



Lecture Notes: East Asian Miracles

J. Bradford DeLong

Department of Economics & Blum Center for Developing Economies at
U.C. Berkeley, & WCEG

<http://bradford-delong.com> :: brad.delong@gmail.com :: @delong

2019-12-25
Revised 2020-04-11

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-20.pptx>>
Text: <<https://github.com/braddelong/public-files/blob/master/lecture-east-asia-text.pdf>>
To edit this: <<https://www.icloud.com/pages/05K6ETWYmQ9pSphVRi8Xlfi4A>>
<<https://www.icloud.com/keynote/0xRRhkj7cn2vsAXbYKCH4E9Ug>>
html: <<https://www.bradford-delong.com/2020/04/lecture-notes-east-asian-miracles.html>> <<https://www.typepad.com/site/blogs/6a00e551f0800388340240a4fa951b200d/edit>>

NEXTSTEP: podcast audio

4149 words

I. East Asia & the Malthusian Cycle

A. On the Downside at the Start of the Long 20th Century

East Asia was on the downside of the Malthusian cycle when western Europe erupted into the eastern Pacific in the 1800s: populous, with many ingenious and efficient non-machine technologies for squeezing output out of very limited resources, but desperately poor. “The West” brought machine technologies and the global market. It also brought a measure of contempt for east Asia. Nearly all western observers thought

the idea that the Mysterious East might catch up to the north Atlantic in any reasonable historical timeframe was absolutely ludicrous.

Malthusian poverty meant no domestic middle-class to demand domestic manufactures, and productivity levels in Asia were hopeless as far as manufactured exports were concerned. The military and political power gradient vis-à-vis the north Atlantic meant no ability to impose tariffs, even had a domestic middle class on whose demand one might be able to build a community of engineering practice and progress existed. The lack of a powerful domestic bourgeoisie meant rule by princes for whom broad-based economic growth was simply not a priority. And in general a “Confucian” religious orientation meant that right orientation was more important than the rationalization of techniques and methods.

B. The East Asian Surprises

As Melissa Dale says: If we were sitting here in the 1950s, we would not have predicted anything like east Asia’s miracles.

Yet we have had four: first the early industrialization of Japan, then the extraordinary drive of Japan to global north status from 1950 to 1975, then the four east Asian tigers, and now coastal China.

All that surprises: As Melissa Dell says: As of 1950 the smart western money was that the Philippines was much more likely than even Japan to rapidly obtain global north status. The Philippines had the highest rates of education in Asia. The Philippines had the highest rates of indigenous entrepreneurship. In the Philippines head it's healthcare sector and other close economic links with America.

II. Growth Accounting

A. Factor Accumulation

What were the proximate causes of the east Asian miracles? Briefly, they were factor accumulation and technology transfer—and the institutional framework to support those, and make them possible and productive.

These economies grew in no small part through intensive factor accumulation: Education expanded massively. Their savings rates were the highest in the world. Hours worked were quite high. There was an extremely rapid transfer of workers from the farm to the city, and from low marginal value agriculture to constant and higher marginal value manufacturing.

B. Sources of Demand

Where did the demand for manufactured goods to make factor accumulation and mobilization effective, even possible, come from?

Initially, in Meiji and post-Meiji Japan, it came from the state: The focus was on revering the emperor and expelling the barbarians, which required building a rich country that could build a strong army. The revenues of the aristocratic samurai class were confiscated by the state, and the samurai bought off by government bonds, the value of which was then inflated away. The government revenues were then used to fund the building of roads and factories. Later on, the growing Japanese middle class played a key role in demand.

After World War II—in Japan and also in the four east Asian tigers—it was a combination of the opening world economy, and what Yingyi Qian and I call “neocolonial origins of comparative development”: It was very important for a United States fighting the Cold War that that part of east Asia that was in the “Free World” be prosperous and be seen to be

prosperous. Thus export-oriented development strategies that would and did have run into nasty quota buzzsaws when pursued by Latin American and south Asian countries were welcomed when the exports came from east Asia. The United States was thus the importer of last resort for the east Asian development model.

C. The China Shock

This openness to exports channel was then amplified and reinforced by the Bush 41 and Clinton administration's decisions, even after the Tien an Men Square massacre, to hug China close: Generate as much contact as possible, economic, social, intellectual, and ideological, between the United States and the rising potential superpower across the ocean to the west. That seemed to provide the best road to a prosperous and peaceful 21st-century. That, after all had been Britain's strategy over 1860-1945 with the then-rising potential superpower across the ocean to the west that was the United States. In Britain's case, that strategy had been very successful.

Thus China's accession to the WTO and Chinese imports were greatly welcomed. Then came the decision of the Bush 43 government of the 2000s that its highest economic policy priority was a tax cut for the rich, funded by deficit spending and large-scale borrowing from China. That then carried with it the massive import flood of the China Shock, which was the real-side economy counterpart of the financial flows. That was the icing on the cake in making possible the coastal China growth miracle that has produced China's state capitalism with Chinese characteristics (and utopian socialist aspirations).

D. Institutions & Technology

Yet east Asia also managed the important tasks of: getting institutions and incentives right; succeeding at large-scale technology transfer; avoiding rent-seeking and other elite-corruption political economy traps.

Some people have argued that the large role played by factor mobilization makes the term “miracle” a misnomer. But that factor mobilization is a key is obvious. And lots of other places didn’t grow: were unable to do the factor accumulation. People need to have the right incentives to invest large shares of their incomes and to participate intensively in the labor force. That industrialization still hasn’t spread to many parts of the world suggests that creating and maintaining these incentives is no easy task.

III. How Did They Do It?

A. Geographical Proximity Suggests Common Causes

What are the hypotheses for east Asia’s miracles? Remember: the geographical concentration of these economic miracles strongly suggests that saying “each country (and era) was different” will not cut it. There is something in the air, in the water, in the soil, found throughout east Asia that has made its economic experience very different from other places outside the global north. A good hypothesis will have to fit with the Japanese and the coastal China miracles as well as with the “four tigers” experience.

There have been a large number of explanatory hypotheses proposed:

- Japanese colonial policy—Japan is the seed from which all of the miracles grew, through its influence first on its colonial empire, and then through Taiwan’s influence on south coastal China.

- The extraordinarily low level of inequality: Japan's decapitation of its landlord samurai class meant that the poison of internal colonization by a hereditary landlord elite with all of its negative political economy consequences did not happen. Then Japan's conquest of south Korea and Taiwan decapitated their landlord elites. Then the purge of Japanese collaborators did it again. Mao's PLA did it in China. And so all east Asian economies have a social class that is (a) educated but (b) poor and propertyless, hence (c) interested in entrepreneurship and enterprise—in creative destruction and economic growth—rather than (d) in holding on to what they have and producing stagnation as a result.
- Neocolonial origins: any country could have done what east Asia did had they been allowed to craft smart tariffs to protect domestic industries in which they could build a community of engineering practice and acquire a comparative advantage, while at the same time having the freedom to export to the global north. But, outside of east Asia, the global north demanded that you pick one or the other: abandon domestic protection, even smart protection, if you wanted access to global north demand for manufactures.
- Simply that leaders matter: the Meiji reformers, those who rose to the top of Japanese politics after WWII, the brutal but effective Park Chung Hee and his successors, the KMT in Taiwan, and Deng Xiaoping and his successors, plus Lee Kuan Yoo were remarkable men whom east Asia was lucky to see.
- And, last, that east Asia somehow had the state capacity to run a developmental state: to have trade and industrial policy crafted to boost growth massively, as happened earlier with Germany and America's "Hamiltonian system", but to a much greater and more effective degree.

B. State Capacity & Industrial Policy

Let's focus on state capacity and industrial policy. What does a government need to do other than to be a “night watchman”? And how can you build, or at least take advantage of, state capacity to successfully accomplish these tasks?

I was tempted—and I am sure Melissa Dell was tempted—to assign all of Peter Evans's book *Embedded Autonomy*. It is great. But *ars longa, vita brevis*...

Evans starts with the observation that “industrial policy” was a success in east Asia, and a bad failure elsewhere.

Actually, that is not quite true. We see premonitions of the east Asian post-WWII successful model in pre-WWI Germany, in Hamiltonian America, and in Meiji Japan.

Evans bets that to understand why, we need to focus on the state. Melissa Dell calls out this passage: Evans writes:

Until less hierarchical ways of avoiding a Hobbesian world are discovered, the state lies at the center of solutions to the problem of order... the contradiction between the ineradicable necessity of the state in contemporary social life and the grating imperfection with which states perform is a fundamental source of frustration. Dreams of cannibalizing bureaucrats are one response. Analyzing what makes some states more effective than others offers less immediate satisfaction but should be more useful in the long run...

Successful economies need rules—for property, for exchange, for the provision of public goods. Laissez faire will not cut it—too many externalities. That India was ruled by Britain under laissez-faire presumptions about policy for a century and yet in 1950 was as poor as it had been in 1850 should be enough to get anyone who holds that laissez-

laissez-faire alone is necessary, sufficient, and unique for successful economic growth laughed out of the room.

Attempts to dismantle the state risk perverse consequences: communist revolutionaries who fought to install a system that would make the state “wither away” ended up constructing extremely repressive states.

20th century states are a key to different paths of historical development. One of the few universals of the 20th century is the increasingly pervasive influence of the state. It is a necessary part of society and we should study how to make it better.

C. Predatory & Developmental States

Key for questions of economic development is how the state can succeed or fail at promoting industrial growth. Evan’s book looks at IT industries in three countries, Brazil, India, and Korea, during the 1970s and 1980s.

Consider the state and the international economic order.

Comparative advantage is dynamic: Comparative advantage is not just about natural endowments, but also about social and political institutions. State involvement is a determinant of what niche a country ends up occupying in the international division of labor. States with transformative aspirations are typically looking to participate in “leading sectors”. Efforts to reshape participation in the global economy are interesting because—while there are examples of success—they also often highlight the limits of what states can achieve.

A key argument in Evan’s book is that it’s more important to ask “what kind” of state involvement than to ask “how much”. India, Brazil, and Korea are very different contexts. Nevertheless, state involvement in

industrial transformation in all three economies is undeniable. These countries provide a stark illustration of why asking about the types of interventions undertaken is imperative.

At one pole, predatory states extract so much otherwise investable surplus—while providing so few public goods in return—that they impede economic transformation.

To sharpen ideas, let us look for the moment at the archetypal predatory state: the Democratic Republic of the Congo. Evans argues that “everything is for sale”; marketization and personalism dominate society-state relations rather than predictable, rule-governed bureaucratic behavior, which makes it foolhardy to make long-run investments.

The absence of bureaucracy is central to the DRC’s problems:

Rule-governed behavior immersed in a larger structure of careers that creates commitment to corporate goals is notably in absence. The only semblance of corporate cohesion centers on the state’s repressive capacity, and even that teeters on incoherence...

The state works to actively disorganize civil society; it is not that the state has weak ties with civil society that prevent joint transformative projects, but rather that the state actively prevents the emergence of social groups that might have an interest in transformation, which would creatively destroy the power and the incomes of the rulers.

Developmental states foster long term entrepreneurial orientation amongst private elites by increasing incentives to engage in transformative investments and lowering risks. These states are not immune to cronyism and corruption, but on balance the consequences of their actions promote rather than impede transformation.

II. Peter Evans's Embedded Autonomy

A. Japan as the Archetype

Evans's goal is to link obvious variation in the outcomes of the state to underlying variations in state structures and state-society relations. He uses a comparative institutional approach.

Evans's motivating example is the archetypal developmental state—Japan. Japan had a “powerful, talented, and prestige-laden bureaucracy.” Bureaucrats were selected by a competitive exam system, with only 2-3% of applicants succeeding. The government officials' success in building their careers takes place via conformity to bureaucratic rules rather than via exploitation of individual opportunities. But beyond impersonal bureaucracy, informal networks are integral to the state's functioning. Japanese industrial policy depends fundamentally on the maze of ties that connect bureaucrats and industrialists: “Complex and stable ties with market players...”

Relative autonomy of the bureaucracy is what allows it to address the collective action problems of private capital. In the case of Japan historically, connectedness appears to create increased competence rather than state capture. Embedded autonomy: combines a Weberian bureaucracy with intense connections to the surrounding social structures. Evans argues that embedded autonomy is the key feature of a developmental state.

Social network-based career strategies; the relative autonomy of the bureaucracy; individual success springs from advancing societal goal: rich country—(once) strong army.

The key is that the bureaucracy needs to be embedded in society—so that it understands it and helps build it up—but autonomous—so that it is not under the control of parasitic hereditary elites—and mission-oriented—in

that all participants share a strong and ideology-driven commitment to achieving the societal goal of strong economic growth.

How is this different from Stalinist bureaucracy under really existing socialism? Using rather than destroying the market; connecting rather than atomizing society.

B. South Korea and Taiwan

Two other examples are south Korea and Taiwan. Korea: competitive exam-based civil service recruitment since 788 A.D.; the Japanese conquest then eliminated the bureaucracy's allegiance to protecting and enhancing landlord interests because after the Japanese conquest there were no indigenous Korean landlords left; the system was weakened under Rhee—a patrimonial regime—but restored under Park. Economic Planning Board and chaebol. Relations to private sector less dense than in Japan—directed mostly towards chaebol—so a greater risk of unproductive rent seeking by a small number of firms.

Taiwan: in mainland China, the KMT was largely predatory. In Taiwan, it remade itself. Less predatory, determined to conserve its bureaucratic capacity. But the state lacked dense relationships with the private sector. Still, the state provided a variety of supports and incentives. ISI not captured by the entrepreneurs that created it. Not a passive register of oligopoly interests.

Without autonomy, embeddedness produces state capture. Without embedness, an autonomous state wouldn't know what needs to respond to, as embeddedness provides institutional channels for continual negotiation and renegotiation of goals and policies. Having successfully bound the behavior of incumbents to its pursuit of collective ends, the state can act with some independence in relation to particularistic societal pressures.

C. Roles of the State

How do we think about the state's role here? Some ideal types: Evans discusses the roles that developmental or intermediate states might play in fostering industrial transformation: 1. The state as regulator. 2. The state as producer. 3. The state as midwife: providing incentives for private enterprises to enter a new sector. 4. The state as gardener: after bringing entrepreneurial groups into a sector, the state further nurtures and promotes them. Central to Evan's argument is that combinations of 3) and 4) tend to be more effective than combinations of 1) and 2).

Evans argues that the regulatory state and the producer state arise from negative conceptions of the private sector:

(1) State as regulator is most universal. While regulation may be important, Evans argues that it is not particularly likely to promote economic transformation. Rather the state as regulator becomes preoccupied with policing.

(2) The state as producer. All states act as a producer of some goods—i.e. roads, the water supply, etc. Public goods produced by the state complement private investments. Some states go further, engaging in productive activities in ways that compete with or replace private producers. There are some examples where state production is successful—i.e. steel in Korea—where there were no private enterprises likely to create this industry, which in turn had strong linkage effects to many other private industries. However, the state as producer is a very risky strategy. SOEs have an expansionary logic. Even if initially justified in a specific sector, they tend to expand to areas where they are not competitive.

Evans argues that the regulatory state and the producer state arise from negative conceptions of the private sector, and that greater optimism about the vitality of private capital leads to different roles:

(3) Instead of substituting itself for private entrepreneurs, the state could assist in the emergence of new entrepreneurial groups and encourage existing entrepreneurs to engage in more challenging endeavors. This idea was articulated decades ago by Albert Hirschman. In the US, the role was performed par excellence by DARPA.

The role of midwife entails reducing the risk and uncertainty associated with entering a new sector or method of production. This could take the form of infant industry protection, providing subsidies and tax incentives, or inducing international capital to invest in a sector. This role can be more difficult if the transformation task is daunting or the existing entrepreneurial class is small.

(4) The state as gardener. Once there are firms in a sector, they may need further encouragement and assistance to remain competitive as the sector advances. Gardening could take the form of setting up incentives for firms to expand into technically challenging areas of the sector, or the state could take over riskier complementary tasks, like R&D, which are necessary for moving forward but may pay off only in the long-run.

Gardening is in some ways easier than midwifery because there are already private firms in the sector to work with. It is more demanding for the same reason: the existence of a directly interested private sector increases the risk for state capture.

Evans argues that the appropriate combination of these roles varies by the characteristics of an industrial sector. The prevalence of SOEs, for example, varies very widely. SOEs are common in steel and minerals—across a variety of countries—but rare in textiles. They are rarely successful in heavy metallurgy and mining. But states do not even try in textiles. States are most likely to be producers when entry barriers are high and when the technology is not closely held by a few global firms.

What are the rules? There are no rules! It depends!!

II. Putting Meat on Abstract Bones

A. Is This Just B-School Blather?

If you are like me, you may be suspicious at this point...: Is This All Just B-School Blather? A combination of generalities, tautologies, and utopian demands. “Everything will work fine if you just do things right”?

B school blather is someone pretending to speak with authority who actually has absolutely no clue as to how things work on the ground, or what one should do next, or what one should even do first, in order to accomplish the task. Embed your bureaucracy in the society, but still have it be autonomous? Have your bureaucracy be independent, and yet closely linked via social networks, education, and ideology to the other power brokers of society? This sounds a lot like: "just do it! And do it right!" In what conception of the world is this helpful?

B. Eight Things Not to Do

I think we can put more meat on the bones here if we focus, instead, on what to avoid: Abandon all hope of running a successful developmental-state industrial policy if:

1. You have landlords (or some other parasitic class interpenetrated with those from whose ranks your bureaucrats are drawn): then you are doomed, because the more effective your government's ability to use levers of state power, the more the distribution of income and wealth will be frozen into a form pleasing to your anti-developmental current

upper class. You need to start with a remarkably equal and definitely not inherited-inequality distribution of income and wealth. If you do not start there, abandon all hope.

2. You do not have an ideology of economic development shared by your elite: if your elite judge each other by, say, how rich they get and do not judge each other by whether they have contributed to society's growth mission, abandon all hope.
3. You do not have an effective educational system for training and an effective examination system for selecting your bureaucrats. If your bureaucrats cannot outsmart the private sector and foreign managers whom they are attempting to regulate, outproduce, midwife, or garden, abandon all hope.
4. You do not have an ideology in which government service is a high prestige occupation. If your best and your brightest do not regard government service as a good thing to do, abandon all hope.
5. You do not have a firm and reality-based conception of what industrial structure you want your country to develop into. If you cannot point to another country, and say: we want to become like them, and here are the first stage investments and capabilities we need to develop to do so—if you cannot do that, abandon all hope.
6. You do not have the factor-mobilization prerequisites—the power to mobilize savings for investment, to massively upgrade the technical education level of your population, to move people out of low productivity into high productivity occupations, to build the infrastructure and the links to global value chains. If you do not have the factor mobilization prerequisites to make a success of industrial policy, abandon all hope.

7. You do not have access to the markets that will buy at a price that will cover your costs the goods you produce if your industrial policy is successful. If world markets are not open to you and you have to rely on domestic demand from a poor population, abandon all hope.
8. You do not have the power to judge which private businesses are successful and need to be fertilized, and which are unsuccessful and need to be pruned back. The best way to do this is to lower the value of your currency and then watch which of your firms are successful exporters—to use foreign countries markets' as devices for telling you who is making high-quality goods at a reasonable price. But you have to do this somehow. If you cannot measure where you are succeeding, abandon all hope.

With respect to this last, in some ways the best of all possible industrial policies is an undervalued currency, access to global markets, and an ability to build infrastructure.

But what to do once you have abandoned hope? Then, if you cannot run a developmental state, your only hope is the neoliberal bet—shrink the state and integrate into the global economy. It is a low odds bet; it is counsel of despair. But there is little as destructive as state-led development led by an anti-developmental state.

Or you could try the long, hard, difficult task of building the preconditions for a developmental state...

Notes, etc.

Presentation file:

