

# **Slouching Towards Utopia?: An Economic History of the Long Twentieth Century**

## **XXI. East Asia's Rise**

**J. Bradford DeLong**

**U.C. Berkeley Economics and Blum Center, NBER, WCEG**

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### **21.1: The View from 1945**

Back in 1945, most outside observers regarded East Asia like observers today regard Africa: the part of the globe facing the biggest development challenges, and most likely to stay poor, and desperately poor, for the longest period of time—if not indefinitely. Japan, it was agreed, was different: it had entered the modern age with a strong, functional government; an elite that rapidly saw the need for westernization and was willing to rapidly defenestrate the landlord *samurai* class to remove its power to absorb wealth and block change; a population that could limit itself and avoid the Malthusian trap; a high and respected place in society for commerce and industry; and an enthusiasm for not just elite but mass education. But the rest of East Asia was seen as different.

Back then in 1945, it Asia that was poor and on the edge of starvation because of its teeming populations. Back then, it was the resulting Malthusian poverty that kept Asia from investing in education, infrastructure, or machinery. Back then, it was Asia that had an anti-democratic political culture that kept politics a game of grab-the-surplus by elites. Back then, the near consensus in the west—stemming from Max Weber's strictures about the inconsistency between a Confucian, Daoist, or Buddhist religio-mystical cultural orientation and the legal-instrumental rationality required for modern economic growth.

Thus the remarkable economic growth trajectory of the Asian Pacific rim since the end of World War II has been astonishing and unexpected.

Japan had been seen as on a strong development trajectory since the Japanese victory in the Russo-Japanese War of 1905, or perhaps the China-Japan War of 1895. But then Korea, Taiwan, Singapore, and Hong Kong joined the group. Then Malaysia, and to some degree Indonesia, joined. And then coastal China and perhaps Vietnam joined. And today they are all seen as different cases of an East Asian development model that delivered rapid and structurally transformative growth.

at the end of the 1990s that the East Asian financial crisis showed that the long ride was over,

## **21.2: “Developmental States”**

Lots of countries have attempted to grow their economies rapidly under the aegis of a “developmental state”. Yet, most of the time, it has not worked.

Latin America and the Soviet bloc of really-existing socialists are the principal cautionary tales. The Soviet bloc attempted central planning via control of key commodities via material balances, plus lots of network-based bargaining, corruption, and influence to govern exchanges outside of key commodity flows in order that managers could try to fulfill their plan-imposed goals. In Latin America planning was with a lighter hand: tariffs and subsidies, and government ownership and operation of key industries and sectors.

There is a famous quote from economist Herbert Simon about how there should be no a priori presumption that market beats plan in any particular case, or indeed that a competitive market economy gets the market vs. planning dividing line right. Simon wrote of visitor forms Mars;

approaches the Earth from space, equipped with a telescope that reveals social structures.... Firms... faint interior contours marking out divisions and departments. Market transactions... red lines connecting firms... a network.... Within firms... pale blue lines... of authority.... No matter whether our visitor approached the United States or the Soviet Union, urban China or the European Community, the greater part of the space below it would be within green areas, for almost all of the inhabitants would be employees, hence inside the firm boundaries. Organizations would be the dominant feature of the landscape. A message sent back home, describing the scene, would speak of “large green areas interconnected by red lines.” It would not likely speak of “a network of red lines connecting green spots”...

Ronald Coase claimed that there was a presumption that firms would grow (or shrink) until they were at efficient scale. Plus, as Cosma Shalizi has written:

The conditions under which equilibrium prices really are all a decision-maker needs to know, and really are sufficient for coordination, are so extreme as to be absurd. (Stiglitz is good on some of the failure modes.) Even if they hold, the market only lets people “serve notice of their needs and of their relative strength” up to a limit set by how much money they have. This is why careful economists talk about balancing supply and “effective” demand, demand backed by money. This is just as much an implicit choice of values as handing the planners an objective function and letting them fire up their optimization algorithm. Those values are not pretty. They are that the whims of the rich matter more than the needs of the poor; that it is more important to keep bond traders in strippers and cocaine than feed hungry children. At the extreme, the market literally starves people to death, because feeding them is a less “efficient” use of food than helping rich people eat more...

Why does it work when other attempts to supplant the Smithies logic of the free market—the South American sad stories not so much of the death of kings but of the failures of tariffs and subsidies aimed at building national capabilities and national champions, the inability of the Soviet Stalinist model to do much of use other than building a heavy military-industrial complex beyond the Urals where it can still roll tanks off the assembly line when the Nazis are at the gates of Moscow and Stalingrad—did not?

One reason is that Latin America to some extent and the Soviet Bloc overwhelmingly aimed—ideologically—for autarky and planning, walling their economies off from world market prices and, indeed, from prices altogether: Juan Peron and his successors did not care whether the railroads they nationalized made a profit, or whether the auto companies they subsidized could sell abroad.

Central to the model is the “developmental state”—a government that is not a referee but a player. It is a government willing to place very large pragmatic long-run bets that there are sectors in which the profit-seeking logic of the market is undervaluing certain important investments and sectors. It doesn’t have to own or run companies—though it does. It doesn’t outlaw or supplant markets. It uses them. But it shapes their outcomes. And it is the partner of business, especially big or organized business. Despite significant national differences, the goal was the same: not to invent the nation’s future, but to catch up with it. As Marx put it, the more developed economies show the less developed the image of their own future.

Looking across the Pacific at the United States, East Asia did not have to guess and experiment but could see what the shape of a high-productivity prosperous economy was. And from that it was obvious what investments and sectors would pay off not necessarily in terms of immediate profits for businesses at Smithian free-market prices but in terms of economic growth. From peasant agriculture to toys, low-value clothes, and luggage—low wage, low value-added, light manufacturing. And then to the core high-value industries of the late twentieth century: steel, shipbuilding, industrial equipment, motor vehicles, electrical machinery, and electronics.

## **21.2: Invention vs. Catch-Up**

There is no reason to think that the economic organization best at inventing the industrial future is the one best-suited to catching up with a known target. The King of England did not call a meeting of barons, bishops, bankers and a few mechanics and say: let's have an Industrial Revolution. But that is pretty much what Japan did, from Meiji onward. Run-and-find-out with ample room for free play and free markets succeeded at not only inventing wholly new technologies that became giant industries but proving the idea of industrial development. The verdict is very clear: for catch-up development, whatever it is the “East Asian development model” works.

East Asian governments were much more pragmatic: providing preferential access to very, very cheap capital, especially to firms that have demonstrated that the goods they produce do offer enough value for their cost to be successfully sold abroad; providing help in getting foreign technology, especially when getting it is not easy; providing tariff and quota protection for industries where industrial learning might be able to be accomplished easily, while letting imports in sectors that are still decades beyond the domestic economy's grasp enter duty- and quota-free. It doesn't typically own or directly manage firms—with the exception of China, where that has been a key part of the process of the transformation of the nomenklatura and its children into a bourgeoisie. It has no time for a firm that cannot meet the standards of competitive success in highly-contested international markets.

East Asian development states have been enthusiastic—compulsive—trading nations, but not open economies. Perhaps the most striking contrast with Latin America has been the largely-successful restriction of imports to intermediate and capital good useful for economic development, in striking contrast to those that are

items of middle class and elite consumption. It was and is not just exchange-rate manipulation—although an undervalued exchange rate is one of the most powerful positive levers of industrial development as long as relatively-low import shares keep the adverse terms-of-trade effects small and as long as export demand elasticities are favorable. Non-tariff barriers both large-scale and small-scale also appear to have played critical roles: specific stories of protection, promotion and organization in first one particular industry and then another and yet another strongly suggest that the bird's-eye overview of key macro aggregates misses a huge amount of the picture.

### **21.3: The Macro Picture**

Teaching tragedy—Sophocles, Euripides and Shakespeare, even, alas, Racine—is much easier than teaching comedy—Aristophanes, Terrance and Sheridan. Why? Tragedy's very few core truths apply always and everywhere: pride, greed, passion, loss of control and so forth are all the same in Periclean Greece, Elizabethan England or Obaman Los Angeles. Comedy is all about context, contingency, particularity, surprise, and inversion. The classics of comedy fall dead with a thud to our current crop of students. Who today finds MacBeth's equivocating porter amusing, or even intelligible? But that comic interlude brought down the house in front of James I Stuart and his court.

The East Asian model has some elements of both. Very high rates of savings and investment sustained year after year. A relative price structure tilted at making those capital goods that embody so much of modern technologies cheap relative to consumption goods, especially elite consumption goods. The use of foreign exchange earned for industrial development no matter what those whose exports earned it would wish to spend it on. These mean, of course, low rates of wages and consumption relative to Smithian prices. Though absolute levels can rise smartly, this is a heavy, hidden tax on labor, especially relatively skilled labor. These mean financial repression relative to Smithies prices: squeezing returns to savers, and shifting those returns to the industrial companies who access the savings, and to those who end up owning them.

These also mean export surpluses via undervalued exchange rates—subsidies relative to Smithies prices to foreigners who purchase the exports, in the hope that the human- and organizational-capital gains via learning-by-doing from producing exports successfully will outweigh the cost of the implicit subsidies. And, indeed—as long as an undervalued exchange rate does not rob domestic businesses of

their ability to obtain access to the first world-produced capital goods and the first world-invented technology that they need—exchange-rate undervaluation and manufacturing export-orientation have since WWII led industrial development—increasing levels of sophistication in product and production, in logistics, in marketing, and in skills extending down the local supply and value chain.

Thus the East Asian developmental model is predicated on other nations—cough, the United States of America—operating on a different, open economy model, absorbing those exports and running those trade deficits. This means that it is a development model restricted to a few. The United States cannot be the importer of last resort for everyone. This means that the United States has to believe that openness to imports even from countries with undervalued exchange rates that do not return market-access favors is in its interest. Perhaps the United States believes that a more rapidly-growing world is a more peaceful world and one that the United States can more completely reshape to make comfortable. Perhaps it is the high Cold War, and it is very important to demonstrate along what used to be called the Bamboo Curtain that Leninism and Stalinism fail as industrial development strategies while market capitalism succeeds. Perhaps it is that manufacturing is the sector of the past, and that shrinking manufacturing leads to a stronger economy as the resources released can be devoted to the high-value industries of the future: high finance, health care administrative services, other services with special emphasis on those demanded by the increasingly-dominant top 1%, and prisons.

### **21.3.1: Japan**

After World War II, whether Japan's economy would successfully surmount the shock of defeat hung in the balance. Japan had begun its government-guided industrialization in the mid-1800s in response to the arrival of America's Admiral Perry and his Black Ships with their big black cannon. The Meiji Restoration enabled Japan—along with only Thailand and the interior of China—to escape colonization, and its best and brightest were sent off to Europe and the United States to learn the new industrial skills, technologies, methods and attitudes and bring them back to Japan to create a rich country and a strong army. It was clear by the end of 1941 that it had worked.

But then came the war. Defeat in World War II ripped its raw material- and labor-supplying empire away from it. With its factories leveled by Curtis LeMay's bombers, without oil, without iron ore, starting from ground zero and having to purchase from abroad nearly every input needed for industrial civilization save rice

and coal, what were Japan's chances? And Proconsul Douglas MacArthur and his staff saw in the industrialists and industrialization of Japan the same social and economic base for aggressive militaristic fascism that U.S. Treasury Secretary Morgenthau saw.

Things changed when the Korean War starting in 1950 made Japanese industry a valuable hot-war resource, and made Japanese economic success an important Cold War goal. It became a keystone of American policy that Japan become a prosperous, democratic and unsinkable ally and base in the troubled regions of East Asia. At the beginning, in the 1950s and 1960s, it was largely painless. Even later, when Japanese exports started to first erode and then decimate the American industrial core, and moans and cries of "foul" arose from first Pittsburgh, then Detroit—and then even Silicon Valley—the U.S. government was unwilling to react by more than saying that they might someday start thinking about what to do to enforce increased U.S. access to Japanese markets.

Why, one asks, did the United States not use its muscle to take action to open Japanese markets and the Japanese system, or to try (the "voluntary" industrial export restrictions Reagan imposed on Japan aside) to protect targeted US industries? Strategic, humanitarian and at the outset America's unquestioned economic interest in free trade and view that free trade leads to prosperity and democracy and is the best bulwark all reinforced each other. And the arguments that the large trade deficits of the 1980s were America's fault because they were driven by Reagan's budget deficits and the large trade deficits of the 1990s were America's blessing because they funded investment in Silicon Valley were both at least half true. And from the standpoint of Reagan and his successors, it wasn't rustbelt manufacturing that were the high-value industries of America's future—those were high finance, health-care administrative services, other services with a focus on those that pleased the increasingly-dominant top 1%, and prisons.

By 1955 the Japanese economy was as strong as it had been on December 7, 1941. And growth thereafter was the fastest the world had hitherto seen. From 1960 to 1973 the Japanese economy sustained a 10%/year average growth rate, quadrupling the economy in a short sprint and raising GDP per capita from 25% that of the USA to 57%. From 1973 to 1990 GDP grew at 4.5%/year, doubling the economy and bringing Japanese per capita GDP up to 78% of America's. A triumph. It did not go unnoticed by its neighbors, many of whom set out to reverse-engineer the miracle.

The micro pieces of Japan's post-WWII industrial economy involved at least four elements: strong domestic protectionism through an intricate network of non-tariff economic and social network barriers with tariffs (against Thai rice, for example) as a backup where those failed, the universal-bank-keiretsu system of interlocking corporate control and preferential industrial relationships, a highly competent and development-focused poetically-independent industrial-policy bureaucracy—DARPA on steroids, but aimed not at funding the invention of the future but the copying of the North Atlantic present)—plus financial repression that produced easy access to capital for successful exporters at and extremely low cost and yet maintained a very high savings rate. And other things went right as well: education, workforce skills, low crime, just-in-time six-sigma industrial ecology, a culture of collective obligation; low military expenditures; lawyer-free, either the appearance or the reality of homogeneity to prevent faction. All mattered. How much did each? If we knew that, we could teach Comedy.

And, of course, in Japan it all—or much of it—crashed in 1990. But that is beyond our subject.

Economists oppose protectionism because it hurts consumers by increasing prices while benefiting producers who have done nothing productive to earn it but only lobby for it. An industrial ecology of protectionism produces firms that are good of getting what they want out of Washington but bad at running efficient current operations and improving technology. The rapid rise of Japanese consumption standards and the world-class performance in international markets of the major Japanese industrial firms, the beneficiaries of years of protection, provides evidence that this is not exactly how it worked in Japan. Japan's protection did have elements of this story: rice for example, it was seen as a necessary price that industrial development must pay to buy-off small farmers and the LDP politicians who serve them. Japanese protection was, it seemed smart—or at least not dumb—protection. At any particular moment protectionism along with financial repression sacrifices the welfare of consumers to the benefit of producers. Yet over time it appears that there were sufficient accumulating gains to producers that even though at every moment consumer welfare was systematically unmaximized—gallingly so—it worked. Overpaying for most everything, they grew rich.

In 1960 Japanese-made automobiles were pathetically inferior to foreign brands such as Volkswagen, Ford, or Fiat. Yet there were essentially zero imported automobiles in Japan. Ten years later, still zero. Ten years after that, still zero. Up through 1985 imports never captured more than 1% of the Japanese market.



Japan kept out not just imports of foreign made goods but foreign companies. The direct investment wave was a key element in post-WWII international economic integration and trade, with the likes of Procter and Gamble, Unilever, Phillips, Ford, General Motors, Goodyear, Kodak, Gillette, Colgate, and of course, IBM producing in every industrial market—except Japan. As late as 1988 foreign-headed companies produced about 1% of industrial output in Japan. They produced close to 30% in France, 25% in Germany and about 12% in the USA. Economists like data, rather than anecdotes—like quantity of observations, not quality of observations. But look long enough at enough anecdotes, and you discover that at a large enough scale quality has a quantity of its own.

Those same Japanese firms that were protected against imports produced abroad and were protected against foreign headquarters branches' producing at home were, in international markets, forced to hone their competitive abilities and match international standards of not just innovation and quality but also price—or else their MITI subsidies would go away. Very patient cheap capital helped. And by the 1980s it was clear that something remarkable was going on with Kawasaki and Nippon in Steel, Toyota, Nissan and Honda in automobiles, eventually Bridgestone in tires, Komatsu in construction equipment, and Toshiba, Matsuhita (Panasonic), and Nikon, Fugitsu, Sharp, Sony, and Canon in electronics. It wasn't just that the Reagan deficits had offered the U.S. a choice between a decade of no productivity growth as the budget deficit slurped up all the savings and a decade of an overvalued currency and thus of the decimation of the rustbelt by imports. That was there, yes, but there was something more too.

Mitsubishi, Sumitomo, Mitsui, Dai-Ichi (Fuyo, Yasuda)—keiretsu institutional forms of industrial groups and cross-holding that had some rough approximations in the industrial affinities of Germany's Grossbanken or of the House of Morgan in its heyday., and some rough approximations in conglomerates like Gulf+Western and General Electric. But they were much no exact equivalent, or even rough approximation in America or Europe. The Mitsubishi keiretsu, for example, had major positions in: banking, insurance, import-export, real estate, beer, electronics, oil, machinery, chemicals, pharmaceuticals, glass, plastics, department stores, paper, steel, shipping, automobiles, "heavy industry", and many others. Keiretsu groups appear to have provided a staunch inner wall of non-tariff protection by "buying Japanese" and by aggressively funding sub pieces that appeared to have an opportunity to build an industrial capacity so that they could then "buy Japanese".

Americans see government bureaucracy through the awful green wall paint, long lines, and dull, repetitive tasks of the motor vehicle bureau or the post office. This image is an important part of how Americans see the world, and have been taught to see it. Bureaucracy looks, or looked, different in Japan. The elite ranks of the Japanese economics bureaucracy attracted the very top graduates of the very top universities: seen as the best and the brightest. Recruitment was seen to be honestly meritocratic. Corruption was deemed to be rare. Salaries were in line. And meritocratic selection was coupled with discretionary power, with ranking bureaucrats very well-informed indeed about the industries they oversaw. The cornerstone of industrial policy was the conviction that what was good for Mitsubishi or Sumitomo was good for Japan, and that the state was to guide, enable, and accelerate their development in its preferred directions. Formal specific laws, rules and targets were kept to a bare and vague minimum. And like the French system—or the Pentagon system—ranking Japanese bureaucrats would retire to take ranking and very well-paid positions in the companies they had overseen. At every moment the bureaucrat overseeing an industry or a company was dealing with his former boss who, once again, would be critical to his next career move. It makes conversation and cooperation easy.

But meddling politicians? Firms that are actually competent not at production and exporting but only at having hired the previous assistant to the vice minister? Halliburton profited enormously in the 1990s from hiring ex-US defense secretary Dick Cheney as head of its government liaison and calling him CEO, but aside from the profits from government relations his effect on the firm's operations and finance appear to have been limited to making it buy a huge loss in the form of liability for asbestos cases. How could Japanese industrial policy be any different?

Somehow, parliamentary politics and politicians were kept out of policy for the industrial core. They went elsewhere: the rent-seeking logic of politics governed agriculture, wholesale and retail trade, and construction. These were industries that employed many more people than export-oriented manufacturing. And these were industries that the technocrats of MITI stayed very far away from. This entailed enormous costs for the Japanese economy. Small shops were protected. Costs to customers were high. But so was employment, and neighborhoods retained their activity and intimacy—which seemed to be part of keeping Japan Japan. Protection raised Japanese prices for rice to about eight times world prices. The small rice farmers survived. They voted for economically irrational, costly subsidies to agriculture so they could continue to make a (not very good) living via ten hours a day of stoop labor during planting season. But Japan was and is not the only industrialized rich country with absurd levels of agricultural protection.

In Japan, designated institutions, particularly the Postal Savings system, channeled capital to normal public works, and rather a lot to politicians' infrastructural boondoggles as specialized financial institutions do in many countries. Savers got low returns and saved patiently while favored industrial borrowers got cheap, patient capital. Housing did not get the special tax subsidies and other advantages that it receives in the United States. Indeed, the goal was to divert the flow of savings away from housing and towards industry. Repressed rates of return to savers did not discourage savings. You had to save for your old age. You had to save up a substantial down payment in order to buy a house. And there is little reason to assume that higher interest rates paid to savers induces greater volumes of savings; the opposite often applies. The lower the return, the more you have to save for a targeted purpose. Seeking higher returns by placing savings abroad was successfully discouraged by the systematic absence of easily accessible instruments to do so. Of course, no foreign-based financial institutions were permitted to operate in Japan until well after the high growth period.

Ever since the development of the "new trade theory" by Paul Krugman and others, the case for free trade as the best policy has, as Krugman has written:

irretrievably lost its innocence. Its status has shifted from optimum to reasonable rule of thumb. There is still a case for free trade as a good policy, and as a useful target in the practical world of politics, but it can never again be asserted as the policy that economic theory tells us is always right...

In Krugman's view, there are four reasons why free trade remains good policy and a useful target in the practical world of politics. They are:

Attempts to craft successful internationally-oriented industrial policies—those that grab a larger share of increasing-return sector-specific rents or a larger share of learning-by-doing and other spillovers—are highly likely to call forth retaliation and trade war, and end in a truly bad equilibrium of limited, administered trade. To figure out what really are the industries of the future—what industries do promise large rents and high spillovers in the future—is, for Hayekian information reasons, beyond the competence of bureaucrats to calculate. Rent-seeking interests can easily deploy the rhetoric of industrial policy to convince governments to adopt not positive-sum but negative-sum interventions. Ideal technocratic guardians in Plato's Republic could conduct developmental industrial policies successfully; our rulers and bureaucrats here in Romulus's Sewer cannot.

Even successful industrial policies build economically powerful and politically canny interests that then keep the policies subsidizing them going long-past the sell-by date: better not to get into the business in the first place.

But what if one's trans-oceanic trading partner—for Cold-War strategic reasons and as part of taking steps toward building a climate of freer trade worldwide—does not wish to retaliate, and so risk destructive trade war? And what if you are not trying to invent the future but merely to copy the present—for you know that, as Marx wrote, the more advanced economy shows the less advanced the image of its own future? And what if your bureaucrats are, for some complicated historical reasons, actually more akin to the guardians of Plato's Republic than to the corrupt bought rent-seekers of Romulus's Sewer?

Then there are two two remaining arguments against industrial policy a la Japan after World War II:

- That it imposes a very heavy tax on the consumption of the current generation in order to produce rapid growth and development—and perhaps this tax is not worth it.
- That after the growth spurt is over, the politically-powerful interest groups that benefitted from it are still politically powerful and are likely to be able to block a shift from government policies oriented toward catch-up to government policies oriented toward pushing the technological frontier outward.

These are powerful negatives. They have both come true in Japan. And historians will debate how important they are for decades if not centuries. But they do not erase the fact that if your overriding national objective as of 1950 was the most rapid convergence to as close as possible to North Atlantic living standards and productivity levels, Japan designed its economy via its post-World War II industrial policy to do that job, and do it very well

No one watching South Korea in the 1950s anticipated that it would become one of the world's fastest-growing economies. It has been devastated by a bitter war that had seen its capital and major industrial center, Seoul, change hands four times. Its savings rate was low. Its exports were low. More than half of imports in the late 1950s were paid for by U.S. assistance, either foreign aid or the expenditures to support the U.S. military presence in South Korea.

The government of Syngman Rhee sought to control the flow of foreign affairs and imports. They overvalued their currency (so as to charge the U.S. as much as possible for support of its military), they imposed high tariffs and they imposed stringent quantitative import restrictions as well. The result was slow and erratic growth, and continued dependence on the flow of resources from the U.S.

With the takeover of the government by Chung Hee Park in 1961, everything changed. Chung Hee Park was a somewhat brutal (although quite ordinarily so by the standards of the twentieth century) but remarkable leader who shifted Korea's development strategy to one of export-led industrialization, rather than import-substitution. The consequences were astounding. The growth rate of income per capita averaged more than 7 percent of GDP for the three decades after 1960. Exports grew from three percent of GDP to forty percent of GDP.

### **21.3.2: China's Opening**

China, with its system-bursting scale, has pushed the model to its limits—and perhaps beyond.

#### **The Era of Deng Xiaoping:**

Mao Zedong's reconquest of power and dominance over the Chinese Communist Party was an extraordinary political accomplishment, but a disaster for China. Higher education nearly ceased for a decade--with a concomitant delay in establishing the human capital infrastructure needed for industrial development. Mao's principal lieutenant in the launching of the Cultural Revolution, Lin Biao, was assassinated--probably by Mao--under mysterious circumstances at the beginning of the 1970s.

The factions of the Chinese Communist Party were unable to coexist after Mao's death. The "left" wing--Chiang Ching, Chen Pota, (those who were soon to be reviled as the "gang of four"--demanded that Hua Guofeng, the compromise party chairman appointed by Mao, purge Deng Xiaoping once again. The Canton military district, in which Deng had taken refuge, professed to be unable to find him for shipment to Beijing and a subsequent show trial. China came very close to Civil War.

By December 1978 Deng Xiaoping had sufficient control to begin dismantling the

Maoist central planning apparatus. Per capita grain production at the end of the 1970s was the same as in the mid-1950s. By contrast, all of China's immediate capitalist neighbors had leaped ahead.

As Dwight Perkins has written:

Where Deng Xiaoping differed from his successors was in the strength of his desire to turn China into a wealthy and powerful state, and his lack of interest in Maoist ideas of a new kind of society, where such things as material incentives would play little or no role.

In the countryside the agricultural collectives were dismantled. In the late 1950s nearly all Chinese agriculture had been gathered into people's communes and people's production teams of some fifty people. But within five years after the beginning of reform, household agriculture was once again the rule in China.

Up until 1985 the state maintained an effective monopoly over "key" agricultural commodities like grain. Peter Timmer estimates that only some eight percent of agricultural output was sold on an open market in 1978; some eighty percent was traded on relatively free markets by 1990. The response of agricultural production to the end of collective farms and to the use of the market to allocate agricultural productivity was enormous. Agricultural output doubled between 1978 and 1992, with most of the gain coming in the first six years.

Karl Marx had, in his economics, inherited a previous distinction between "productive" labor—which made things—and "unproductive" labor: the service sector, including not just services as final outputs but distribution as well. The Soviet Union and then China inherited this distinction: private restaurants and personal services were suppressed, made illegal, before 1978. After 1978, the service sector grew by leaps and bounds.

The proportion of the labor force employed in agriculture dropped from 71 percent in 1978 to 54 percent in 1994. The proportion of real GDP exported rose from 5 percent in 1978 to 23 percent in 1994. And the proportion of non-agricultural commodity output produced by the command economy's government-run enterprise dropped from four-fifths to one-third.

A first limit is external: the capacity and willingness of other countries to absorb its exports, to pile up debt, and to tolerate the shrinking of manufacturing out of not just the low value-added industries of their industrial past—everything at Wal-Mart

or Target;—and the present—steel, ships, cranes, pumps, compressors, small appliances, bigger appliances—but what had been thought to be the cutting-edge manufacturing industries of their future—solar panels, LEDs, networking equipment, supertrains. A second limit is domestic: the high wire act of shifting the drivers of growth from cheap debt-financed investment and exports to domestic consumption. China’s collective leadership says that it understands how China is rubbing against the model’s limits. But saying is not acting. And acting is not doing.

China disciplined itself to the macro levers of the basic model: repressed rates of consumption, high rates of savings, high rates of investment, export surpluses. And China’s sustained performance in each of these macro drivers has been more than extraordinary. Investment in China has climbed to over 50% of GDP—two-thirds again higher than Japan in the High Growth Period. Savings has kept pace. Exports have climbed to 30% of GDP. Consumption has been repressed to only 34% of GDP.

The “comedy”, or institutional- and sector-specific policy, components of the East Asian growth model have been different for China. China started on its trajectory of economic reform and rapid development as a miserably poor peasant economy. It had just seen the ebbing of another wave of economic and social destruction wrought by a ruthless and apparently mad totalitarian government: Great Leaps Forward, Great Sparrow Campaigns, Great Locust Plagues, Great Famines, and, last, Great Proletarian Cultural Revolutions. It was Deng Xiaoping—finally, pragmatically, saying that what one cared about in a cat was not whether it was revolutionarily red or reactionarily white but whether it caught mice—who set China on what has proven to be an ongoing and unimaginably successful trajectory of structural economic reform. And since his accession to power in the mid 1970s, the Chinese economy’s growth has astonished the world.

At the beginning, reforms were tentative: controllable experiments in bounded areas that could be shut down swiftly without having contaminated the vast Red rest of China. There was no shared consensus on just how far-reaching reform would be or where it would lead. There was a mere choice of direction: not the Soviet Union, not the cult of personality, and somehow towards the successes of the fast-growth Asian Pacific Rim economies, all to be called—as it still is —“Communism with Chinese Characteristics”.

Reform began with agriculture. Agriculture directly employed about three-quarters of the Chinese work force in 1978. Communes were dismantled. Peasants got their

farms back, with enough security of tenure to encourage investment in irrigation, drainage, breeding stock, and equipment. Peasants were told that they had to continue to sell to the state the same quantities as they sold to the state the previous year at the same state set price, but they could sell anything beyond that at market prices. Few economists would have counseled such a dual-price structure with its built-in promise of black market corruption. But rising output swiftly trivialized the assigned quotas and the corrupting force of the dual-track pricing system.

Agricultural output grew smartly, compounding at about 5% per year, and so more than doubled by 1995. The agricultural workforce fell by a quarter, down to 53%. Peasants saw that they were living three times as well as they had in the bad old days of Mao Zedong. That gave the regime of Deng Xiaoping and his successors enormous street credibility—which they banked and on which they are drawing to this day. No matter how large the gap between the richer coastal cities and the relatively poorer rural interior remains, the government will not be blamed as long as a critical mass of agricultural workers remembers 1959, or even 1975.

Stalin's greatest and most murderous failure was his brutally forced collectivization. It was intended to enable the State to control agricultural output (and the peasants) and take it (and the peasants' sons) off the farm to build the dams, roads, electrification, and factories of the Five-Year Plans. It kept Soviet agriculture a lagging sector for generations, employing vastly more than its normal share of the labor force at productivity incredibly low even by Soviet standards. It turned the Ukraine from a grain-exporting region rivaling the U.S. midwest into an economic drain.

Similarly, forced collectivization under Mao had failed to generate increases in agricultural output and productivity to support industrialization. Deng and his reformers inverted the model and succeeded: shifting peasants out of low, often zero, productivity work in agriculture and into manufacturing—producing goods with machines.

But who in China could buy the output of these factories? The peasants had no money. Effective domestic demand could only increase slowly, too slowly for rapid industrial growth. Only exports could absorb the output, grow its volume vertiginously, yielding rich gains of learning-by-doing—the very essence of real development—promote improvement in its quality and sophistication, and provide the foreign exchange to purchase the machines needed for sustaining that expansion and upgrading. That, after all, is the obvious lesson China could read



from the high-growth economies of East Asia: Japan and Korea, Singapore and, yes, Taiwan.

But who would teach the Chinese how to produce, and provide the know-how, the technology and access to foreign markets? A bold and rather fundamental reform addressed this question. It came at near universal surprise: China, Communist China, opened its economy to foreign companies, indeed, eagerly courted them. Foreign companies would bring technology, know-how, access to export markets, and even capital. They had, of course, to be kept on a tight chain, carefully supervised and made to contribute what they had to the Chinese economy. Entrepreneurs from Hong Kong Taiwan would be the middlemen, managing the relationships both with Chinese whose grandparents had known their grandparents and the North Atlantic companies the Chinese government hoped to attract.

This bold departure was, of course, begun cautiously, experimentally. Delimited geographic areas were made into special economic zones, opened to controlled foreign investment. The first was just across from Hong Kong. Then one across from Taiwan. Then up further north near to Japan. Again, if things threatened to get out of hand, the zones could be quickly closed. China had very bitter memories indeed of foreign enclaves.

At the beginning, there was no way indigenous Chinese firms would know what kind of garments to make for the outside world, nor would they know how to make them efficiently and to world standards, nor could they, by themselves, market and sell them. The Hong Kong people brought that to the party, and it was very valuable. Hong Kong apparel, shoe and toy companies led the way, setting up sewing factories. China supplied very cheap labor and the guarantee of labor discipline. The native fluency in Cantonese of the “foreigners”, their Han faces, their family ties and the obvious fact that Hong Kong was not, in itself, a potentially threatening colonial power, should not disguise the enormous importance of China opening itself.

The lopsided US-China trade balance is politically charged in the U.S. by the RMB-Dollar exchange rate held artificially low. 2011 saw \$129 billion of US exports to China and \$411 billion of US imports from China—a net \$282 billion deficit. In the depressed U.S. economy of 2011, balanced trade with China would have been worth 3 million more jobs in the U.S. But bi-national trade numbers are misleading. Everything that goes out of China to the US counts as a Chinese export, though its Chinese value-added is on average perhaps 40% of the total. 60% made elsewhere, 40% made and the cost of assembly in China. The analysis

of the iPhone is the most famous example, with only \$6.54 Chinese value added to an iPhone priced at \$169.41 at the factory door, and at \$599 when sold in the Apple store to the combination of the customer and ATT. And the quintessential US export—a Boeing commercial 787 jet aircraft—has a foreign value-added proportion that may be 35%, with the major production “partner” for the Boeing plane is Japan. The OECD and the WTO are attempting to do the heavy lifting to track international trade by value added. In their preliminary accounting, only about half of conventionally counted Chinese and American bilateral exports consist of Chinese and American value added, which implies a \$141 billion bilateral deficit in value added for the \$282 billion deficit in trade flows

### **21.3.2.1: “Predatory” Investment**

Technology transfer was central to China’s plans for foreign firms; it still is. Over half and possibly as much as two-thirds of Chinese exports during the past decade came from what the Chinese call Foreign Invested Companies. And a very, very considerable part of Chinese firms’ climb up the ladder of industrial sophistication came, one way or another, from foreign firms: witness, the latest and to-date grandest, example: very fast trains, solar panels and networking equipment. Japan based its own rapid growth on a successful determination to keep foreign companies out. China invited them in, more and more openly and cordially, and used them to its own purpose ever more effectively. China turned out not to need foreign capital for very long; its own savings rate could finance things. What it needed, more and more, was foreign technology and know-how. All companies coming in to produce, or to sell, or both, were required to have Chinese companies as partners. The Chinese partner would provide such valuable things as official permissions and permits and the connections necessary to access the Chinese market or do just about anything else. But the partner was also there also to make sure that technology and know-how poured out of the joint venture and was quickly transferred into Chinese hands.

Technology transfer moved up the ladder of sophistication very quickly, quicker than outsiders imagined. The very fast train built by Siemens to run the ludicrously short distance from the Shanghai airport into town was of course a demonstration product, with behind it the promise of a major piece for Siemens of what would be the world’s biggest fast train program. But it was also a way for China to get the technology into Chinese hands, which it succeeded in doing with breathtaking speed. Is there any company operating in China with an interesting technology that believes it is not having its technology “homaged”—imitated—stolen? Francis Cabot Lowell went to England to frantically sketch pictures of British textile

machinery, and when he returned to the U.S. he brought along British engineers like John Moody who got equity kickers in the new enterprises for turning the drawings into the machines they remembered using. It has been always thus.

At about 50% of GDP, China's investment spending has reached a proportion that no other country has ever attained or sustained. Local governments in China are not like local governments (or even state governments) in the US or Europe. They, of course, provide basic services: roads, water and sewers, transportation, police and fire, and the like. But Chinese local (and provincial) governments also play a major role in promoting and steering industrial investment and production: village, township, and provincial enterprises. They are big, perhaps the biggest, players in economic development—not just infrastructure and urban services.

To promote growth and employment they back or arrange bank financing. Loans, when they can't be repaid, or repaid conveniently (in terms of sales and employment) can, with the help of the local government, be rolled over. They can even be rolled over so generously that new borrowing covers current interest payments. Investment can be made to be close to costless. They make land available to selected developers and companies on extremely favorable terms by seizing land at the ever-advancing urban edge at extremely unfavorable, below market-value prices, with that spread being a significant source of government financing that also tends to enrich selected developers and companies—and to enrich officials and their families. Chinese officials seem to wind up with much richer families than their American or European counterparts. And growth keeps the mechanism going.

Local governments demand performance in return: rising sales and employment. There are a great many powerful local governments in China, and they compete with one another to foster growth. Their top officials also compete: promoted according to formal and informal performance metrics, high on the list of which is economic and employment growth.

Over-investment can seem a distant threat when urban development has to accommodate 10 million new urbanites a year, industrial output keeps growing at 10%/year, and the RMB can be adjusted so that whatever the Chinese market won't absorb can be exported. Consider The South China Morning Post (10/06/14) on aluminum, in an article which one imagines was not displeasing to Beijing:

Since 2003 Beijing has issued at least three policy circulars ordering the aluminium industry to correct its overcapacity problem, caused by local

governments' pursuit of their own interests. Ten years on the situation has not improved and is expected to worsen for at least a few more years...

That is: ten years of splendid and successful resistance by local governments to central government efforts to close down at least the least efficient and most polluting smelters, which use large quantities of local coal: "The Mountains are very high, and the Emperor is very far away." As Chinese capacity expands to 50% of world aluminum production capacity, foreign producers respond by crying foul but also by shuttering their now-un-economic capacity. If there is value in the network of technological capabilities surrounding aluminum production that does not make it into the short-term stock price-boosting financing calculations of Wall Street and Canary Wharf, that shuttering of North Atlantic capacity may be over-hasty.

Container ships are massive pieces of capital that demand little labor to operate. The new biggest ones can carry as many as 10,000 fifty-foot containers. In the 1990s, a giant carried 2,000. Orders placed before the 2008 crash have now been delivered. And yet in the teeth of this global overcapacity, China Shipping Container lines ordered five new super behemoths. The shipping line is not a big employer, but the shipyards are. And financing didn't seem to be a problem. Someone else who faces real capital costs will have to adjust.

Solar panels are a poster-boy industry of the future, Obama, Merkel, and Silicon Valley VCs tell us. World production of solar panels rose by 50% in the five years beginning in 2004. Chinese production rose 400%. Well over 90% of that Chinese production was exported. Chinese output then rose by 1000%, between 2008 and 2012, mostly for export—so that the price of solar cells and modules plummeted by 75% and the Chinese had more than 65% of the world market, putting American and European producers out of business—including Solyndra. U.S. producers filed complaint with the US ITC, which imposed first countervailing duties to offset subsidies of 2.4% to 4.7%, since increased to ????. The E.U. announced that it was opening an enquiry, though European producers of luxury goods—autos, watches and handbags, Airbus—pressured the EU to avoid antagonizing the Chinese government on trade matters. The EU dropped its case.

Producing photovoltaic cells and modules is not a labor-intensive process; it is technology and capital intensive in the extreme. The same is broadly true for LED lighting. Producing solar panels is not labor intensive; it is technology and capital intensive; that is the job of China. Installing them on roofs is technology light, capital light, but labor intensive; that is the job of America.

From one perspective, China's pushing the value of its currency down and providing very low cost land and capital to its producers so that they can cut the prices of their exports is an enormous foreign-aid program by China to America. China has now bought \$3 trillion in U.S. assets at an average price of 7 yuan to the dollar—that's 21 trillion yuan. When it sells those assets off in some future generation, it is going to be lucky to get a dollar for 3 yuan. That means that 12 trillion yuan—\$2 trillion—have been borrowed by the Chinese government from its citizens and given to Americans in the form of goods at discounted prices in return for the American government's acceptance of the migration-production-export-more migration political-economy cycle that has fueled Chinese growth recorded at 8% per year for the past generation and a half. That is a \$2 trillion payment by China to America in return for our providing its leadership with a form of political risk insurance and its people with a place on the escalator to modernity.

If the United States had taken that \$2 trillion, taken a look at whether and which of the changes in industrial structure grasping that windfall required should be accepted and which should be neutralized, and invested that \$2 trillion in schemes of social utility, valuable factors of production, and technological and organizational capabilities in the productive industries of the future—well, if the U.S. had done that then the entire ball of wax conventionally referred to as “global imbalances” would have been genuinely win-win.

### **21.1.3.2: Resolving Imbalances**

Has China arrived at the limit of its growth model? Japan did over twenty years ago, and has since been stumbling along in the grey murk. Many think China has. Macroeconomists see flashing cautionary indicators—and perhaps time bombs—in the increasingly skewed proportions of GDP, in an accumulation of white elephants, unproductive investments, overcapacity, papered-over dud loans, and enterprises that make sense only if net exports achieve growth rates which they, arithmetically, cannot achieve any more. Even China's State Council repeatedly calls China's growth path “imbalanced and unsustainable”. China thus seems to be on the brink of turning into concrete reality the overinvestment business-cycle theory which Hayek and von Mises wrongly diagnosed as the cause of the North Atlantic Great Depression of the 1930s.

China responded to the world economic crisis and its threats to Chinese exports with an enormous 2008 stimulus, about \$700 billion, 13%-points of annual GDP, mostly to finance investment. That pulled Chinese GDP growth up and away from

the rest of the sagging world to 10.4% in 2010 and 9.3 in 2011. Total internal debt increased from about 150% of annual GDP in 2008 to perhaps 275% by end-2014. Debt cannot grow at such a rate for very long, even in dollar-stuffed China. And rapid growth in overall debt, especially when accompanied by financial innovation, and China's financial sector has recently become quite innovative, is usually a dead-certain sign of even faster growth in imprudent lending and bad debt. There are schadenfreude-filled analogies to the miserable denouement of other high leverage investment booms: Japan in the 1990s, the US in 1929 and again in 2008, even Spain since 2008.

What is needed is well-articulated at the abstract level by armies of analysts and commentators: rein in excess credit growth, cut the crony and politically influenced loose lending, increase consumption, extend the social safety net, rid the Party and the system of corruption, and move decisively towards "more market and less state". The Top Leadership says that it agrees. There is every reason to take it seriously. It is a major political thrust. But, once again, out in the countryside the mountains are high and the emperor is far away.

Pure politics is the unwelcome guest at the economists' banquet. But only pure and crude politics can begin to explain why America spends at least two Pentagons more on health care for inferior health results than other North Atlantic nations, nor why the poor Federal Reserve resorting to asset pumping and voluntary financial repression is the only standing arm of government combatting the Lesser Depression, itself inexplicable without the politics of the great boom in innovative finance. China has its ugly, dysfunctional politics. How far does, in fact, the writ of the Top Leadership extend? Is the embarrassing difficulty the government has had in shuttering environmentally and economically noxious overcapacity in aluminum smelters a canary in the aluminum—or, rather, the coal mine? What permits the big State Enterprises keep investing zero cost capital for dubious value? Why do real estate values keep soaring (about 20% per year) in the major cities when they are at the center of popular resentment? The problem is not, of course, gridlock from an open opposition party but resistance from entrenched interests within in an income distribution badly skewed towards the very top. And, as has always been the case in China, owners, entrepreneurs, bureaucrats, intellectuals, high politicians, and their families and clients are so tightly intertwined that the relative autonomy of the technocrat may prove to be a mirage. Economic liberalization may well imply political illiberalism; the new leadership may believe that to move to "more market and less State" may well mean a more powerful and centralized State—at least, as they say, for the short run.

Perhaps China has an advantage compared with most other governments facing troubling macro imbalances and developing debt sustainability problems. Perhaps its leadership is quite aware of the problems, their magnitudes, and the second and even third order consequences of clever and bold first-order actions. Perhaps. A balance sheet crash is a cure much worse than the disease as it now presents itself. Liberalization of capital markets is a most powerful and a most risky measure. More traditional Chinese medicine is more likely than such radical surgery. Sudden drops in investment are very destabilizing, and destabilization is the most important second order consequences on the Leadership's list, economic destabilization, social destabilization and political destabilization.

Perhaps the low-hanging fruit is reform of the Hukou household registration system: bringing the perhaps 140 million migrant workers currently excluded from social protections who work longer hours for lower wages because they lack residency permits. That would be a giant step towards a more just and equal society, and also a big boost in rebalancing towards consumption and a likely reduction in the overheated savings rate—but it entails a giant jump in urban wage costs and a feeling in the countryside that by playing by the rules and not migrating illegally to the cities they were played for chumps. Should work force formalization be combined with, say, exchange rate liberalization, multiplying the impact and the risk, and setting everything spinning?

Regularization also implies a major change in local government financing. Currently local governments pay the lion's share of social protection, and they derive about 40% of their revenues from land transactions—the ever-over-heated investment boom in real estate. Second-order considerations temper zeal as they cloud laser-like clarity of simple but powerful prescriptions. Laser-focus is better in cosmetology than in political economics. “Prudence” must be the guiding level, and “gradually” the first derivative. But that requires that change be started long in advance.

As the late Herbert Stein said, processes that are unsustainable stop. China's current path is unsustainable. It will stop. Markets will take more of a leadership role in the economy. Generalized overcapacity will be cut back, as will leverage. More Chinese will be integrated into formal employment, social protection and public schooling. But when, how, how much, and how whether the landing will be merely bumpy or a crash or even trigger a revolution are open and unknown questions. A 7% cruising speed? Perhaps. Will that be too slow to be politically sustainable after a generation at 10%? Perhaps. And lower rates are more likely. Pritchett and Summers forecast 4%/year.

But the efforts of the State—at its various levels—to promote Chinese entry and success in what economic commentators tend to call the industries of the future will not go away. China will not reopen as a free-market carnival. East Asian governments will continue their efforts to upgrade and reshape their economies. And as they do they will apply pressures that reshape the American economy. How has America responded to their efforts?

Periodically, neoliberal observers have reported that the model has led its countries into dead ends. They have reported that indicative planning and state-led development have distorted their economies away from proper balance. First it was that Japan had overinvested in light manufacturing. Then it was that the Japanese development model could not flourish without cheap global energy. Last—with some truth this time—that Japan's economic model could catch-up in mass production and flexible manufacturing, but could not forge ahead and could not rationalize its low-productivity retail and food-processing sectors. But were Japan's retail and food-processing sectors really low productivity, or was it just a different quality-cost tradeoff?

In the 1980s there were claims—partly true—that the Korean economy had focused on heavy manufacturing to an extent that imbalanced growth and added risks. In the 1990s there were critiques of the model as based on resource mobilization rather than productivity growth. However, factor price trends—stable profits and rapidly rising wages—demonstrated to my satisfaction that those were not true. And there are always predictions of imminent, drastic slowing of growth in the economy of coastal China. Perhaps there will come a time when one of these predictions happens to come true.