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Kyoto University
China’s Capitalistic Development 
from 1949 to 2025

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China's Capitalistic Development from 1949 to 2025

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Abstract
This paper mainly examines what was China’s Mao’s era, and contrary to many orthodox understanding, we understand that was a ‘state capitalism’ which is inevitable in the early stage of capitalistic development. In other words, we need a kind of dictatorship in the early stage of capitalism, and after it becomes more moderate style of regime, and its two stages can be comparable as China’s Qin era and Han era, or Japan’s Momoyama era and Edo era. By this understanding, we can get a clear recognition on China’s past and present, and also its future. By using my Pacific-rim linked long-term econometric model, I also serve a long-term forecast on China’s future.

Key Words
Mao Zedong, Deng Xiaoping, Capitalism, Socialism, State Capitalism, Private Capitalism, Marxism, Historical Materialism, Political Instability, Separatism
1. WHAT WAS MAO’S ERA?

Our first understanding from which we should start is that Mao’s era was the ‘socialist’ era. However, this type of understanding has some problems. For example, if so, we cannot use development economics to analyze China because this understanding assumes that Mao’s era’s stage was higher than capitalist stage. However, many economists use this approach and think still now China is a developing country.

Furthermore, there is another theoretical problem. That is, Mao’s system put importance on accumulating capital contrary to ordinary understandings. This characteristics can be shown by Figure 1 made by Chow (1993). As shown, except for during the Cultural Revolution, accumulating speed was higher in Mao’s era than in Deng’s era.

Therefore, our new question is that; what should we call such kind of capital accumulating period after the industrial revolution? A natural answer should be ‘capitalist era’. Or if we focus on its state-leading characteristics, it should be called as ‘state capitalism’, identified from market-oriented capitalism; ‘market capitalism’ or ‘private capitalism’.

In fact, in almost all of the countries, we can identify these two stages of economic development as we show in Table 1. That is 'state capitalism' in Japan before 1945, in Germany before 1945, in Indonesia before 1967, in Egypt before 1970, in Russia before 1991, in India before 1991, and in China before 1978. And all of these countries became 'private capitalism' after these years. In this sense, so-called 'socialism' should be understood as an early type of capitalism which should be experienced by all of the countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>State Capitalism</th>
<th>Private Capitalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Taiseiyokusankai</td>
<td>LDP</td>
</tr>
<tr>
<td>German</td>
<td>NAZI</td>
<td>CDU</td>
</tr>
<tr>
<td>Indonesia</td>
<td>National Party(Sukarno)</td>
<td>Gorkal(Suharto)</td>
</tr>
<tr>
<td>Egypt</td>
<td>Nasser</td>
<td>Sadat</td>
</tr>
<tr>
<td>China</td>
<td>CCP(Mao)</td>
<td>CCP(Deng)</td>
</tr>
<tr>
<td>Russia</td>
<td>Communist Party</td>
<td>Yeltsin</td>
</tr>
<tr>
<td>India</td>
<td>National Congress(Nehru)</td>
<td>National Congress(Rao)</td>
</tr>
</tbody>
</table>
However, there may be some objections that insist England and US didn't have such type of 'state capitalism'. However, as far as English history, we should notice the 2nd enclosure movement where its government helped its new entrepreneur class to push out peasants from the land. And also its first version of factory act served the capitalist to enforce labors to work longer. In these events, the role of state was completely same as in 'state capitalism'.

It can be said also in US. I think that its slavery system in the 19th century had a completely same role as 'state capitalism', and that system was, of course, maintained by a serious of state laws. Furthermore, there were some governmental intervention policies which prepared its market-oriented economic development in the later periods.

Therefore, 'state capitalism' is universal stage in all of the countries, and in this sense, we should understand it was a kind of precondition for the next stage: 'private capitalism'. For example, also in the case of China, Mao constructed railroads, ports, dams, universities and heavy industries in his period, and they served a lot in Deng's period. In this sense, Mao's era should be understood as Deng's precondition.

Of course, Mao made a lot of mistakes to develop its economy as we know. It is true, especially in the Cultural Revolution. However, contrary to ordinary misunderstandings, we should know that his rural-oriented developing strategy is also serving for today's economic development. For example, China has its strong base for development also in its rural area differently from Russia. It is because small industries were introduced to all of towns and villages in his era, and its strategy had come from Mao's philosophy; that is, industrialization should be done not only in urban area but also in rural area. He battled against Soviet type of urban-oriented industrialization philosophy, but also against conservative and backward villages. He hated Confucianism as a backward philosophy to prevent rural liberalization, and wanted modernize villages. The only difference from Soviet Marxism was that Mao wanted modernize villages without making villages to be cities. He thought that villages should be modernized as villages. This is very important to understand Mao's philosophy and his strategy.

For Deng Xiaoping, in order to be against his enemies, to criticize Mao was very important, and in this circumstances, above kind of understanding was not appealed in China after the opening policy. However, our present task is to understand Mao neutrally, and such kind of efforts are now being made in China.
2. WHAT IS ‘CAPITALISM’?

However, to confirm the above understanding, we should redefine ‘capitalism’, because we cannot use the word ‘sate capitalism’ without knowing what is capitalism. Therefore, in this section, I want to reveal my understanding on ‘capitalism’ clearly based on its technological base, because ‘capitalism’ or ‘socialism’ is categories of historical materialism.

Then, first, let me explain ‘feudalism’ to identify ‘capitalism’ from its precedence society. In my opinion, the society before industrial revolution did not have any 'machine' and had only tools, and craftsmen made different qualities of products by using same quality of tools. If so, what was the cause which made its difference? I think its difference came from the difference of skill, and in this sense that type of society's most important task was to brush up skill in national level. For this purpose, that society made seniority system, because senior craftsmen were more skilled and productive, and by this system craftsmen could work in same factories through lifetime in order to brush up their skill enough. Under this condition, human relationship became an apprenticeship which was translated into philosophy as Confucianism.

Needed characteristics of that society were not only this one. Besides it, that society limited the sizes of factories because large number of craftsmen could not learn from their one master in one factory. It was because of characteristics of this type of skill. Modern type of skill can be taught in a large class, but feudal type of skill was hidden and could be learned only by imitating their masters' way by close watching. Therefore, that society had to divide its market town by town in order to restrict its size of factories. That system was the guild system.

However, these all necessities were lost after the industrial revolution because of appearance of machine. In this new society, quality and quantity of products are decided by quality and quantity of machine, and workers become unskilled and just affixes. And the most important change from the former system was their weak bargaining power against capitalists, because now capitalists can gather unskilled workers easily from labor market. Now, anyone in labor market can substitute workers in their factories.

Therefore, under this condition, workers' wages become lower and profits become higher, and most part of profits are used re-investment and sizes of machines become larger. Here, because we assumed that sizes of machines decide sizes of products after the industrial revolution, this re-investment means economic development. That is, the capitalist way of economic development!
However, on this point, we should note some points, and the first one is on our attitude toward capitalism. That is, we are not criticizing capitalism but just explaining why we need capitalism after the industrial revolution. In other words, when capitalism should be introduced, capitalism should be introduced by Marxist. It is completely same as the fact when socialism should be introduced, socialism should be introduced by Marxist. This must be the only attitude that true Marxist should have on this problem.

Secondly, this understanding is very historical and materialistic, because in my framework technologies decide superstructures and they change historically. I think, even if my understanding is very different from existing type of Marxist understanding, 'historical' and 'materialistic' are the most decisive characteristics and so my understanding must be a Marxist understanding.

Thirdly, my understanding on the society after the industrial revolution is proper to be named as 'capitalism', because in this society capital is the principal, and whole social system is served in order to accumulate it. For example, Protestantism served for this purpose in the Western world, while Confucianism and Buddhism were changed for its purpose in Edo era in Japan. States established educational system for different types of needs in modern era, and gathered social surplus in order to build social infrastructures.

3. NEO-CLASSICAL WAY OF MODELING of CAPITALISM

As I mentioned above, this understanding on capitalism can be understood as a kind of Marxist understanding. However, same understanding also can be understood by a neo-classical type of model. By showing it, I would like to confirm and strengthen our understanding. Then, to do so, we firstly formalize an economy by the following two production functions.

\[ Y = (sL)^{1-\alpha}K^\alpha \]
\[ K = (1-s)L \]

Here, Y, K, L, s, and \( \alpha \) express production of consumption goods, capital stock, total labor, ratio of total labor used for production of consumption goods, and technology. And this economy maximizes its total utility by maximizing total consumption during unlimited period. That is;

\[ \max \int_0^\infty e^{-\rho t} \log Y(t) dt \]
\[ s.t. \quad K(t) = B(1-\varphi(t))K(t) - \delta K(t) \]

Here, \( \rho \) shows time preference of its representative individual. And the solutions of these equations can be expressed in Figure 2.
As it is shown, optimal saving ratio (investment ratio) of total production has jumped at
the industrial revolution\(^1\) at the industrial revolution, because capital accumulation was no
use before industrial revolution and became critical after that.), and after that this ratio
becomes smaller gradually, and ultimately it reaches almost zero besides depreciation when
its capital labor ratio reaches its ultimate equilibrium value. Therefore, we could use all of
national products for consumption not for capital in the feudal era, but after that and until
its ultimate value will be reached we should give up consuming all of national products and
should accumulate capital as a capitalist era. We should experience this era until we will
reach at the next era which can be called as post-capitalism or 'socialism'.

Therefore, also by a neo-classical type of model, we have explained the same historical
law as I have shown above in Marxist way. That is historical materialism.\(^2\)

\(^1\) We assumed \(\alpha\) had jumped from 0 to a certain value (larger than 0 and smaller than 1.

\(^2\) Our modeling is completely neo-classical. However, it keeps not only historical materialism but also
labor theory of value and surplus value theory of Marx in the following way.

First, our model expresses the economy as an optimal detouring production system using machines.
The word 'optimal' means maximizing the amount of production by the same labor, or in other words,
minimizing the needed labor to produce the same amount of goods. So, here the only measurement of
the production is labor.

In order to explain it, as an example, now we assume four kind of technologies whose amount of
products are same; those are as follows:
the 1st technology whose factor combination is zero machine and 1000 hours human labor,
the 2nd technology whose factor combination is 5 machines and 200 hours human labor,
the 3rd technology whose factor combination is 10 machines and 50 hours human labor,
the 4th technology whose factor combination is 20 machines and 20 hours human labor.
Please note that these four technologies produce same amount of products. And then, if we assume
again that one machine can be produced by 10 hours human labor, total
labor which are needed in the above four technologies are
\[
\begin{align*}
0 \times 10 + 1000 &= 1000 \text{ hours, in the } 1^{\text{st}} \text{ technology,} \\
5 \times 10 + 200 &= 250 \text{ hours, in the } 2^{\text{nd}} \text{ technology,} \\
10 \times 10 + 50 &= 150 \text{ hours, in the } 3^{\text{rd}} \text{ technology,} \\
20 \times 10 + 20 &= 220 \text{ hours, in the } 4^{\text{th}} \text{ technology.}
\end{align*}
\]
Therefore, the 3\(^{\text{rd}}\) technology should be chosen by the human society in order to minimize the needed
labor to produce the same amount of goods (in this sense, we can call it as 'optimal capital/labor ratio').,
4. CHINA’S FUTURE UNTIL 2025

Hereinbefore, we discussed on Mao’s era. However, one more point that we should discuss on is China’s future. As an econometrician, I provide the result of my projection calculated by my long-term and multicountry econometric model. Theoretical framework of this model is Lenin’s uneven development, because it focuses on the effect of international capital movement and such movement is very important to estimate future growth rates in the long run. Table 2 shows the results of our projection on the Chinese economy until 2025.

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<tr>
<th>Projected period</th>
<th>Dollar Base</th>
<th>Yuan Base in 1995 Price</th>
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<tbody>
<tr>
<td>2000-2005</td>
<td>8.4</td>
<td>8.8</td>
</tr>
<tr>
<td>2005-2010</td>
<td>10.7</td>
<td>10.4</td>
</tr>
<tr>
<td>2010-2015</td>
<td>11.4</td>
<td>10.3</td>
</tr>
<tr>
<td>2015-2020</td>
<td>12.2</td>
<td>10.7</td>
</tr>
<tr>
<td>2020-2025</td>
<td>13.9</td>
<td>12.2</td>
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Source: Ohnishi (1998)

The points of our projection is that China’s future growth rates will also very high and still now increasing. Its projection is very different from many ones, but there are several

and we should recognize that the only measurement is labor here. This is a labor theory of value.

However, in fact, to reach at its final goal is not easy, because needed capital accumulation for the 3rd technology is very huge and over one-year total products. Therefore, human society should spend much time to reach at this point and go through the path which should be calculate by its time preference. It is the 'optimal path' to the ultimate goal, and in this sense, we can identify how long we need to reach at there, in other word, how long do we should experience the capitalist era. In my opinion, because this part of national products for this capital accumulation serves capital not people directly, this part can be understood as exploitation by capital from workers. Of course, as I mentioned above, this exploitation can be justified in the wider sense of historical materialism, because it serves people in the long run. At least, by this understanding, we can expand labor theory of value into a historical perspective, and can define 'exploitation' quite differently of an older type of Marxism.

a Whole equations of this model and some simulation results are shown in Kyoto Univ. Pacific Rim database (http://www.econ.kyoto-u.ac.jp/pacific/) and Ohnishi (1998).
reasons which support this projection.

First, our projection between 2000 and 2005 is lower than the actual growth rate between 2000 and 2004, and if yuan will grow in 2004 or 2005, our projection should be regarded as too pessimistic.

Second, at least it is a certainty that the exchange rate of yuan will grow from now on, and if its appreciation will be same as Yen after 1971, value of yuan in 2025 should be three times higher than now. This appreciation rate is also higher than our projection.

Third, because China’s dollar base high growth had started just after 1994, our projection means that China’s dollar base high growth continue only thirty years, and this length is not longer than in Japan, in Taiwan and in Korea. Especially, we must note that China has many regions, and in this sense, even when its some coastal areas will lose their growth power in future, other inland areas will be still powerful. This China’s characteristics guarantees the long duration of its high growth rate.

However, we cannot expect such kind of high growth continue forever. In my opinion, it will stop in around 2025 or 2030, and after that China should be under a bitter trial, because all of the national trial are experienced in such periods. For example, after ending its high growth period in 1990, now Japan is experiencing a trial to change its socio-economic system, and political instability. Russia, Czech-Slovak, and Indonesia were/are troubled by separatist movement. In this sense, also China should experience some severe problems including Tibetan or Uygurian separatist revolts and political instability.

In summary, China’s high growth is possible for two or three decades, but its discontinuance is also inevitable, and at the turning point, China should take the test of time, like Japan, Russia, Czech-Slovak and Indonesia. How can China bear this test?

In this point, China has a special achievement at the turning point from Mao’s era to Deng’s era. At this time, Deng controlled its inevitable change from ‘state capitalism’ to ‘private capitalism’, and by this guide, China passed this test. Therefore, the problem for China is whether it will be able to control the next inevitable change or not with Deng’s wisdom. In other words, China’s future stability will depend on this leadership. Ho government’s historical role is to prepare this leadership, and we social scientists’ role is to translate Deng’s wisdom to our scientific words.

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Figure 1  China’s Capital Accumulating Speed after 1952

Source: Chow (1993)

Figure 2 Optimal Growth Path after Industrial Revolution