RAGHURAM G. RAJAN

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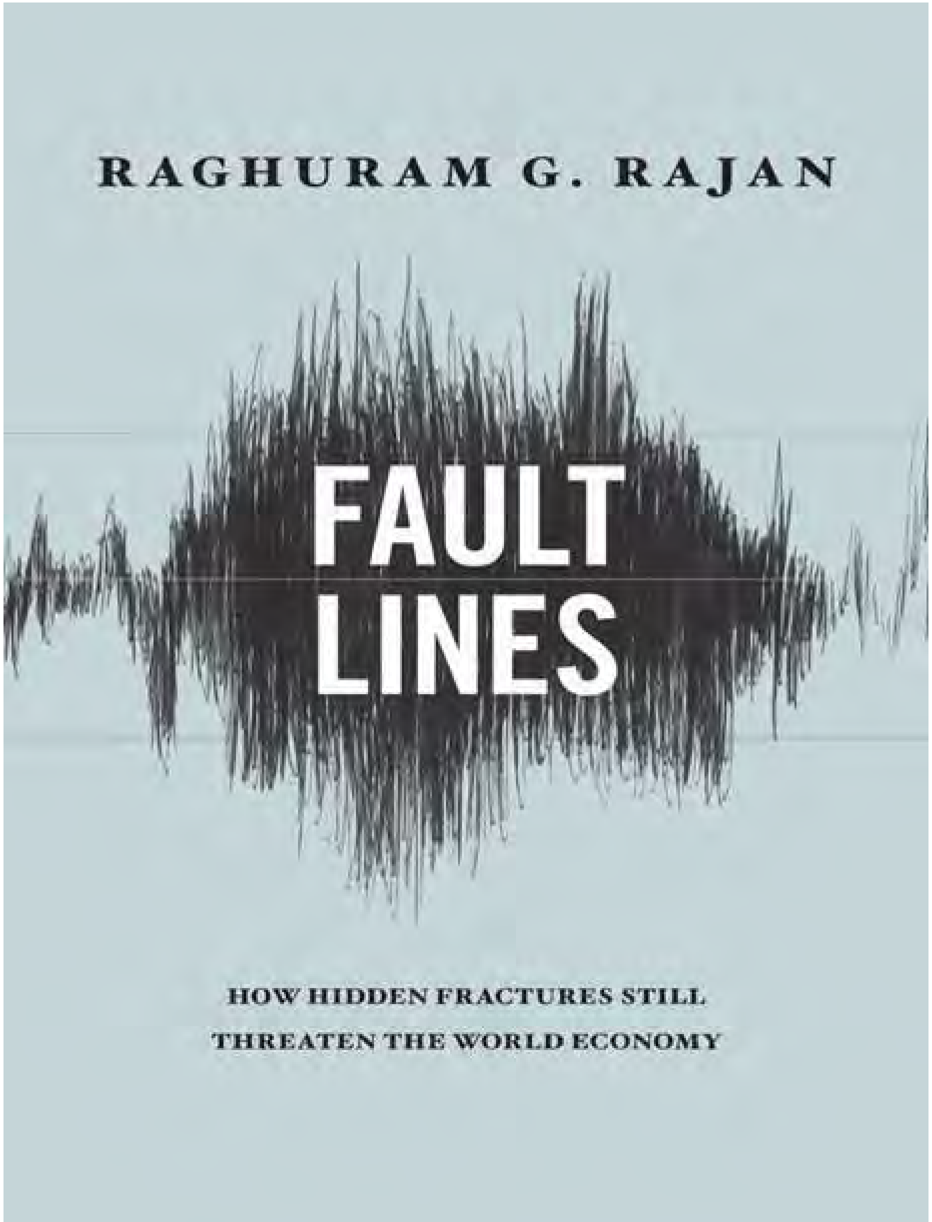
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CHAPTER TWO

Exporting to Grow

I GREW UP IN DIFFERENT PARTS of the world because my father was an Indian diplomat. My first real memories of India are from my early teens, in the mid-1970s, when he returned to work in Delhi. It was not an easy time. We were not poor, but my parents had to bring up four children on my father's government salary. More problematic, there was very little to buy, especially for children who had grown used to the plentiful choices in European supermarkets. Every evening, one of us children trudged around the local markets looking for bread. The government was trying to limit the production of "unnecessary" consumer goods, of which bread was deemed one. Moreover, because the government also regulated the official sale price for bread, the little that was produced was diverted to favored clients and sold at black-market prices. So we went around the empty stores, trying to ingratiate ourselves with the shopkeepers in the hope that one would sell us half a loaf of bread from his hidden stock—at twice the fixed price. I remember the joy we felt when a friend's brother bought a shop in the market. My new connections ensured our bread supply, allowing us to stop haunting the market.

We were not so lucky in our quest for a car. High import duties made foreign cars unaffordable. The government allowed only three domestic firms to produce cars, and only in limited quantities, for cars were deemed unnecessary as well. The only Indian-made car that could accommodate our large family was the Ambassador—a local version of the 1954 Oxford Morris, virtually unchanged from the original. But the waiting list for an Ambassador, which in most other countries would be deemed an antique, was years. So my father settled for a scooter that he rode to work. Because public transport was unreliable, family outings were rare.

The government wanted to limit consumption and encourage savings, and households did save a lot. But there were also unintended consequences. Because goods were in short supply and prices were fixed at ludicrously low levels, little was available in the open market. Black markets flourished: everything could be obtained if you had cash or connections. Few jobs were created: the production of more cars would have meant more demand for restaurants and cinemas and thus more jobs not only for auto workers but also for waiters and ticket clerks. I thought there might be some grand design I did not understand, but the government's policy clearly was not working, because India was still poor. I was determined to learn more, so I became interested in economics. This book is another unintended consequence of the government's policies.

Thirty-five years later, it is relatively easy to describe the typical path that successful countries have followed in the search for growth. It has emphasized both substantial government intervention in the early stages—which is why I broadly refer to it as *relationship* or *managed* capitalism—and a focus on exports. Although easy to describe, it is much harder to implement. At key junctures, the government has to take steps that go against its natural inclinations; the India of my youth muffed the game plan. Perhaps this is one reason why only a handful of countries have grown rapidly out of poverty in recent years.

The export-led managed-growth strategy, when implemented well, has been the primary path out of poverty in the postwar era. In the early days of this strategy, the exporters were small enough to allow the rest of the world to boost its spending and absorb the exports easily. Unfortunately, even as exporters like Germany and Japan have become large and rich, the habits and institutions they acquired while growing have left them unable to generate strong, sustainable domestic demand and become more balanced in their growth.

The surpluses they put out into the global goods markets have circled the world, looking for those who have the creditworthiness to buy the goods, and tempting countries, companies, and households around the world into spending. In the 1990s, developing countries ran the trade deficits necessary to absorb these goods: the next chapter shows how many of them suffered deep financial crises and forswore further deficits and borrowing. Even as developing countries dropped the hot potato of foreign-debt-financed spending in the late 1990s, the United States, as well as European countries such as Greece, Spain, and the United Kingdom, picked it up. First, though, I want to describe the export-led managed growth strategy and why it worked.

The Elusive Search for Growth

Few people realize that many of today's wealthy nations are rich today because they grew steadily for a long time, not because they grew particularly fast. Between 1820 and 1870, the per capita incomes of Australia and the United States, the fast-growing emerging markets of their time (I refer to them as *early developers),* grew annually at 1.8 percent and 1.3 percent, respectively.[1] By contrast, *late developers* like Chile, South Korea, and Taiwan, which joined the ranks of wealthier nations only in recent decades, grew at multiples of these rates over a shorter period. Japan was not quite a poor country in 1950 (though in 1950 its per capita income was lower than Mexico's). However, between 1950 and 1973, Japanese per capita income grew at a rate of around 8 percent a year. These late developers have set the aspirational level for today's developing countries, but theirs is a very different path from that of the early developers especially with respect to the speed of their growth.

How did the late developers grow so fast? In the entire history of humankind, no country had grown as fast as Japan did between 1950 and 1973. But since then, South Korea, Malaysia, Taiwan, and China have approached and even exceeded this rate of growth. To understand these developments, we have to understand why countries are poor in the first place and how they attempt to climb out of poverty.

Is More Capital the Key to Growth?

A difference obvious to anyone who travels from a rich country to a poor country is the varying levels of physical capital. In rich countries, vast airports accommodating big planes, enormous factories packed with high-tech machinery, huge combines in well-irrigated fields, and households with appliances and gadgets for every imaginable use suggest to us that far more physical capital is in use than in poor countries. Physical capital increases income because it makes everyone more productive. A single construction worker with a backhoe can shift far more mud than several workers with shovels and wheelbarrows.

If, however, the only difference between the rich and the poor countries is physical capital, the obvious question, posed by the University of Chicago Nobel laureate Robert Lucas in a seminal paper in 1990, is, Why does more money not flow from rich countries to poor countries so as to enable the poor countries to buy the physical capital they need?[2] After all, poor countries would gain enormously from a little more capital investment: in some parts of Africa, it is easier to get to a city a few hundred miles away by taking a flight to London or Paris and taking another flight back to the African destination than to try to go there directly. Commerce would be vastly increased in Africa if good roads were built between cities, whereas an additional road would not make an iota of difference in already overconnected Japan. Indeed, Lucas calculated that a dollar's worth of physical capital in India would produce 58 times the returns available in the United States. Global financial markets, he argued, could not be so blind as to ignore these enormous differences in returns, even taking into account the greater risk of investing in India.

Perhaps, Lucas concluded, the explanation is that the returns in poor countries are lower than suggested by these simple calculations because these countries lack other factors necessary to produce returns: perhaps education or, more broadly, human capital. It may seem that an Egyptian farmer, using the ox and plow that his ancestors used five thousand years ago, could increase his efficiency enormously by using a tractor. By comparison, it would seem likely that a farmer in Iowa who already owns an array of agricultural machinery would improve his yield only marginally by buying an additional tractor. But the Egyptian farmer is likely to be far less educated than the farmer in Iowa and to know less about the kinds of fertilizers and pesticides that are needed or when they should be applied to maximize crop yields. As a result, the additional income the Egyptian farmer could generate with a single tractor might be far less than what the Iowa farmer could generate by buying one more machine to add to the many he already has.

However, even accounting for differences in human capital between rich and poor countries, Lucas surmised that capital should still be far more productive in the latter. Moreover, evidence suggests that the enormous investments in education around the world in recent years have not made a great difference to growth.[3] Something else seems to be missing in poor countries that keeps machines and educated people from maximizing productivity and the countries from growing rich—something that dollops of foreign aid cannot readily supply.

Organizational Capital

The real problem, in my view, is that developing countries, certainly in the early stages of growth, do not have the organizational structure to deploy large quantities of physical capital effectively.[4] You cannot simply buy a complicated, high-speed machine tool and hire a smart operator to run it: you need a whole organization surrounding that operator if the machine is to be put to productive use. You need reliable suppliers to provide the raw materials, buyers to take the output from the tool and use it in their production lines, managers to decide the mix of products that will be made, a maintenance team to take care of repairs, a purchasing team to deal with suppliers, a marketing team to deal with buyers, a security outfit to guard the facility at night, and so on. The organizational differences between a small car repair shop and Toyota, or between a medical dispensary housed in a shed and the Mayo Clinic, are enormous, and determine their ability to use large modern sophisticated machines effectively.

Of course, these complex organizations do not operate in a vacuum either. They need other complex organizations to provide inputs and sometimes to buy their output. Equally important, they need finance, infrastructure—for example, electric power, and transport and communication networks—and governance institutions to provide security to property and life as well as to facilitate business transactions.

How the Early Developers Built Organizational Capital

The great Austrian economist Joseph Schumpeter argued that capitalism grew through innovation, with newcomers bringing in creative new processes and techniques that destroyed the businesses of old incumbents. Much of capitalism's dynamism in industrial countries does reflect this process: in the past few years, for example, the whole business of film photography has been almost completely eclipsed by the digital photography revolution. Film makers such as Kodak, which did not anticipate the speed of this change, have had to struggle to remake themselves.

With this kind of growth process in mind, what is loosely termed the institutional school of economists has argued that the role of the government in business is to create the institutional environment for competition and innovation—to establish secure property rights, strengthen patent laws, reduce barriers to entry, and reduce taxes—and then let the private sector take charge. There is a small problem with this view. No large country has ever grown rapidly from poverty to riches with this kind of strategy, in part because poor countries do not have the necessary private organizations to take advantage of such an environment, and the environment, in turn, is not conducive to creating the organizations quickly.

For example, British India had many of the qualities that these economists advocate: a small and fairly honest government, low taxes, low tariffs, a focus on building infrastructure like railways, and a laissez-faire attitude (even toward famines).[5] However, between 1820 and 1950, per capita incomes in India were virtually stagnant, growing at just 0.1 percent per year because the British did little to nurture local industry. Instead they encouraged imports of both goods and management, especially from Britain: India had among the lowest import tariffs in the world in 1880. As a result, India's private sector simply did not have the encouragement or the requisite cover behind which to develop organizational capital.

Indeed, economists may overplay the role of institutions in growth. History suggests that institutional change often does not predate but rather accompanies the process of growth.[6] For example, sensible governments of developing countries do not have strong laws protecting intellectual-property rights when their industrial sector is starting out: such laws would put an end to the rampant copying from foreigners that is often the basis for initial growth. Instead, they enact property-rights legislation when domestic firms have become strong enough to innovate and demand protection. Generally, institutions seem to develop along with, and in response to, the need for them. They are then refined through use and kept from exercising authority arbitrarily by the complex organizations that use them and pay for their upkeep. In many ways, the real challenge for developing countries is, again, to create effective complex organizations.

Rich early developers such as Australia, Canada, and the United States built their complex organizations over time. New industries often started with many small firms, some of which were exceptionally innovative or well managed.

These generated larger profits than their competitors, hired more employees, and, over time, built effective and stable organizational structures. Initially, these firms grew slowly, both because it takes time to build the social relationships, the organizational norms, and the organizational procedures that allow the firm to function efficiently and because the availability of outside finance to an untried, unproven organization is limited. Eventually, some firms gained reputation and wealth: many of these were family firms like Anheuser-Busch or Cargill in the United States, whose reputation could transfer down through generations.[7] Because banks would accept these firms' reputation and wealth as collateral for financing, they could grow faster. All in all, however, growth was slow and steady, with many firms falling by the wayside; failure rates for small, new firms are spectacularly high even today.[8]

Governments of early developers, in general, simply did not have much capacity to intervene to create a nurturing environment, even if they wanted to. Before the dramatic increase in spending during the Great Depression, the total outlays of the U.S. government in 1930 were only 3.4 percent of GDP.[9] The primary roles of the government were thought to be defense and maintaining law and order. However, wealth was a source of military power, and wealthier people were happy and did not foment trouble. Governments, therefore, did try to foster growth, typically through the strategic use of trade barriers and tariffs.

Daniel Defoe, the businessman, journalist, pamphleteer, and author of *Robinson Crusoe,* among other books, describes in detail in *A Plan of the English Commerce* one of the earliest documented instances of government-aided development: the way the Tudor monarchs transformed England from a country reliant on raw-wool exports to one that exported manufactured woolens.[10] Prior to his coronation following the War of the Roses, Henry VII spent time as a refugee in the Low Countries. Impressed by the prosperity in those lands, derived from wool manufacturing, he decided to encourage manufacturing in England.

The measures he took included identifying locations suitable for manufacturing, poaching skilled workers from the Low Countries, increasing duties on or even banning the export of raw wool, and banning the export of unfinished cloth. The monarchy also started promoting the export of finished woolen garments, with Elizabeth I dispatching trade envoys to the Russian, Mogul, and Persian empires. The calibrated and measured support afforded to industry is best reflected in the fact that raw-wool exports were permanently banned only when the monarchy was confident that domestic manufacturers could use all the raw wool available and were competitive enough internationally to export the additional production. Such managed competition eventually drove manufacturers in the Low Countries to ruin.

Governments also tried to create private monopolies in banking or trade (recall the East India Company, which was granted certain monopoly rights over trade with India and ended up ruling much of the subcontinent). But citizens saw these as indirect forms of taxation and, as democratic rights expanded, fought hard to curb them. So competition within the domestic market was typically unfettered, with governments rarely intervening. The extent of government intervention is the critical difference between the early developers and many of the late developers.

The Strategy of Late Developers

The late developers, especially nations that became independent just after World War II, started out with organizational deficiencies similar to those of the early developers. Indian politicians like to recall that when India became independent in 1947, it had to import even sewing needles.[11] Their governments were, however, much more impatient for growth, especially given the expectations of their newly free citizens. Moreover, when they started out, they faced much fiercer competition from firms in developed countries than the early developers had faced initially. In the century or so between when the early developers began industrializing and when the late developers started, the cost of transportation had fallen tremendously, and the extent of potential competition from firms in richer countries was commensurately much higher.

Their strategy for advancement, though, was clear: climb the same ladder the rich countries had done, step by step, moving from the least sophisticated technologies to the frontier of innovation, using low labor costs to stay competitive until technologies improved and the available capital stock, including human capital, increased.

The organizational path was less well laid out. Given that the late developers had little faith that their small and underdeveloped private-sector firms could lead growth at a pace that would satisfy their needs, they had two options: they could create government enterprises to undertake business activity, or they could intervene in the functioning of markets to create space for a favored few private firms to grow relatively unhindered by competition. In either situation, the country's savings were directed through a largely captive financial system to the favored few firms. Governments also typically protected their domestic market from foreign imports through high tariffs and import restrictions, allowing domestic firms the space to flourish.

The Commanding Heights

Consider first the strategy of creating state-owned enterprises. In a developing country, the government typically is the best-developed organization, apart from the army. It is tempting for it to use its existing organizational templates—often put in place by a colonial power—to create additional departments to manage investment and production. Indeed, Lenin, in a famous speech in 1922, pointed the way (ironically while defending his New Economic Policies, which allowed more freedom to farmers and traders) when he declared that the state must control the most important sectors of the economy—the "commanding heights," as he called them.[12]

Some countries have grown rich from substantial contributions made by government-owned firms—France and Taiwan are examples—but there aren't many. The fundamental problem with the government's implementing projects such as building schools, roads, and dams, let alone running complex firms, is that incentives in the government are not aimed at using resources efficiently. The primary role of the government is to ensure that the superstructure that facilitates private activity—including public security, the functioning of markets, and the enforcement of contracts—functions efficiently. Typically, this means a neutral and transparent exercise of power with the public interest in mind, not power that can be bought by the highest bidder. The sociologist Max Weber postulated that a bureaucrat's rewards should come from long-term career progress, status, and the knowledge that he has served the public interest, rather than from the spoils of office. In other words, he believed that the absence of monetary incentives for performance accorded well with the nature of the bureaucrat's work.

Moreover, because performance in many government activities is hard to measure, government officials are typically not given monetary incentives for fear that they might focus on the measurable (for example, the number of files cleared) rather than the useful (the quality of decisions made). Instead, a plethora of rules guide their behavior. Because large organizations find it hard to manage the intra-organizational frictions and jealousies that arise when compensation structures differ considerably within them, it is probably not surprising that even bureaucrats undertaking measurable tasks, such as implementing clear, time-bound projects, are not given strong monetary incentives. As a result, government projects take too long, and administrators do not adapt flexibly to circumstances. Such flexibility would typically mean the bureaucrat's exercising initiative and violating some rule.

Inefficiency arising from poor incentives within the organization is compounded by the fact that the government is a monopoly and has little fear of running out of resources so long as the taxpayer can be squeezed. The combination of poor incentives and little competition typically results in poor outcomes when governments undertake activities that should belong to the private domain. For instance, Argentina's telephone system under state ownership in the 1980s was notorious for its inefficiency—the waiting period for a phone line was more than six years, and some businesses employed staff who sole job was to hold a telephone handset for hours on end until they heard a dial tone.[13]

History does offer some examples of strong state-owned-enterprise-led growth. Under Stalin, the Soviet Union grew rapidly while the rest of the world was mired in the Great Depression. Indeed, much as Japan was the role model for East Asian economies like South Korea, the Soviet Union, with its state-led growth, was the role model for leaders like Jawaharlal Nehru and Mao Zedong.[14] Unfortunately, the imitators did not realize that the incentive for bureaucrats to perform in the Soviet Union at that time might have come initially from revolutionary and patriotic fervor, fortified with a dose of terror: if failure to complete a project on time is met with accusations of sabotage and a firing squad, bureaucrats can become surprisingly energetic. However, such incentives cannot be maintained over sustained periods of time: fervor turns to cynicism, and terror eventually turns on itself.

Moreover, even if the incentives within government-owned firms can be maintained, the relationships between the firms become far more complicated over time, as poor economies finish catching up on the essential. Growth eventually requires not only more steel but also much more detailed information —which grade of steel is needed, how much, when, and where. The Nobel Laureate Friedrich von Hayek recognized that this information is diffused in society: it is possessed by the various consumers and distributors of steel products around the country. It could be aggregated in the planning ministry if everyone is asked to file reports, but a lot of tacit information would be lost on the way as the respondents' feel for a market was converted into a hard number. Furthermore, the reported numbers would be distorted by each one's incentives —with consumers wanting to shade demand numbers up so as to encourage production and producers wanting lower numbers so as to ease the pressure on them.

Hayek's fundamental contribution was to recognize that market prices can play a role in aggregating information in a way that is not biased by organizational disabilities or biases. The market prices of various grades of steel, for instance, are established every day—sometimes on organized exchanges—by the forces of demand and supply for this product. Producers and consumers do not write reports but simply express their interest—which reflects their unbiased and informed expectations of the future—through the price at which they are willing to sell or buy steel. Most important, they do so not to fulfill a bureaucratic requirement, but from the purest of motives, self-interest. No matter how qualitative each one's information is, no matter how detrimental it is to some people, so long as the market functions, its prices aggregate all these individuals' information. In the Soviet Union, the system eventually failed in part because the information on which central planning was based was a fantasy that bore no correspondence to ground realities; but this information was so carefully manipulated that even the CIA had no idea of the true weakness of the Soviet economy.

In sum, there are indeed some well-run state-owned firms. But the best state-run firms typically distance themselves from government norms, procedures, and interference and are often private in all but ownership.

Favoring the Few

Instead of relying on state-owned firms to propel growth, a number of governments have tried to remedy private-sector organizational deficiencies and build domestic champions, even while relying on some market signals to allocate resources. The process of playing midwife, often derided as crony capitalism but better termed relationship or managed capitalism, involved a judicious mix of the government's giving firms some protection from foreign competition and special privileges so that they could generate the profits around which they could build their organizational capital, while maintaining some incentives for firms to be efficient.

One example is Taiwan's efforts in the early 1950s to promote its textile industry.[15] The first textile manufacturers in Taiwan were mainland Chinese, who put their machines on board ships when the Communists took over in 1949 and relocated on the other side of the straits. Soon after, in the early 1950s, the Taiwanese government imposed restrictions on the entry of any new yarn producers to prevent "excessive competition." It then supported incumbents by supplying raw cotton to mills directly, advancing them working capital, and buying up the entire production of yarn. It followed a similar approach toward weavers. It also imposed tariffs on imported yarn and cloth and even banned imports when tariffs proved insufficient. As the textile industry boomed, the government encouraged firms to merge so that they could realize economies of scale.

More generally, the tools used by governments have included erecting barriers to entry, offering tax breaks so that private firms can generate larger profits and use their retained earnings to fund investment, encouraging close ties between banks and favored firms so that the former lend abundantly (and cheaply) to the latter, providing raw materials at a subsidized price, and imposing tariffs so that foreign competition is not a threat. With subsidies and protection from the government, some favored champions have grown rapidly and profitably, acquiring technology, wealth, organizational capabilities, and stability.

Government intervention has sometimes gone much further. K. Y. Yin, an electrical engineer who was also a voracious reader of economic texts (including Adam Smith), was Taiwan's chief economic planner in the 1950s and is often referred to as the father of Taiwan's industrial development.[16] He commissioned a study in 1953 that identified plastics as an important area for Taiwan to enter. According to a possibly apocryphal story, Yin used his access to information on bank deposits to identify an individual, Y. C. Wang, as someone who had both enough savings and the entrepreneurial zest to undertake a plastics project, and instructed Wang to do it.[17] The first Taiwanese plant for polyvinyl chloride (PVC) was built under government supervision and transferred to Wang in running order in 1957. He went on to build the Formosa Plastics Group, Taiwan's largest business.

There are, however, a number of problems with government intervention that favors a few. Nothing prevents a corrupt government from distributing favors to incompetent friends or relatives, a problem that has plagued countries like the Philippines. Even if a government starts out with the best intentions and carefully screens incumbents, government protection means that those who become lazy and inefficient are not forced to shut down. A key conundrum for governments therefore has been how to retain the disciplinary incentives provided by the market while still allowing firms the room to make profits and build organizational capabilities.

Some governments tried to instill a sense of efficiency and quality directly. For instance, the Taiwanese planner, Yin, ordered the destruction of twenty thousand substandard light bulbs at a public demonstration in Taipei and confiscated tons of substandard monosodium glutamate, the food additive.[18] In those cases, the message to producers got through. But governments need a source of discipline more systematic than the whims of bureaucrats, one that would be applied without sparing the favored few.

A second problem with favoring producers in developing countries is that households get a raw deal, and so consumption tends to be low. For starters, wages tend to be low because the many workers in low-productivity agriculture constitute a reserve army, waiting to take up factory jobs at low wages, and keep industrial wages from rising rapidly. But over time governments can also interfere in the wage-setting process, favoring manufacturers over workers so as to keep firms competitive and profitable. Also, the favored firms may pay low prices for government-controlled natural resources such as energy and minerals. Governments make up the shortfall in their revenue by taxing households more, even while the firms charge high prices for the goods they sell to those same households in the cartelized domestic markets.[19] To add insult to injury, banks offer low government-set deposit rates for household savings, thus cutting further into household income, even while making subsidized loans to businesses.

In sum, the need to create strong firms may lead the state to favor the producer and the financier at the expense of the citizens. As a result, consumption is unnaturally constrained in such economies. The India of my youth was not dissimilar to the Korea that my Korean friends still remember, where wages were low, work hours long, and consumption frowned on. Indeed, many of them recollect how dim Seoul was at night, because bright neon lights advertising consumer goods were prohibited. Midnight curfews both ensured security and prevented young workers from wasting their energy on an unproductive night life. So a second problem of managed capitalism is that because consumption is repressed, firms are deprived of large domestic markets.

Export-Led Growth and Managed Capitalism

One way to both discipline inefficient firms and expand the market for goods is to encourage the country's large firms to export. Not only are firms forced to make attractive cost-competitive products that can win market share internationally, but the larger international markets offer them the possibility of scale economies. Moreover, because they are no longer constrained by the size of the domestic market, they can pick the products for which they have the greatest comparative advantage.

Often, the starter sector in developing countries is easy-to-make but laborintensive consumer goods like garments and textiles. Having consolidated the protected textile sector as described earlier, the Taiwanese government started putting in place incentives to export. By 1961, Taiwanese textile exports had become a big enough threat that the United States imposed quotas on them—a sure sign that Taiwan's textile industry had come of age.

Once industry learned the basics of production in textiles, it started moving up the technological ladder to produce more complicated goods. As late as 1970, textiles were still Korea's leading export, followed by plywood and, curiously, wigs, whereas its major exports today include cars, chips (silicon, not potato), and cell phones.[20] Today, it is China, Vietnam, and Cambodia that compete to export textiles.

Developing-country governments tried to enhance incentives even further by offering greater benefits to firms that managed to increase exports. For instance, because foreign exchange was scarce in the early days of growth, imports were severely restricted. Successful exporters were, however, given licenses to import, and the prospect of making money by selling these licenses gave them strong incentives to expand their foreign market share. In situations where foreign countries imposed import quotas, or where raw materials were scarce, the government also allocated a greater share of these to the more successful exporters. So both indirectly and directly, the efficient were encouraged.

The export-led growth strategy does not mean that government reduces its support to industry. Indeed, exports may initially require more support if domestic firms are to be competitive globally. Some countries have provided a general subsidy by maintaining an undervalued exchange rate or holding down wages by suppressing or co-opting unions; such strategies are more easily followed by authoritarian governments. Others have provided a specific targeted subsidy by underpricing key raw material or energy inputs to exporters or by directly providing cash rebates for exports or for importing manufacturing equipment intended to produce exports.

What is clear is that a necessary concomitant to the strategy of government intervention to create strong domestic firms is to push them to prove their mettle by exporting. Managed capitalism has proved enormously successful in its immediate objective of getting countries out of poverty. It is not, however, an easy strategy to implement.

Missing the Turn

Managed capitalism initially requires a producer bias that is not easy to sustain in populist democracies. Then the government, despite coddling firms in their early years, has to turn and push them toward exports. For small nations like Taiwan, limited domestic markets made the second step virtually a necessity. But for countries with large domestic markets like Brazil, that second transformation was long delayed.

One country that flubbed this move was India. Under its first prime minister, Jawaharlal Nehru, India did strive to build organizational capacity. Although Nehru reserved industries like steel and heavy machinery for the state sector, he never actively suppressed the private sector. Instead, a system of licensing—the infamous "license-permit raj"—was put in place, ostensibly to use the country's savings carefully. This meant guiding investment away from industries that bureaucrats thought were making unnecessary consumer goods (even durable ones such as cars), and instead into areas that could lay the basis for future growth, such as heavy machinery. The result, however, was that incumbents, typically firms owned by established families that were well enough connected to procure license early, were protected from competition. Barriers were also erected against foreign competition in order to provide a nurturing environment to India's infant industries until they matured and became competitive.

The protection India offered these industries, however, became an excuse for the companies to become "Peter Pans"—companies that never grew up. Car manufacturing is a case in point. Over nearly four decades, only five different models of the Ambassador car were produced, and the sole differences between them seemed to be the headlights and the shape of the grill. After growing rapidly just after independence, the Indian economy got stuck at a per capita real growth rate of about 1 percent—dubbed the "Hindu" rate of growth.

Like Korea or Taiwan, India should have made the switch toward exports and a more open economy in the early 1960s. But because the protected Indian domestic market was large, at least relative to that of the typical late developer, firms were perfectly happy exploiting their home base despite government attempts to encourage exports. This is not to say that government efforts to change were particularly strenuous, especially given that protected firms were an important source of revenue to the ruling party for fighting elections. Democracy at this stage may well have seemed a source of weakness: leaders like Park Chung Hee in Korea and Lee Kuan Yew in Singapore did not have to worry about such niceties. As a result, India stayed closed, poor, and uncompetitive long after the economies of countries like Korea, which were at similar levels of per capita income in the early 1960s, had taken off.

What Happens When the Exporters Get Rich: Germany and Japan

Not every country has been able to succeed with an export-led growth strategy. Moreover, this strategy also has weaknesses that may become clear only gradually, as countries grow rich. To understand these weaknesses, we should take a closer look at Germany and Japan. Neither was really poor after World War II—their people were educated, these countries had the blueprints to create the necessary organizations, and some of their institutional infrastructure survived—but both had devastated, bombed-out economies, with their capital stock substantially destroyed, large firms and combines broken up or suppressed by the occupation authorities, and households too downtrodden to be an important source of consumption. Exports were the obvious answer to their problems.

With a large number of workers still in agriculture, and with labor organizations docile, postwar wages initially did not keep pace with the extraordinary rate of productivity growth (a measure of the growth in efficiency with which inputs are used and thus a measure of the profit margins that can be distributed to workers through higher wages). As a result, corporations were able to generate substantial profits for a while.

In both countries, the mature banking sector took on part of the role that was played by the government in the countries discussed earlier. Close cooperation between firms and universal banks in Germany, cemented by share holdings by firms and banks in one another, led to domestic cartels and diminished domestic competition, allowing corporations to focus their energies on competing in foreign markets. Similarly, in Japan, the ties between firms and banks in the bank-centered networks called *keiretsus,* which were overseen by the powerful Ministry of Finance and the Ministry of International Trade and Industry (MITI), resulted in a canonical version of managed capitalism.

Once the excess labor in agriculture was fully drawn in to the manufacturing sector, however, wages inexorably increased to keep pace with productivity growth in the efficient export sector. By 1975, hourly wage rates in manufacturing in Germany had caught up with those in the United States, and Japan caught up in the early 1990s. Low wages therefore no longer offered a competitive advantage for the exporters. More problematic, once the initial phase of catch-up was over and Germany and Japan approached the levels of capital per worker that existed in advanced economies such as the United States, the growth rate of investment slowed considerably, and so did imports of capital goods. With the postwar households conditioned to limit consumption, and successive governments intent on disciplined macroeconomic policies, both Germany and Japan started running large trade surpluses. These initially helped them repay foreign borrowing but eventually resulted in increasing pressure on the currency to appreciate.[21]

To stay competitive, both countries had to move up the value chain of production and to the frontiers of innovation, making more and more high-tech, skill-intensive products. More important, they also had to improve productivity steadily. They certainly managed to do this in the sectors that exported or competed with imports, the so-called tradable sector. But problems eventually emerged in the domestic nontradable sector, in areas like construction, retail, and hotels, where foreign competition was often naturally absent and sometimes deliberately kept out. Although the extent of government intervention to support exporters was naturally disciplined by international competition—after all, regardless of how much the government helps, if you produce a shoddy product at too high a cost, you will lose export market share—there were no such constraints in the nontradable sector. Productivity growth eventually lagged because the market forces that would force the inefficient to shrink or close were suppressed.

Japan has fared worse than Germany in this respect. As a part of the European Union (EU), Germany is subject to the EU's rules on fostering domestic competition—though because it has substantial power in the union, it plays a big role in watering them down. Japan has not found any equivalent external discipline in Asia. As a result, the close relationship between government and incumbents has been particularly detrimental to efficiency in the domestic-oriented production sector.

Many a visitor to Japan is surprised at the sight of elevator ladies in hotels—women whose job it is to usher guests into the next available elevator, even though bright lights and buzzers clearly indicate, to anyone who can hear or see, which elevator is next. Perhaps these women had a function when elevators were a new invention, when spotting the next elevator was a challenge, and elderly guests had to be coaxed to get in. That the job has not been done away with over the years, or transformed to retain its essential functions (greeting visitors) while allowing the women to do some useful work, suggests an uncompetitive service sector.

Indeed, when an upstart haircutting firm in Japan recently started opening salons rapidly and undercutting existing barber shops by offering quick, cheap haircuts, a nationwide association of barbershops took note.[22] It called for more regulation, protesting that it was unhygienic to cut hair without a shampoo beforehand, and had an ordinance passed requiring all barbershops to have expensive shampooing facilities. This immediately slowed the upstart and hit directly at its low-price strategy.

More generally, as rising wages in the productive export sector pulled up wages elsewhere in the economy, high wages (relative to productivity) and the resulting high prices of nontraded goods such as haircuts, restaurant meals, and hotel rooms reduced domestic demand for them. So the export-oriented miracle economies started looking oddly misshapen, much like someone who exercises only the limbs on one side of the body: a superefficient manufacturing sector existed side by side with a moribund services sector; a focus on foreign demand persisted even while domestic demand lay dormant.

The Fault Line: The Case of Japan

Japan's and Germany's dependence on exports for growth did not matter much in the early years, when they were small relative to the rest of the world. But as they became the second and third largest economies in the world, it put a substantially greater burden on other countries to create excess demand.

What is particularly alarming for the future of countries following this path is that Japan did try to change, but without success. In the Plaza Accord of 1985, Japan agreed, under U.S. pressure, to allow its exchange rate to appreciate against the dollar. As Japanese exports came under pressure, the Bank of Japan cut interest rates sharply. According to a high-ranking Bank of Japan official: "We intended first to boost both the stock and property markets. Supported by this safety net—rising markets—export-oriented industries were supposed to reshape themselves so they could adapt to a domestically-led economy. This step then was supposed to bring about enormous growth of assets over every economic sector. This wealth-effect would in turn touch off personal consumption and residential investment, followed by an increase of investment in plant and equipment. In the end, loosened monetary policy would boost real economic growth."[23]

What the loose monetary policy instead triggered was a massive stock market and real estate bubble that led to the widely circulated, although exaggerated, claim that the land on which the Imperial Palace stood in Tokyo was worth more than the state of California. Corporate investment did pick up. But instead of reorienting themselves toward manufacturing for domestic demand, Japanese firms started investing much more in East Asian countries where labor costs were substantially cheaper, again with the intent of exporting. Construction and consumption in Japan did boom, but these were temporary spikes. When the alarmed central bank started raising rates in the early 1990s, the collapse in stock and real estate prices led to an economic meltdown whose effects are still being felt.

So, far from automatically becoming more balanced in their growth as they become rich, export-led economies have found it extremely hard to boost their growth on their own, because the typical channels through which they can increase final consumption tend to atrophy during the period of emphasis on exports. As banks grow used to protected markets and instructions on whom to lend to, they have little capacity to lend carefully when given the freedom to do so. Also, given the strong ties between the government and producers, it is far more convenient for the government to channel spending through domestic producers that are influential but not necessarily efficient. In Japan, more government spending generally results in more bridges and roads to nowhere as the powerful construction lobby secures stimulus funds. Even as Japan has been covered with stimulus-induced concrete, the economy has remained moribund.

As a result, not only are countries like Japan unable to help the global economy recover from a slump, but they are themselves dependent on outside stimulus to pull them out of it. This is a serious fault line. Indeed, an important source of Japan's malaise in the early 1990s was that the United States did not pull out all the customary stops in combating the 1990–91 U.S. recession, and thus did not provide the demand that historically had helped Japan out of its downturns. It was not until the early 2000s, after a number of failed Japanese attempts to pull itself out of its decade-long slump, that the massive U.S. stimulus in response to the dot-com bust helped Japan export its way out of trouble yet again.[24]

There is no natural, smooth, and painless movement away from export dependence to becoming a balanced economy. Even ignoring the clout of the export sector, which would like to preserve its benefits, the costs of changing emphasis are substantial, and the tools the government has for redressing past distortions are limited. For instance, wages in the domestic sector are often too high relative to productivity in those sectors. To allow greater differentiation of wages, as will be necessary to allow the service sector to flourish, existing service-sector workers must suffer a steep drop in incomes. They have strong incentives to fight against such change. Moreover, foreign entry into the service sector could boost productivity. But years of protection and overregulation are hard to overcome, and strong incumbent interests, like those of the Japanese barbers, will fight against competition and entry.

Similarly, consumers have been trained to be cautious about spending, and retail finance is not well developed. Japanese households, unlike those in the United States, do not readily borrow to spend. It is hard for older people to forget the experiences of postwar deprivation and insecurity or the subsequent period of growth when saving was considered patriotic, and it is the older generations who have more spending power and still determine the overall pattern of consumption. For a while, younger consumers in Japan were thought to offer the answer. But after years of depressing economic outcomes, they too seem to be retreating into their shells, perhaps further depressed by the enormous public debt and underfunded pension schemes they will have to shoulder.[25] Economic reform in Japan requires tremendous political will, a commodity in short supply when the status quo is perfectly comfortable and the pace of relative decline gentle.

Will China Deepen the Fault Line or Bridge It?

Will the world become more balanced in the future as the late developers continue to grow? The experiences of Germany and Japan offer grim portents for the future. A number of late developers will be joining the ranks of the middle-income nations, if not the rich, in the near future. Will they continue to depend excessively on exports, or will they be able to reform their economies, making the needed transformation back to balanced growth, once they have become rich? Of especial importance is China, which barring untoward incidents, is likely to become the world's largest economy in a decade or two. Although China has a huge domestic economy, it too has followed the path of export-led growth.

Chinese households consume even less as a share of the country's income than the typical low average in export-oriented economies. Because economic data from China, as in many developing countries, are not entirely reliable, economists constantly attribute any Chinese aberration to data problems. But assuming the data are broadly right, why is Chinese household consumption so extraordinarily low? In part, it is because Chinese households cannot rely on the traditional old-age safety net in Asia, namely children. As a result of the government's policy of allowing most couples only one child, six adults (four grandparents and two parents) now depend on one child for future support.[26] No wonder adults, especially older ones, are attempting to increase their savings quickly. To make matters worse, many of them have lost the cradle-to-grave benefits that once came with jobs with state-owned firms, and the costs of needed services like health care are rising quickly as the economy develops. China is trying to improve its pension and social security system, but countries typically take decades to convince citizens that they will get what is promised from such schemes.

China also faces a more traditional problem related to export-led growth strategies. As a proportion of the total income generated in the Chinese economy, household incomes are low. Wages are low because they are held down by the large supply of workers still trying to move from agriculture to industry. Household income is further limited because the subsidized inputs to state-owned firms, like low interest rates, also mean households receive low rates on their bank deposits. Moreover, a number of benefits such as education and health care are no longer provided for free by the state, eating further into discretionary spending.

Finally, consumption may be low because Chinese households feel poorer than they actually are. State-owned firms do not pay dividends to the state and because households do not own their shares directly, they do not see the extremely high profits made at state-owned firms as part of their own wealth. Of course, in the long run, it is hard to believe that the wealth created by these state-owned firms will not be recaptured for the public good. For now, though, households believe they have no part in it, and they consume less than they might if they believed they were richer.

Low domestic consumption, of course, makes the economy excessively reliant on foreign demand. Moreover, even if the Chinese can find ways to boost household consumption in a crisis, it constitutes only a small share of overall demand, and thus the effect on growth is small. Therefore, the Chinese authorities typically try to stimulate investment when they need to keep up growth in the face of a global slowdown—and they do need strong growth to keep up with the expectations of the people. They push loans from the state-owned banking system to local governments and state-owned firms, who then do more of what they were already doing, without regard to long-run profitability. Thus far China has successfully followed the principle “Build it and they will come.” But rapid investment in fixed assets carries many dangers, especially once the basic infrastructure is in place. As Yasheng Huang of MIT points out, Chinese bureaucrats have a penchant for glamour projects—vast airports, fancy modern buildings (typically housing the bureaucrats themselves), and enormous malls. It is not clear that this way of stimulating the economy will remain sustainable. China’s leadership has adapted in the past when necessary. Can they step away from the seductions of export-led growth and fixed-asset investment before it is too late? Only time will tell whether China will deepen or mend this fault line.

Summary and Conclusion

The late developers were not innovators initially: they had no need to innovate because rich countries had already developed the necessary technology, and the technology could be licensed or "borrowed." Instead, they tried to remedy a fundamental deficiency: the weakness of existing organizations—even while tackling more traditional development problems like the lack of basic education and skills in the workforce and deficiencies in the health care system. The process of strengthening organizations, in their view, required massive but careful government intervention. Infant firms had to be nurtured. The very real danger, as evidenced in India's stagnation during the 1960s and 1970s, was that the infant firms would demand permanent protection and then strangle growth.

One option was to increase internal competition by reducing barriers to entry and eliminating various subsidies. But governments thought this would waste resources and be potentially harmful to the incumbents who had only recently become profitable. Moreover, the internal market was small, made even smaller by the repression of households in favor of producers. The solution instead was to use the disciplinary power, as well as the attractiveness, of the large global market. Governments forced the now-healthy firms to compete to export, using the threat of opening up the economy to foreign investment to keep firms on their toes.

There were considerable pressures on the government to prevent it from forcing this change. Businesses would have loved protection to continue so that they could lead a quiet, profitable, life. But a few governments, typically authoritarian ones that managed to avoid the influence from the private sector that comes with having to fight elections, drove the transformation to an export orientation.[27] Those are the growth miracles that we celebrate today.

Unfortunately, their growth is still strongly dependent on exports. Government policies, domestic vested interests, and household habits formed during the years of catch-up growth conspire to keep them dependent. The world has thus become imbalanced in a way that markets cannot fix easily: much of my tenure at the International Monetary Fund was spent warning not about finance but about global trade imbalances. The two are linked, for the global trade surpluses produced by the exporters search out countries with weak policies that are disposed to spend but also have the credibility to borrow to finance the spending—at least for a while. In the 1990s, developing countries, especially those in Latin America and East Asia, spent their way into distress. How and why this happened is what I turn to next.