshoots"[4]—the United States, Canada, Australia, and New Zealand—were able to acquire the necessary prerequisites thanks to large immigrations. Supported also by sizable capital flows from Europe, these economies would eventually become part of the industrial "core." Chalk up two for globalization.

Colonization's impact on other parts of the world was quite different. When Europeans encountered inhospitable conditions that precluded their settlement in large numbers or began to exploit natural resources that required armies of manual workers, they set up institutions that were quite different from those in the Western offshoots. These purely "extractive" institutions were designed to get the raw materials to the core as cheaply as possible. They entailed vast inequalities in wealth and power, with a narrow elite, typically white and European, dominating a vast number of natives or slaves. Colonies built on the extractive model did little to protect general property rights, support market development, or stimulate other kinds of economic activity. The plantation-based economies in the Caribbean and the mineral economies of Africa were typical examples. Studies by economists and economic historians have established that this early experience with institutional development—or lack thereof—has produced a debilitating effect on economies in Africa and Latin America that is still felt today.[5] Chalk up one *against* globalization.

Those regions of the world that avoided European colonization weren't exactly shielded from the adverse effects of globalization. The free trade treaties that European powers imposed on peripheral regions froze their initial comparative advantage in raw materials. Low tariffs combined with the decline in shipping costs exposed their textile and other nascent industrial activities to competition from Britain and decimated them. In the Ottoman Empire, for example, textile imports shot up to capture nearly 75 percent of the home market by the 1870s, up from a mere 3 percent in the 1820s.[6]

Once the lines were clearly drawn between industrializing and commodity-producing countries, there were strong economic dynamics that reinforced the demarcation. Globalization played a crucial role here by deepening the international division of labor. Commodity-based economies faced little incentive or opportunity to diversify. As transport costs fell during the nineteenth century and growth in the industrial core fed demand, these economies experienced commodity booms. This was very good for the small number of people who reaped the windfall from the mines and plantations that produced such commodities, but not very good

for manufacturing industries that were squeezed as a result.[7] International trade worked just as in textbook models: profits rose in economic activities in which countries had comparative advantage, but fell elsewhere.

International trade induced industrial countries to keep investing in skills, technology, and other drivers of economic growth. It also encouraged families to have fewer, better-educated children, in light of the high returns to skills that modern manufacturing industries brought. These effects were reversed in the developing countries of the periphery. Specialization in primary commodities did not encourage skill accumulation and delayed the reduction in fertility and population growth. Birth rates remained high in the developing world well into the twentieth century, unlike the industrialized countries, which experienced sharp declines in fertility toward the end of the nineteenth century. In the words of the economists Oded Galor and Andrew Mountford, commodity-exporting countries gave up productivity in exchange for population.[8]

The countries of the periphery not only failed to industrialize, they actually lost whatever industry they had. They *deindustrialized.* At the dawn of the Industrial Revolution, Asia and Latin America had levels of industrial activity roughly similar to Europe's. Europe experienced a nearly sixfold increase in these levels between 1750 and 1913. Asia and Latin America meanwhile witnessed a decline to less than a third of their initial level.[9] In 1900, developing nations produced only about half the quantity of manufactured goods that they did in 1830. As the economic historian Paul Bairoch, the source of these estimates, writes: "There cannot be any question but that the cause of de-industrialization in the Third World lay in the massive influx of European manufactured goods, especially textiles, on the markets of these countries."[10] Chalk up two against globalization.

The pre-1914 international division of labor did produce wealth in commodity-exporting countries. But just as in today's oil-rich economies, the wealth was highly concentrated and ended up stifling institutional and productive development. Where independence had not yet arrived, it accrued to the metropolitan powers. Where it had, it went to a narrow group of domestic elites.

Argentina, to take the leading example, became one of the world's richest economies on the back of the produce of its fertile lowlands, its *pampas*. With its chic boulevards, polo clubs, grand opera house, Eton-educated children, and refined aristocracy, Buenos Aires could outdo any of the major European capitals. This wealth came at the expense of crippling future economic development. Exports of grains and livestock along with large infusions of British capital mainly benefited large landowners who had little interest in diversifying the economy or building better market-supporting institutions. The contrast with the United States is instructive. There Northern industrialists and Western farmers gained the upper hand over Southern plantation owners and fostered broader-based institutions and industrialization, on the back of high import tariffs.[11]

The Japanese Exception

So geography and natural endowments largely determined nations' economic fates under the first era of globalization. One major exception to this rule would ultimately become an inspiration to all commodity-dependent countries intent on breaking the curse. The exception was Japan, the only non-Western society to industrialize before 1914.

Japan had many of the features of the economies of the periphery. It exported primarily raw materials—raw silk, yarn, tea, fish—in exchange for manufactures, and this trade had boomed in the aftermath of the opening to free trade imposed by Commodore Perry in 1854. Left to its own devices, the economy would have likely followed the same path as so many others in the periphery. But Japan had an indigenous group of well-educated and patriotic businessmen and merchants, and even more important, a government, following the Meiji Restoration of 1868, that was single-mindedly focused on economic (and political) modernization. The government was little moved with the laissez-faire ideas prevailing among Western policy elites at the time. In a document that could be called the world's first development plan, Japanese officials made clear that the state had a significant role to play in developing the economy, even though its actions "might interfere with individual freedom and with the gains of speculators."[12]

Many of the reforms introduced by the Meiji bureaucrats were aimed at creating the infrastructure of a modern national economy: a unified currency, railroads, public education, banking laws, and other legislation. Considerable effort also went into what today would be called "industrial policy"—state initiatives targeted at promoting new industries. The Japanese government built and ran state-owned plants in a wide range of industries, including cotton textiles and shipbuilding. Even though many of these enterprises ended as failures, they produced important demonstration effects and trained many skilled artisans and managers who would subsequently ply their trade in private establishments. These enterprises were eventually privatized, enabling the private sector to build on the foundations established by the state. The government also paid to employ foreign technicians and technology in manufacturing industries and it financed training abroad for Japanese students. In addition, as Japan regained tariff autonomy from international treaties, the government raised import tariffs on many industrial products to encourage domestic production. These efforts paid off most remarkably in cotton textiles, where Japan established by 1914 a world-class industry that was able to displace British exports not just from the Japanese markets but from neighboring Asian markets as well.[13]

Japan's militarist and expansionist policies in the run-up to World War II tarred these accomplishments, but its achievements on the economic front demonstrated that an alternative path was available. It was possible to steer an economy away from its natural specialization in raw materials. Economic growth was achievable—even if a country started at the wrong end of the international division of labor—if you combined the efforts of a determined government with the energies of a vibrant private sector. The key was not more or less globalization, but just the right kind of globalization.

These lessons would be relearned in the decades that followed World War II.

The East Asian "Miracle"

One hundred years after the Meiji bureaucrats produced their first development plan, Japan was a major economic power with significant say in global institutions.[14] It had become the second largest shareholder in the World Bank, forcing the institution's management to pay more attention to its views. Masaki Shiratori, Japan's executive director at the World Bank, one of twenty-four country representatives who oversee the institution's operations, was growing increasingly uncomfortable with the policy advice the Bank gave to developing nations. He and his colleagues in Japan's powerful Ministry of Finance felt that this advice relied too much on the American preference for a free market model and underplayed the role of the state in promoting industrialization and development. In their view, the World Bank did not pay enough attention to the lessons of Japan's own development experience.[15]

The Japanese government pushed the Bank to prepare a study of the "Asian miracle," agreeing also to pay for the bulk of it. The miracle in question referred not only to Japan's experience but also to that of seven other East and Southeast Asian economies that had grown very rapidly since the early 1960s—South Korea,

Taiwan, Hong Kong, Singapore, Malaysia, Thailand, and Indonesia. All of these countries had benefited enormously from exports, and hence from globalization. But none, with the exception of the British colony of Hong Kong, came even close to being free market economies. The state had played an important guiding and coordinating role in all of them.

The World Bank's report was eventually released in 1993 with the title *The East Asian Miracle: Economic Growth and Public Policy.* Produced by a large team of economists and consultants, and encompassing nearly 400 pages of text, charts, and statistical analysis along with more than 40 background studies, it could lay claim to being the most authoritative analysis of the subject. But more than anything else, the report demonstrated the World Bank's inability to fashion a coherent account of how Asian nations had managed to grow so rapidly. There was too much state intervention in Asia for it not to have had some beneficial effect, yet the Bank did not want to suggest that state intervention works. Fixated on an absolute distinction between markets and state intervention, the Bank could not see how the two could mutually reinforce each other. The resulting report proceeded in a schizophrenic manner and presented a deeply contradictory argument.

The analysis of financial markets—drafted by Joe Stiglitz, well known for his skeptical views on financial liberalization—painted a positive picture of the Japanese and South Korean governments' controls: ceilings on interest rates, credit subsidies targeted at new industries, and restrictions on international capital flows. This part of the report accepted the Japanese argument that government-supported loans to industry had played a positive role in accelerating industrialization and growth. Yet in other chapters the line was that industrial policies—the promotion of specific industries through government inducements—had not worked and should not be advocated for other developing nations. Depending on which chapters you read, you would have come away with a very different view as to whether Asian countries had succeeded because of their governments' efforts to promote new industries or despite these efforts.[16]

Asia's economic experience violates stereotypes and yet offers something for everyone. In effect, it acts as a reflecting pool for the biases of the observer. If you think unleashing markets is the best way to foster economic development, you will find plenty of evidence for that. If you think markets need the firm commanding hand of the government, well, there is much evidence for that, too. Globalization as an engine for growth? East Asian countries are a case in point. Globalization needs to be tamed? Ditto. However, if you leave aside these stale arguments and listen to the real message that emanates from the success of the region, you find that what works is a combination of states and markets. Globalization is a tremendously positive force, but only if you are able to domesticate it to work for you rather than against you.

Consider two of the most successful countries of the region: South Korea and Taiwan. In the late 1950s, neither of these economies was much richer than the countries of sub-Saharan Africa. South Korea was mired in political instability and had virtually no industry, having lost whatever it had to the more developed North Korea. Taiwan too was a predominantly agricultural economy, with sugar and rice as its main exports. The transformation that the two economies began to experience in the early 1960s placed them on a path that would turn them into major industrial powers.

Their strategies in many ways mirrored Japan's. They required first a government that was single-mindedly focused on economic growth. Prior land reform in both countries had established some space for governments to act independently from landed elites. Both countries also possessed an overarching geopolitical motive. South Korea needed to grow so it could counter any possible threats from North Korea. Taiwan, having given up on the

idea of reconquest of mainland China, wanted to forestall any possible challenge from the Communists. In many parts of the world, regional hostilities become an excuse for building a strong state at the expense of the economy; think, for example, of the Middle East. But the governments in South Korea and Taiwan understood that achieving their political and military goals required rapid economic growth as well. In particular, developing industrial capabilities and a strong manufactured exports base became the predominant objective of both governments' policies.

This objective was accomplished by unleashing the energies of private business. Even though both governments invested heavily in public enterprises during the 1960s, this investment was designed to facilitate private enterprise—by providing cheap inputs, for example—and not to supplant it. One plank of the strategy called for removing the obstacles to private investment that stifled many other low-income countries: excessive taxation, red tape and bureaucratic corruption, inadequate infrastructure, high inflation. These were improvements in what today would be called "investment climate."

Equally important were interventionist policies—government incentives designed to stimulate investments in modern manufactures. Both governments designated such industries as "priority sectors" and provided businesses with generous subsidies. In South Korea, these took the form largely of subsidized loans administered through the banking sector. In Taiwan, they came in the form of tax incentives for investments in designated sectors. In both countries, bureaucrats often played the role of midwife to new industries: they coordinated private firms' investments, supplied the inputs, twisted arms when needed, and provided sweeteners when necessary. Even though they removed some of the most egregious import restrictions, neither country exposed its nascent industries to much import competition until well into the 1980s. The domestic market was protected to enable the "infant" industries to make sufficient profits. South Korea also discouraged multinational enterprises from coming in, which allowed maximum room for domestic firms to engage in technological learning.

While they enjoyed protection from international competition, these infant industries were goaded to export from day one. This was achieved by a combination of explicit export subsidies and intense pressure from bureaucrats to ensure export targets were met. In effect, private businesses were offered a quid pro quo: they would be the beneficiary of state largesse, but only so long as they exported, and did so in increasing amounts. If gaining a beachhead in international markets required loss-making prices early on, these could be recouped by the subsidies and profits on the home market. But, importantly, these policies gave private firms a strong incentive to improve their productivity so they could hold their own against established competitors abroad.[17]

We can see how this growth strategy offered something to satisfy all tastes. A macroeconomist could walk away with the conclusion that macroeconomic stability in the form of low inflation held the key. A labor economist could point to the importance of a relatively well educated labor force. A trade economist would note the high rates of protection, but take comfort from the fact that their trade-inhibiting effects were nullified by export subsidies that pushed the other way. A political economist would emphasize the role of the strong state and its "autonomy" from elites. The World Bank could emphasize the leading role that private investment and exports played. An interventionist could emphasize the heavy hand of the state in guiding private investment.

They would all be missing the big picture. Economic growth requires a pragmatic government willing to do whatever it takes to energize the private sector. It requires using markets and globalization strategically to diversify the domestic economy away from natural resources. The specific tools and instruments needed to achieve this can vary and will depend heavily on the context. Specific recipes for success do not travel well. It is the broad vision behind them that needs emulation.

These lessons were put to good use in the most astounding development success the world has ever known.

Marching to Its Own Drum: China and Globalization

The feat that China's economy pulled off would have been difficult to imagine had it not happened in front of our eyes. Since 1978, income per capita in China has grown at an average rate of 8.3 percent per annum—a rate that implies a doubling of incomes every nine years. Thanks to this rapid economic growth, half a billion people were lifted out of extreme poverty.[18] During the same period China transformed itself from near autarky to the most feared competitor on world markets. That this happened in a country with a complete lack of private property rights (until recently) and run by the Communist Party only deepens the mystery.

China's experience offers compelling evidence that globalization can be a great boon for poor nations. Yet it also presents the strongest argument against the reigning orthodoxy in globalization—emphasizing financial globalization and deep integration through the WTO. China's ability to shield itself from the global economy proved critical to its efforts to build a modern industrial base, which would be leveraged in turn through world markets.

China's big break came when Deng Xiaoping and other post-Mao leaders decided to trust markets instead of central planning. But their real genius lay in their recognition that the market-supporting institutions they built, most of which were sorely lacking at the time, would have to possess distinctly Chinese characteristics. Western economists would propose European- or American-style regulations to enforce contracts, protect property rights, liberalize markets, and free up trade. These ideas faced huge practical difficulties and moreover violated, in many cases, official Party doctrine (as in the case of private property). Instead, the Chinese leaders pragmatically experimented with alternative institutional arrangements. No fewer than half of all national regulations in China in the early to mid-1980s had explicitly experimental status.[19] Through experimentation, China's policy makers sought to discover solutions that would overcome their constraints and be more suited to local conditions. China's institutional innovations proved remarkably successful. They effectively turned institutional weakness into an advantage.

China's economy was predominantly rural in 1978. A key problem Deng faced early on was how to energize farmers in an environment where prices and quantities were still determined by central planning. The state fixed all the prices and demanded that peasants deliver mandated quantities of grains to the government in accordance with the plan. Farmers were organized into communes and prohibited from selling any of their produce in private markets. The food that the state extracted from the countryside in this fashion was then rationed to workers in urban areas. The system ensured that workers would be fed at no cost to the government budget. The downside was that farmers had little incentive to increase production or make more efficient use of the land.

A Western-trained economist would have recommended abolishing the plan and removing all price controls. Yet without the quotas, urban workers would be deprived of their cheap rations and the government of an important source of revenue. There would be masses of disgruntled workers in the cities and the government would have to resort to printing money, risking hyperinflation. The Chinese solution to this conundrum was to graft a market system *on top* of the plan. Communes were abolished and family farming restored; but land remained state property. Obligatory grain deliveries at controlled prices were also kept in place; but once farmers had fulfilled their state quota, they were

now free to sell their surplus at market-determined prices. This dual-track regime gave farmers market-based incentives and yet did not dispossess the state from its revenue or the urban workers from their cheap food.[20] Agricultural productivity rose sharply, setting off the first phase of China's post-1978 growth.

Another problem was how to provide a semblance of property rights when the state remained the ultimate owner of all property. Privatization would have been the conventional route, but it was ruled out by the Chinese Communist Party's ideology. Once again, it was an innovation that came to the rescue. Township and village enterprises (TVEs) proved remarkably adept at stimulating domestic private investment. They were owned not by private entities or the central government, but by local governments (townships or villages). TVEs produced virtually the full gamut of products, everything from consumer goods to capital goods, and spearheaded Chinese economic growth from the mid-1980s until the mid-1990s.

The key to their success was that local governments were keen to ensure the prosperity of TVEs as their equity stake generated substantial income for them. Local authorities gave private entrepreneurs considerable freedom and also protected them from challenge—most critically from the local Party bosses themselves. This offered a better deal to the entrepreneurs than having formal private ownership rights and then hoping that local courts—weak and corruptible as they were—would enforce those rights in the face of disputes. Many a former Socialist economy has painfully discovered that property rights reform often flounders because domestic courts are too fragile to enforce the new rules. As the Berkeley economist Yingyi Qian emphasizes, property rights were effectively more secure when backed up by partnerships with the local government than they would have been under a standard regime of private property rights.[21]

China's strategy to open its economy to the world also diverged from received theory. The standard list of recommendations for countries pursuing this goal includes: dismantling quantitative restrictions on imports; reducing import tariffs and their dispersion; and making the currency convertible for trade transactions. Measured by these guidelines, China's policies suggest a country that messed up big time, not one that became a formidable competitive threat in world markets. In brief, China opened up very gradually, and significant reforms lagged behind growth (in exports and overall incomes) by at least a decade or more. While state trading monopolies were dismantled relatively early (starting in the late 1970s), what took their place was a complex and highly restrictive set of tariffs, non-tariff barriers, and licenses restricting imports. These were not substantially relaxed until the early 1990s.

The Chinese leadership resisted the conventional advice in opening their economy because removing barriers to trade would have forced many state enterprises to close without doing much to stimulate new investments in industrial activities. Employment and economic growth would have suffered, threatening social stability. The Chinese decided to experiment with alternative mechanisms that would not create too much pressure on existing industrial structures. In particular, they relied on Special Economic Zones (SEZs) to generate exports and attract foreign investment. Enterprises in these zones operated under different rules than those that applied in the rest of the country; they had access to better infrastructure and could import inputs duty-free. The SEZs generated incentives for export-oriented investments without pulling the rug from under state enterprises.

What fueled China's growth, along with these institutional innovations, was a dramatic productive transformation. The Chinese economy latched on to advanced, high-productivity products that no one would expect a poor, labor-abundant country like China to produce, let alone export. By the end of the 1990s, China's export portfolio resembled that of a country with an income-per-capita level at least *three times higher* than China's.[22]

This was the result not of natural, market-led processes but of a determined push by the Chinese government. Low labor costs did help China's export drive, but they don't tell the whole story. In areas such as consumer electronics and auto parts China made stupendous productivity gains, catching up with countries at much higher levels of income. Furthermore, China steadily moved away from being simply an assembler of components. Increasingly, production became integrated backwards and the supply chain moved from richer countries to China where the assembly was undertaken.

Foreign investors played a key role in the evolution of China's industries. They were the most productive among the firms, they were the source of technology, and they dominated exports. The SEZs where foreign producers could operate with good infrastructure and a minimum of hassles deserve considerable credit. But if China welcomed foreign companies, it always did so with the objective of fostering domestic capabilities.

The Chinese government used a number of policies to ensure that technology transfer would take place and strong domestic players would emerge. Early on, it relied predominantly on state-owned national champions. Later, the government used a variety of incentives and disincentives. In mobile phone and computer production, foreign investors were required to undertake joint ventures with domestic firms. In autos, the government required foreign car companies investing in the domestic market to achieve a relatively high level of Chinese content within a short period of time (typically 70 percent within three years).[23] This forced these companies to work closely with local suppliers to ensure that their technology and quality were up to par. Domestic markets were protected to attract investors seeking a large consumer base, in addition to those that looked for cost savings. Weak enforcement of intellectual protection laws enabled domestic producers to reverse engineer and imitate foreign technologies with little fear of prosecution. Cities and provinces were given substantial freedoms to fashion their own policies of stimulation and support, which led to the creation of industrial clusters in Shanghai, Shenzhen, Hangzhou, and elsewhere.[24]

Many of the Chinese companies created through government efforts failed. Accounts of industrial policy in China point to the low productivity and low-technology absorption of many state enterprises and to the lack of coordination (across national ministries as well as across different levels of government) that characterizes Chinese policies.[25] But as in Japan a century earlier, state-led efforts played an important role in training workers and managers and in creating demonstration effects. Would China have been able to produce a company like Lenovo, which became large and profitable enough to purchase IBM's PC unit in 2004, without state support and financial assistance?

Moreover, as in other areas of policy, government attitudes were pragmatic and open to trying new approaches when old ones failed. A well-known case involves the early development of the color TV industry, which consisted in the 1980s of more than one hundred companies operating at short production runs and high cost. By the early 1990s, the industry had been consolidated thanks to the efforts of local governments and national leadership, which forced mergers and joint ventures with foreign firms. This policy reversal led to the emergence in quick order of a profitable, export-oriented industry.[26]

Many of these early policies would have run afoul of WTO rules that ban export subsidies and prohibit discrimination in favor of domestic firms—if China had been a member of the organization. Chinese policy makers were not constrained by any external rules in their conduct of trade and industrial policies and could act freely to promote industrialization. By the time China did join the WTO in 2001, it had created a strong industrial base, much of which did not need protection or nurturing. China substantially reduced its tariffs in preparation for WTO membership, bringing

them down from the high levels of the early 1990s (an average of around 40 percent) to single digits in 2001. Many other industrial policies were also phased out.

However, China was not yet ready to let the push and pull of global markets determine the fate of its industries. It began to rely increasingly on a competitive exchange rate to effectively subsidize these industries. By intervening in currency markets and keeping short-term capital flows out, the government prevented its currency (the renminbi) from appreciating, which would have been the natural consequence of China's rapid economic growth. Explicit industrial policies gave way to an implicit industrial policy conducted by way of currency policy. The renminbi has been undervalued by around 25 percent in recent years, implying an effective subsidy to export-oriented industries (and import-competing firms) of an equal magnitude.[27] Once again, China bent globalization's rules to its own requirements. Since floating currencies and free capital mobility would not have helped its economic development, China simply did without them. Its flouting of these "rules" would eventually become a serious source of conflict in its relationship with the United States. I will return to this conflict in chapter Twelve, as the growing role of China in the world economy renders its foreign economic policy one of the thorniest issues that the world will have to confront in years ahead.

In sum, Chinese policy makers maintained their maneuvering space and they exploited it skillfully. They gave markets and private incentives a much greater role, but did so in ways that were adapted to domestic economic realities and respected political and ideological constraints. The international rulebook was not suited to their needs, so their reforms necessarily took on unorthodox characteristics. They resisted international disciplines, and submitted to them only once their economy had become sufficiently strong. They would have found it very difficult to diversify out of agriculture and other traditional products otherwise. China (like

South Korea and Taiwan before it) played the globalization game by Bretton Woods rules rather than the post-1990 rules of deep integration.

The Diversification Imperative

You become what you produce. That is the inevitable fate of nations. Specialize in commodities and raw materials, and you will get stuck in the periphery of the world economy. You will remain hostage to fluctuations in world prices and suffer under the rule of a small group of domestic elites. If you can push your way into manufactures and other modern tradable products, you may pave a path toward convergence with the world's rich countries. You will have greater ability to withstand swings in world markets, and you will acquire the broad-based, representative institutions that a growing middle class demands instead of the repressive ones that elites need to hide behind.

Globalization accentuates the dilemma because it makes it easier for countries to fall into the commodities trap. The international division of labor makes it possible for you to produce little else besides commodities, if that is what you choose to do. You can always import the other stuff from the rich countries. At the same time, globalization also greatly increases the rewards of the alternative strategy, as the experiences of Japan, South Korea, Taiwan, and China amply show. A government committed to economic diversification and capable of energizing its private sector can spur growth rates that would have been unthinkable in a world untouched by globalization.

In principle, well-functioning markets—both domestic and global—should help countries move up the ladder from commodities to new industries without a push from the government. Many economists believe the transition doesn't need a helping hand beyond ensuring that markets do their job. But in practice there are too many things that can go wrong. Learning new technologies and investing in new products is a difficult process that has many built-in obstacles if a country is not already predisposed toward it.

In particular, industrialization requires the development of social capabilities that are subject to significant economic spillovers—adapting foreign technologies to local conditions, acquiring skills, producing specialized inputs for production, coordinating complementary investments in diverse areas. In all of these cases, social benefits exceed the gains captured by the relevant private actors alone, producing what economists call "positive externalities." Markets are not very good at providing signals beyond short-term private profitability. Left to their own devices, they undersupply the incentives needed for productive upgrading. That is why, in the words of the Harvard Business School innovation expert Josh Lerner, "virtually every hub of cutting-edge entrepreneurial activity in the world today had its origins in proactive government intervention."[28]

The benefits of globalization come to those who invest in domestic social capabilities. Those investments in turn require some degree of support for domestic firms—protective tariffs, subsidies, undervalued currencies, cheap funding, and other kinds of government assistance that increase the rewards for entering new lines of business without closing the economy to the outside world. If the rest of the world does not create high-productivity jobs for your workers, you have no choice but to create those jobs yourself. The deep integration model of globalization overlooks this imperative. By restricting in the name of freer trade the scope for industrial policies needed to restructure and diversify national economies, it undercuts globalization as a positive force for development.

It may seem like the ultimate paradox that reaping globalization's gains may require an increase rather than a decrease in international transaction costs, but the paradox is more apparent than real. A complicated world requires foxlike policies. There is no more contradiction here than there is when we mount a screen on an open window; in a perfect world there would be no mosquitoes and no need for a screen.

Why have not more countries followed the East Asian examples? Why has it proved so difficult to emulate their strategies? Why do scores of countries in Africa and elsewhere remain mired in poverty, unable to make the transition to modern industries and services? Unfortunately, many of these countries have governments with little interest in real development. These governments are unlikely to unleash economic changes that threaten their hold on power.

Politics is only part of the answer. We cannot understand the disappointments of the rest of the world without giving economists their due. Economists have been responsible for the narratives that interpret developmental success and failure, narratives which in turn have guided policy in many parts of the world. Economists have been the ultimate arbiters of how those narratives would be shaped, which would survive, and how they would spread. As we shall see in the next chapter, they have not always got it right.

8

Trade Fundamentalism in the Tropics

In March 1960, James Meade, a Cambridge don and future Nobel Prize winner for his research in international economics, traveled to the British colony of Mauritius with a small team of economists. The island was getting ready for independence, which it would acquire in 1968. The British fretted about the country's prospects under self-rule, shorn of support from London. Meade, a left-leaning economist and admirer of Keynes, had been invited by the island's British governor to survey the economy and make proposals for its future development.

Meade stood for a practical, commonsense brand of economics, and his eventual recommendations would reflect this pragmatism. However, three decades after his trip to Mauritius, development economics was transformed beyond recognition and became dominated by a vision that elevated free markets and free trade above all else. The central insights of Meade and his contemporaries—the need to tailor reforms to local circumstances and for proactive government policies to stimulate structural transformation—were shunted aside. It is only recently that these older insights have been resuscitated and are being reincorporated into thinking on development strategy. This chapter recounts this strange tale of the loss and (partial) recovery of common sense.