

INTERNATIONAL SYMPOSIUM

THE TRANSFORMATION OF THE CHINESE ECONOMY

Four Decades of Reforms and Internationalization
AND WHAT COMES NEXT?

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Conference Documents Series
Keynote Speech

Understanding China: Four Decades of Fast Economic Growth and Future Transformations

Organized by: Center for China and Asia-Pacific Studies, Universidad del Pacífico
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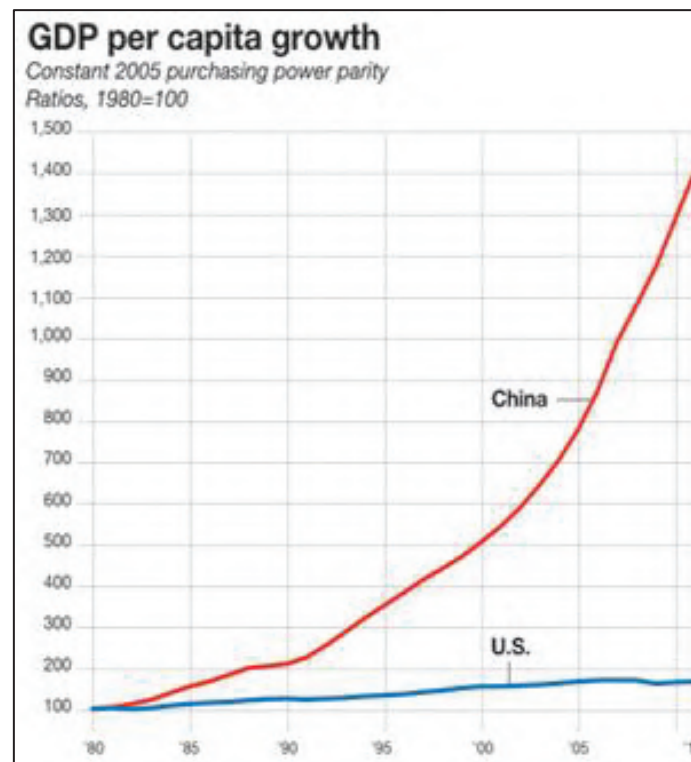
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Understanding China: Four Decades of Fast Economic Growth and Future Transformations

1. Introduction

China's economic transformation over the past 40 years has left many important aspects to consider and explore. Starting with figure 1, it is noteworthy to remember that the GDP per capita in China over the past 40 years has been growing at an average of 9.4%, which is definitely a record in the economic history of the world. This picture is interesting because one can clearly realize how much is the increase of the Chinese GDP per capita over the past 40 years in comparison with the US.

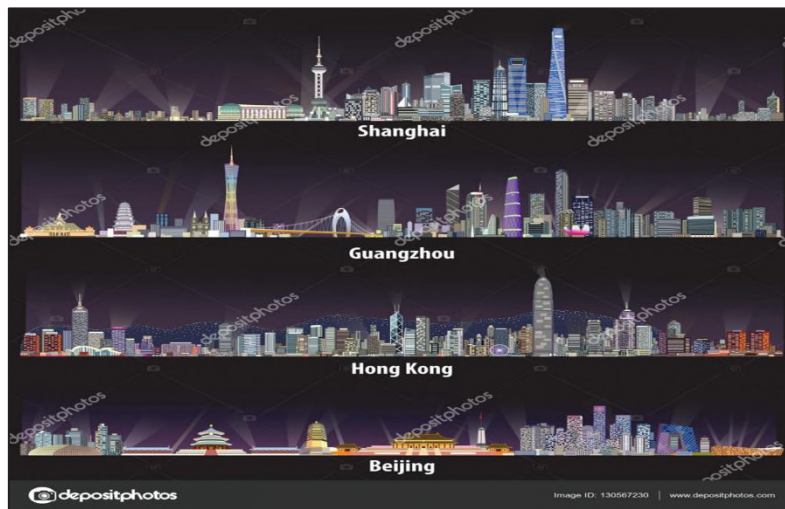
Figure 1: GDP per capita of China and the US



One of the great achievements that the Chinese economy has made over the last 40 years is the transformation of the Chinese major cities, one of the greatest examples are the skylines of four Chinese great cities, in this case Shanghai, Beijing, Guangzhou and Hong Kong (see figure 2).

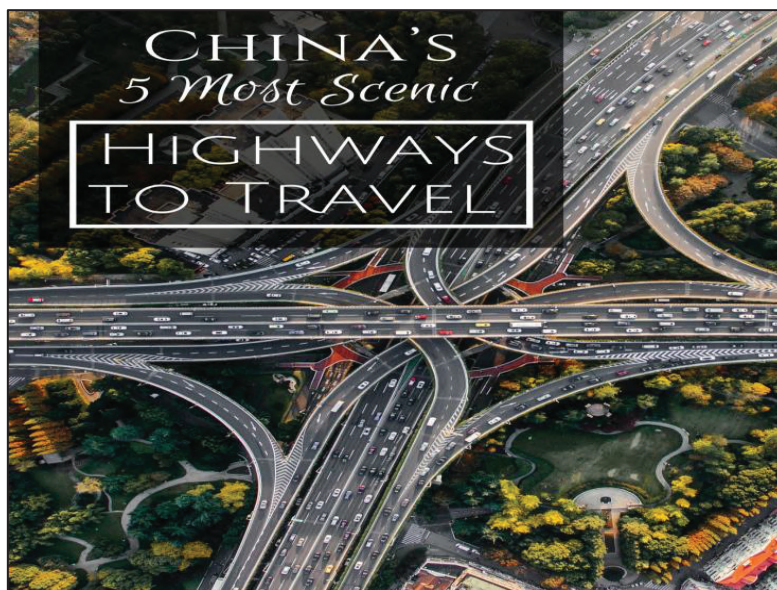
Forty years ago, cities like Shanghai and Beijing were still very much underdeveloped. The transportation system within those cities was precarious, the conditions for housing were still poor and people used to live in very poor conditions. It is evident that cities have been transforming themselves, in order to become global ones.

Figure 2: Skylines in China



Another notable issue is the very impressive highways system in China (see figure 3), 140 thousand km of highways were built over the past 40 years. Visitors to China would be very impressed by how efficiently the transportation system operates right now.

Figure 3: Highways in China



2. Understanding the nature of economic development in post-reform China

1979 Nobel Laureate in Economics, Arthur Lewis, wrote the following paragraph in his seminar paper published in 1954:

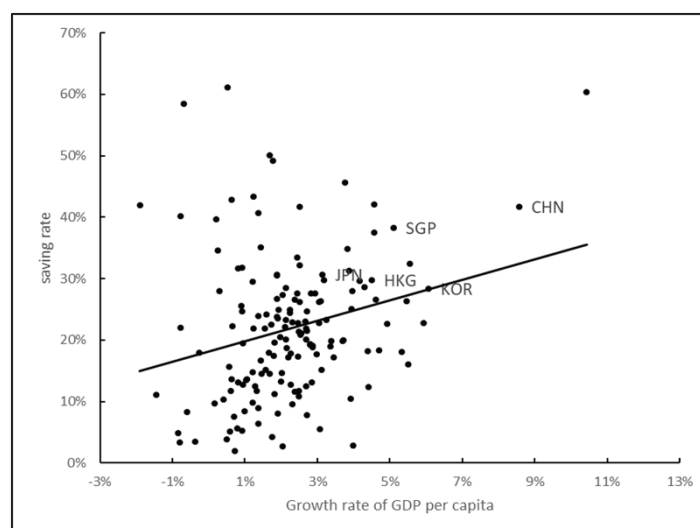
“The central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 per cent of its national income or less, converts itself into an

economy where voluntary saving is running at 12 or 15 per cent of its national income or more. This is the central problem because the central fact of economic development is rapid capital accumulation (including knowledge and skills with capital)."

This paragraph clearly describes the nature of the economic development happening in China over the past 40 years. China has been enjoying pretty high saving and investment rates, which largely contributed to the fast economic growth. The high output growth is possible in China because a pretty large share of the national income, every year, is not being consumed out. Hence, there is a really large part of the national income that has been saved and then converted to the rapid process of capital accumulation. For instance, the highway network is one of the results of the fast capital accumulation occurring in China.

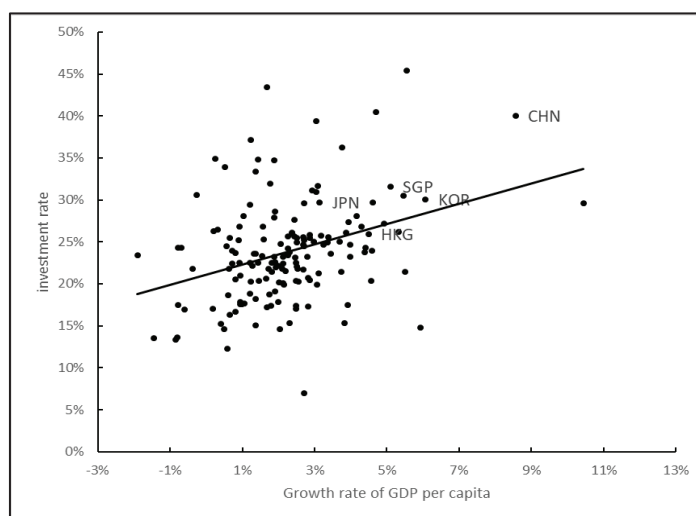
Moreover, the saving rate is one of the commonalities for any of the high performing economies who wanted to reach the fast economic growth. According to the World Bank data if we plot the saving rate vs the growth rate of GDP per capita (see figure 4), we can clearly see that the saving rate is positively correlated with the growth rate of GDP per capita. These are cross-country correlations and China has definitely been achieving a fast economic growth thanks to its higher saving rate.

Figure 4. Correlation between Saving Rate and Growth Rate of GDP per capita



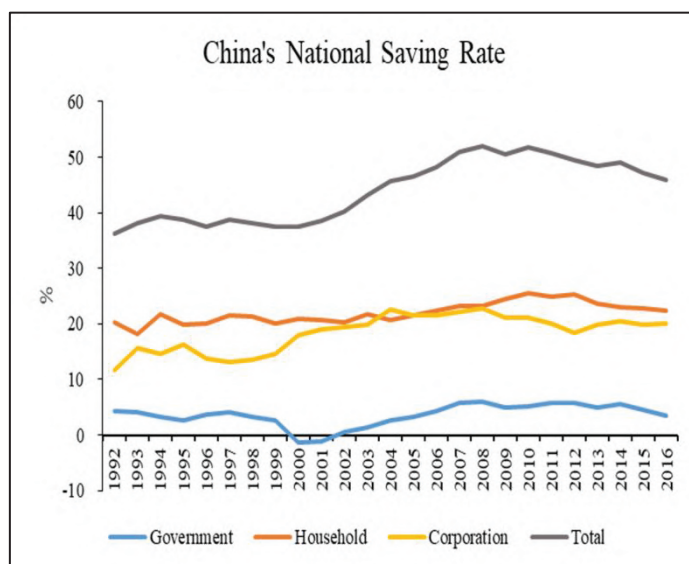
Converting the saving rate into the investment rate, one can get a similar correlation picture (see figure 5), which is also based on the same dataset that included over 70 countries. China has been enjoying a higher investment rate over the past 40 years and that could be accounted for the large output growth experienced, which is pretty similar to most of the East Asia economic miracles including Japan, South Korea and Singapore.

Figure 5: Correlation between Investment Rate and Growth Rate of GDP



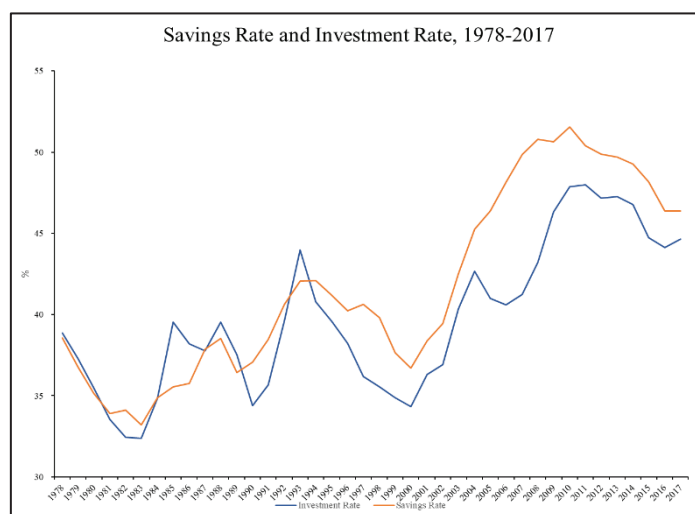
This is the evolution of the national saving rate in China over the past 30 years (see figure 6). In the 1990s, China enjoyed a period of time where the saving rate was increasing, it peaked around 10 years ago and now it is declining a little but still in comparison with other developing economies, China still is a country with a pretty high saving rate and this could be one of the major reasons why the economy has been growing so fast.

Figure 6: National Saving Rate in China



In addition, putting the saving and investment rates together (see figure 7), one can clearly see that given the size of the economy, China is one of the countries, one of the few countries in the world, who can finance its development domestically and it is not borrowing from abroad. It is not like the countries in Latin America back in the 1970s when they borrowed too much from the US. China is a domestically financing country meaning the fast growth of the output has been financially supported by the domestic sources.

Figure 7: Saving and Investment Rates in China



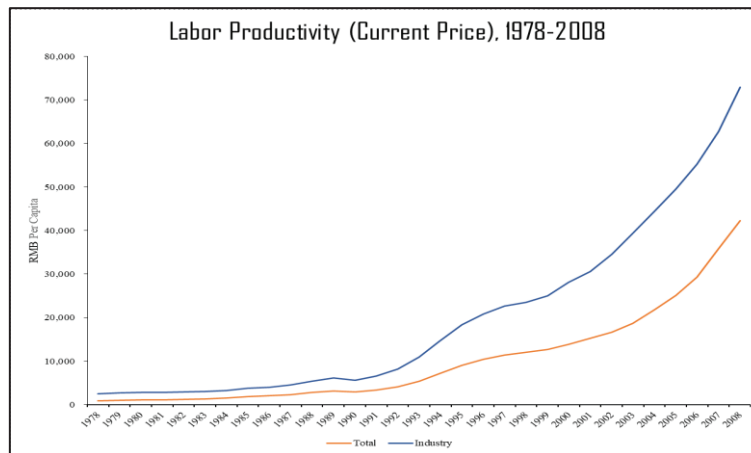
China now enjoys a rising share of voluntary saving but even if back in the 1960s and 1970s China still enjoyed pretty high savings, the saving was not really voluntary, it was forced by the government. Despite the nature of the savings, it supported the rapid industrialization at that time, the great difference after the economic reform in the 1980s was that China turned itself into a country with a rising share of voluntary savings. These were not requested or forced by the government but determined by the households and corporate sector themselves. The rise of voluntary saving is very much essential for the long term economic development and examples of this are Singapore and South Korea, they still enjoy pretty high nationally saving rates and even the per capita income has been rising to something close to the one from the US, these are very rich countries now.

One of the reasons why China has a rising share of voluntary saving is very much linked to the rising labor productivity growth over the past 40 years. Many developing countries suffer the lack of growth of labor productivity due to some of the institutional barriers that need to be addressed and overcome. Back in the 1980s when China decided to liberalize the economy from the central planned regime, the policy makers had to think how to start up, in order to get into the fast track for sustaining the labor productivity growth. In other words, a country needs to have policies that are supportive of the sectoral shift of the labor from the rural to the urban areas and from the low productivity growth industries to the high labor productivity growth ones.

Hence, one has to let the economy change in a way which promotes labor productivity growth by relocating the labor forces from the agriculture sector, which is one of the less productive, to the sectors with high labor productivity. This is exactly what happened to the Chinese economy in the beginning of the 1980s when the policy makers decided to liberalize the economy to allow a change in the structure of the economy which could led to more labor forces being attracted to manufactories, away from the agriculture sector.

Statistically, the labor productivity has grown really fast over the past 40 years (see figure 8), the blue curve represents labor productivity growth of the whole economy and the red one represents the labor productivity growth of manufactories. This is one of the sources of the very rapid GDP growth per capita because the economy keeps going by the increase of labor productivity. The vice president of the university also mentioned that Peru's economy is also facing the problem of how to maintain rapid labor productivity growth. This is one of the common challenges many countries face.

Figure 8: Labor Productivity



3. Structural Change and Sources of Productivity Growth

This will help us understand from where does the productivity growth come. Strategically, many agree that for a country like China, having a point from where to start-off or kick-off the process of the structural change of the economy is vital. In terms of policies, we have to let the tradable sector move first and try to connect with the global supply chain. Usually countries who are struggling to grow find themselves in a difficult condition in regards to connecting to the global supply chain. Hence, one of the lucky things that China had for the past 40 years is that it had the chance to connect with the global supply chain through some of the channels.

One channel was the overseas Chinese people, especially from Hong Kong and Taiwan, so when China decided to open the economy at the end of the 1970s, the most productive investment at that time was actually coming from the overseas Chinese. They brought back the capital, the technology and the marketing skills to mainland China, this set up the manufactory in the coast line of China, especially in the southern part, the one connecting to Hong Kong and Taiwan.

Letting the tradable sector move first is strategically the right policy to kick-off the process of the structural change in the economy. This is one of the lessons we can get from the Chinese economy, the initial and effective strategy for late-comers to enhance the labor productivity is to turn the tradable sector into the leading sector in which processing exports are institutionally encouraged to connect with the global supply chain.

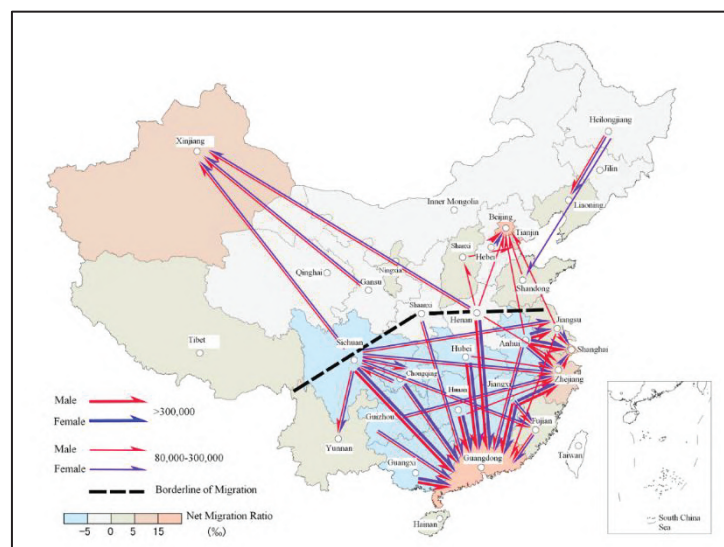
On the other hand, we understand that after 40 years of growth in China, the processing of export became more expensive because of the rising labor costs, so a lot of manufactories have been moving away from China to Vietnam, this could lead to a rapid productivity growth for the next decade in Vietnam because of the connection to the global supply chain. The global supply chain provides a platform for latecomers to kick-off the structural change of the economy, China was fortunate to have this opportunity to connect to the global supply chain in the 1980s and 1990s through the influx of the capital from overseas Chinese. The influx to mainland Chinese economy of the so called foreign direct investment is extremely important to build up the linkage or to offer the opportunity so the country can easily integrate with the rest of the world through the global supply chain.

Usually, at the beginning, a country has a leading sector, one that moves faster than the rest of the economy and China found that these sectors were much related to the processing export. The fast expansion of this leading sector induces the sectoral shift of labor from the primary industry to the secondary or manufactory industry, as well as to the tertiary industry. These became the major sources of the productivity growth over the past 40 years in China.

There are two important stories worth mentioning. First, in the early 1980s, the most dynamic province in China which was very much driven by the growing of processing export was Guangdong, a southern province which connects to Hong Kong and Macau. At that time, the policy makers tried to create a local economy which could mimic the growth pattern of the East Asian economies, which were led by exports. Guangdong and Fujian provinces became the frontier, leading most of the Chinese manufactories because of their connection to Hong Kong, Taiwan and Macau. In the whole decade of the 1980s, these two provinces became the main drivers of the Chinese economy and a huge number of labor moved very fast from the inland provinces to these destinations, in order to get a job with the expectation of a rising wage rate.

The other story is about Shanghai, which happened ten years later, in the 1990s. Shanghai is the gateway of the Yangtze river, so when the government decided to open Shanghai and the Yangtze River Delta, it was creating a destination for more foreign direct investment, especially from Japan, South Korea and the US. This quickly integrated the Chinese manufactory sector with the global supply chain. Today, in one county, a small city of the Jiangsu province next to Shanghai became the manufacturer center for electronics like laptops, smartphones, etc. This is a Chinese case where the manufactory is greatly enhanced by foreign direct investment, this place produces about 70% of the global supply of laptops. There is even a joke which states that if the traffic jam between this county and Shanghai gets worse, this could influence the global supply price of the laptops.

Figure 9: Labor Migration



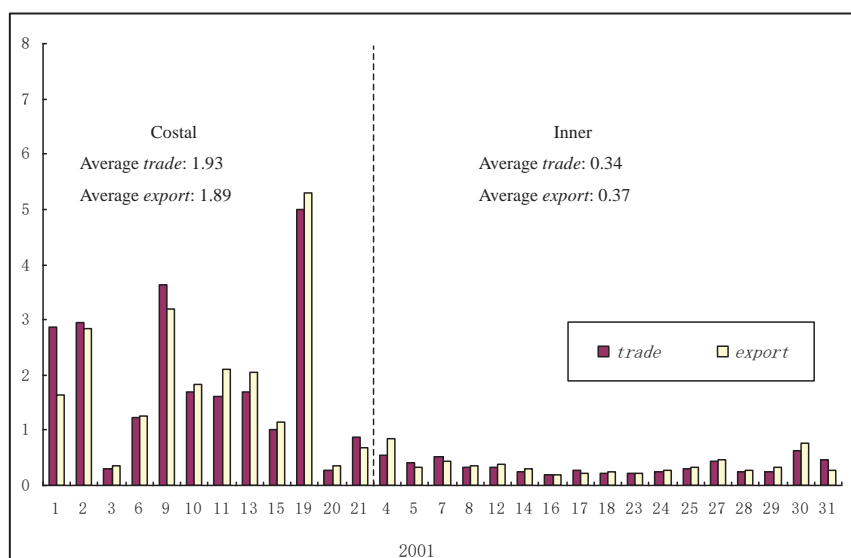
This is only one of the thousands of manufactories centers or industrial clusters across China, it is noteworthy mentioning that some places had almost nothing 40 years ago but today became the global manufactories centers, one example is the great city of Shenzhen which is next to Hong Kong. This is a miracle city created over the last 40

years, this is a hub that is going to replace Silicon Valley in San Francisco for the next 20 years.

Moving to another issue, by looking at the mobility of the labor forces in China we can clearly distinguish that most of the population migrate very quickly to the south, a part also known as the Pearl River Delta, and also to the Yangtze River Delta (see figure 9). This process of migration symbolizes the very interesting process of the industrialization in China and represents the structural change of the economy over the past 40 years.

Looking at the geographical distribution of the international trade in China in figure 10, the 31 horizontal columns represent the ratio of the export to GDP across the provinces. The export to GDP ratio in each of the provinces shows which is the preferred destination of the foreign direct investment and which province does more in terms of processing exports. Most of the provinces on the left hand side are the coastline provinces so when China decided to open up the economy, most of the resources including the labor force relocated from the inland provinces to the coastline ones. Forty years ago when China was a centrally planned regime, the government did the opposite, they tried to mobilize the resources like people and labor force from the eastern coast side to the inland provinces, this violated the principle of comparative advantage of the eastern provinces.

Figure 10: The Ratio of Regional Export/GDP (trade/GDP) to the National Average, 2001

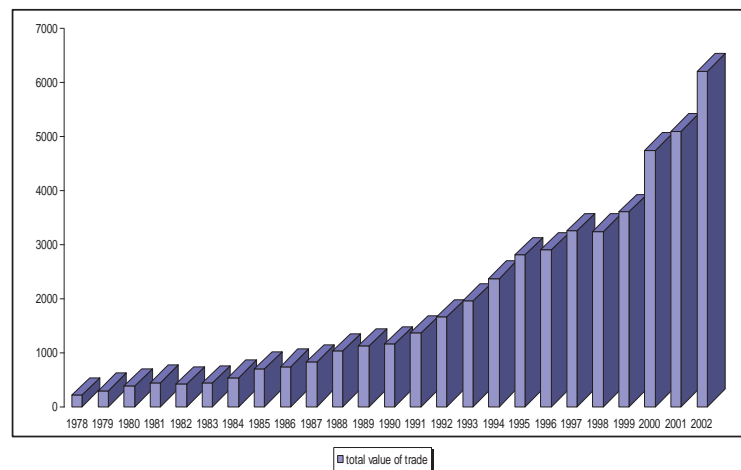


The numbers in horizontal axis indicate provinces

Liberalizing the economy and letting the market decide where the resources should be coming to conducts to a situation in which most of the resources including the labor usually go where the productivity grows faster. When the coastline provinces became the industrial sectors or hubs through connecting to the global supply chain, they created so many jobs that many people wanted to move to these provinces to work with a higher payment. The left hand provinces enjoyed a much higher share of the exports as a percentage of GDP, local GDP, than the ones on the other side.

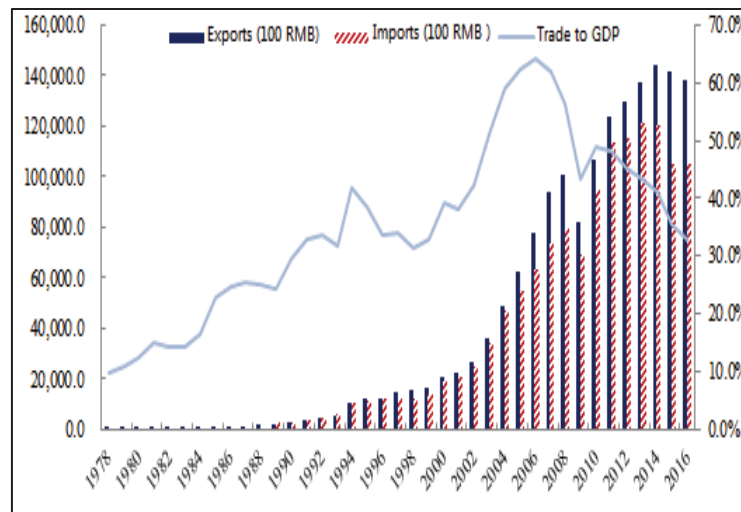
The following picture shows the general path of growth of the Chinese total value of trade in terms of hundred million dollars (see figure 11). China created a total value of trade of 70% of Chinese GDP, a very high number.

Figure 11: China's Total Value of Trade (100 million USD)



Other important figures include the export to GDP ratio and the trade to GDP ratio, the last one results from the combination of export and import respectively (see figure 12).

Figure 12: Export, Import and Trade to GDP Ratio



The exports sector grows much faster than the GDP, while processing exports grows even faster than the total exports (see figures 13 and 14). China became the global manufactory center, so the processing export using the incoming components and parts that had been processed locally by Chinese labor was the driver of the great economic change in China, especially in 1980s and 1990s.

Figure 13: Percentage Growth in China's GDP and Exports

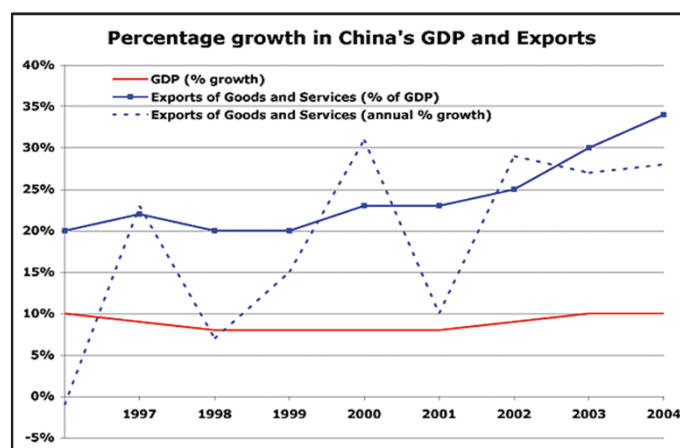
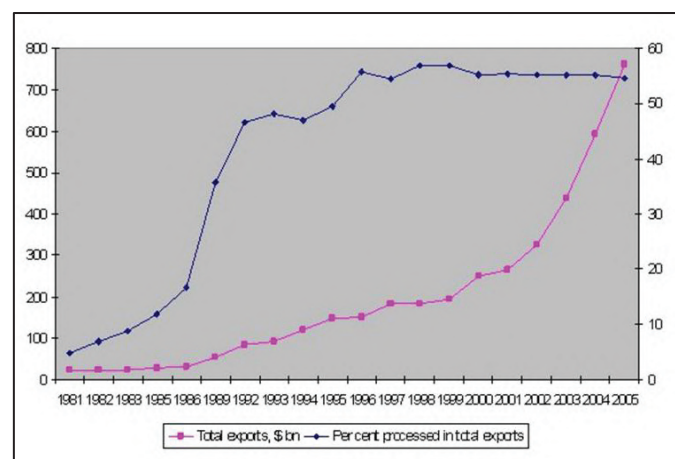


Figure 14: Processing Exports



In addition, foreign capital which came to China made a great contribution to the expansion of the export sector (see figure 15). Moreover, the share of China's export related to the foreign investment is pretty high in comparison to other high-performing economies (see figure 16).

Figure 15: Paid-in Foreign Capital (USD 100 million)

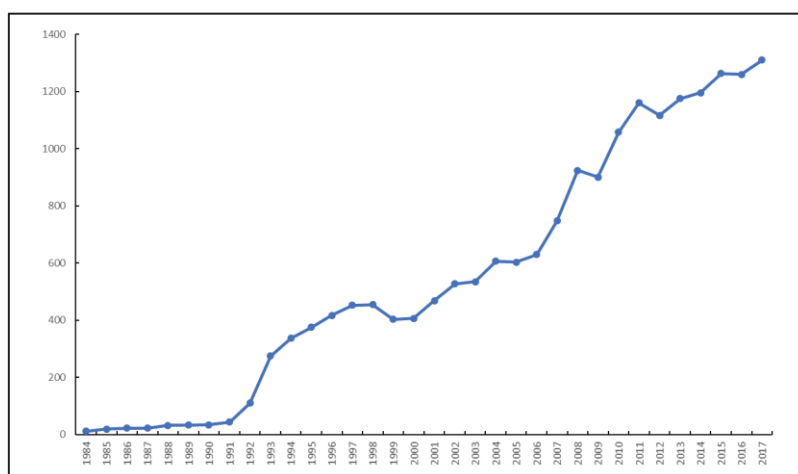
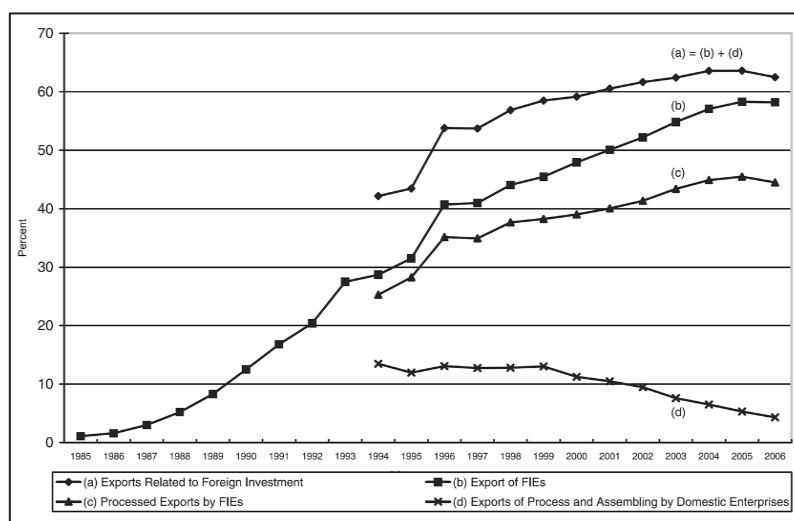
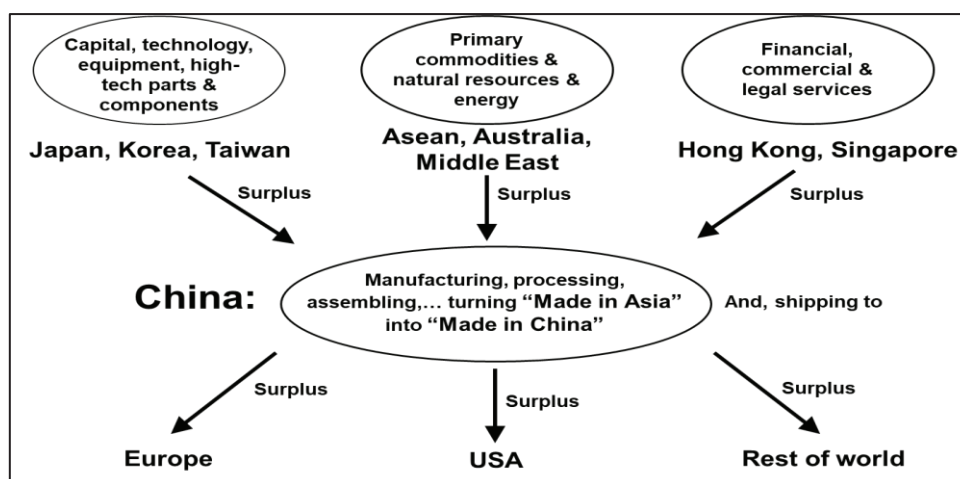


Figure 16: Share of China's Exports related to Foreign Investments



After all this, China quickly became the center of the global production network, so it received the components or intermediate goods from Japan, South Korea, Taiwan, Australia and then manufactured it locally (see figure 17). Since China was already in the supply global chain, it was easy to get to the global market.

Figure 17: China at the Center of Global Production Networks



Then we have the structural change of the economy, by looking at the figure 18 we see the composition of the Chinese GDP, in which the manufactory and the tertiary industries represent a large part while the blue line which represents the agriculture sector has a declining share in regards to the Chinese GDP. The impression is that for the past 40 years since the resources, including labor, had been moving faster from the agriculture sector to the manufactory and services ones, the Chinese economy has been enjoying a very fast growth of labor productivity. As a result, the income for the Chinese people has been rising very rapidly.

The same pattern of the change of the structure of the economy can also be found by looking at the employment structure, most people get a job at manufactories and at services moving away from the agriculture sector (see figure 19). Despite this, today

China still has about one fifth of its labor force stuck in the agriculture sector, a sector which only contributes less than 10% to Chinese GDP. There is still potential to exploit if these people move towards the manufacture and service sectors and increase their incomes.

Figure 18: Sectoral Composition of China's GDP

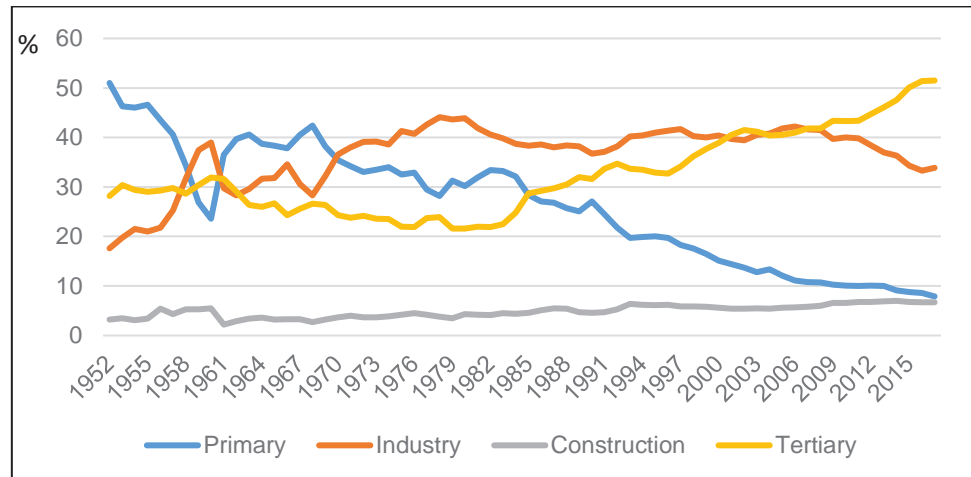
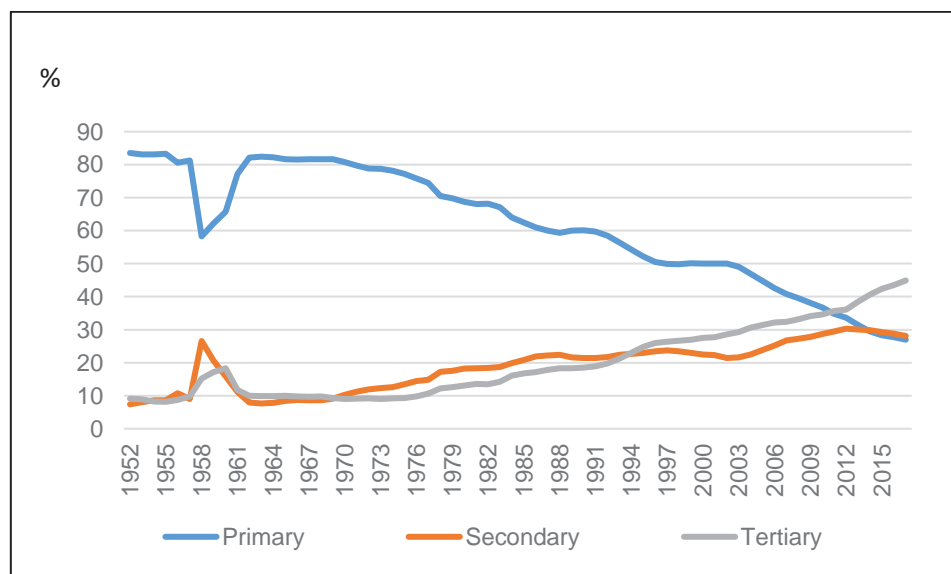
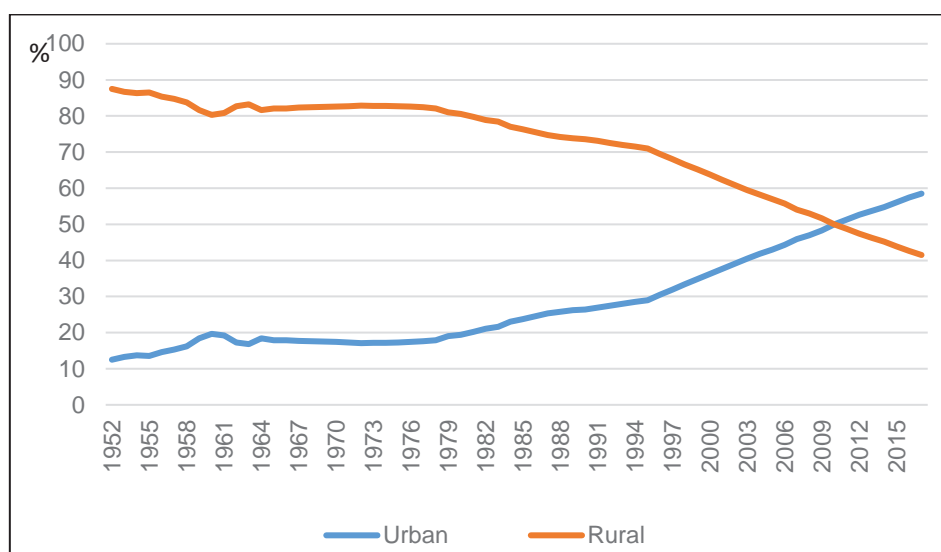


Figure 19: Composition of Employment



Finally, the figure 20 shows the composition of the population. The fast growth of labor productivity and the rapid process of industrialization of China over the past 40 years also made a contribution to the rising share of population urbanized. As a result, China had a rapid process of urbanization during the same period of time. Forty years ago around 70% of Chinese people lived in the countryside and today over 60% of the Chinese population live in the urban areas. Thus, the urbanization process has also been rising as a result of the industrialization process. Chinese always mention that over the past 40 years, over 7 hundred million people got out of poverty largely because of this urbanization process.

Figure 20: Composition of Population



The enduring dependence on the foreign direct investment in China has received criticism from many economists but despite the low-value added, the short term allocative effects of export-oriented FDI has usually been positive because it has created millions of jobs for surplus labor, which usually has low opportunity costs. Moreover, the long term effect has also been positive because of the linkage spillover and the learning process through which the Chinese private sector has benefited a lot due to the learning from this FDI and the transference of technology which entails a long term growth effect. For instance, one can clearly see that in the past 40 years many Chinese firms took over. More than 20 years ago, Chinese households used to buy Japanese electronic devices like refrigerators and TVs but today the Japanese brands are gone, they were taken over by the Chinese brands.

This process is possible because of the long term learning process created by the FDI which is possible thanks to the fact that Chinese firms can learn very quickly from foreign companies operating in China.

4. **China's Institutional Reform and Macro Policy Framework**

Everyone who has an insight to what happened to the Chinese economy over several decades has to recognize that China still has a double helix structure of the political system. It has a very centralized political power which entails a very strong state capacity for carrying on the structural reform, policy execution and provision of public goods. The network of the highways in China is a result of the state capacity because the government has more ability to mobilize resources and put it into infrastructure. Infrastructure has been moving faster than the other sectors in China because it creates externalities and has great spillover effects to the rest of the economy.

China also has a decentralized fiscal system meaning that the local governments or provincial city governments enjoy great financial autonomy. In the end, China has a centralized political power and a strong state capacity but also has a decentralized fiscal system in which local governments have been very actively pursuing local economic development and creating horizontal competition among themselves. This is the

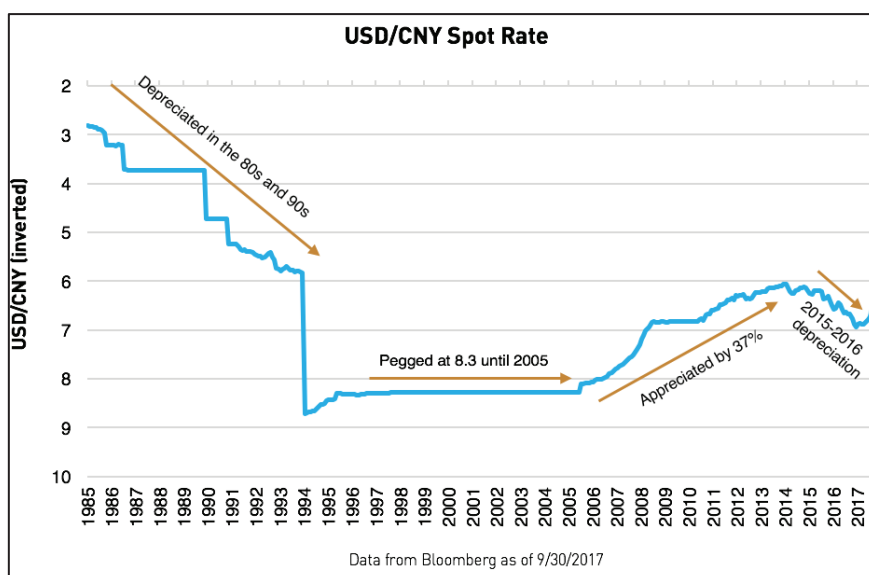
institutional foundation for the economic transformation in China, this is the double helix structure of the system.

In terms of the macro policies, for a long time China enjoyed a fixed exchange rate pegged the US dollar, controlled interest rates and credit policy. Then, it liberalized the current account in the middle 1990s but the capital control remained. China did this combination because liberalizing the current account facilitated the influx of foreign direct investment into manufactory and controlling cross-border capital mobility helped to avoid being hit by the global financial crisis. China also created a framework with the US, one in which China could enjoy the fixed exchange rate, free market access to the US economy and at the same time China created a surplus and also purchased the US treasury bills to finance the US purchases of Chinese manufactories goods.

Today this framework has been broken because of the US – China trade war, the interdependence between the US and China is getting weaker and China needs to recalibrate its macro parameters including the exchange rate and interest rate to facilitate moving into another phase of the macro economy in China without substantially relying on the American policies.

One of the examples is the exchange rate between the USD and the Chinese currency, China pretty much enjoyed a fixed exchange rate before the Chinese currency depreciated (see figure 21). Later, because of the frictions with the US, China had to appreciate its currency around 2005 which created some turmoil in the economy. Today if China and the US decouple and China gains more autonomy in making its own monetary policy to support growth, it is most likely that the Chinese currency will depreciate, which is good for China.

Figure 21: USD/CNY Spot Rate



5. Recent Growth Slow-down and Growth Prospects

The Chinese economy is facing a slow-down due to challenges within China and from outside. China's decline in regards to growth is quite natural since it has enjoyed fast growth for over 40 years which have resulted in rising labor costs (see figure 22). The long term trend of growth is slowing and the demographic transition has been very

dramatic, so China is quickly moving to an aging society, especially in metropolitan cities like Shanghai in which they have negative population growth. This led the Chinese government, a couple years ago, to give up the one child policy to try to accommodate to this transition.

Apart from the convergence effect, China has a declining demographic dividend and in order to move to the new growth model it has to generate more domestic demand to sustain the growth rather than relying too much on the external market. This could contribute to the long-term trend of the slowing growth in China, still there are some immediate reasons for the slowing growth, China has accumulated huge financial debt and there is still space to cut interest rates because interests around the globe are almost zero while China still has positive high real interest rates. In addition, the Chinese currency has been too strong in comparison with other currencies. Moreover, China is facing policy rigidity largely because of the US but now that the trade war is happening, this could create an opportunity to decouple from the US also in terms of policy making.

Figure 22: China's GDP Growth

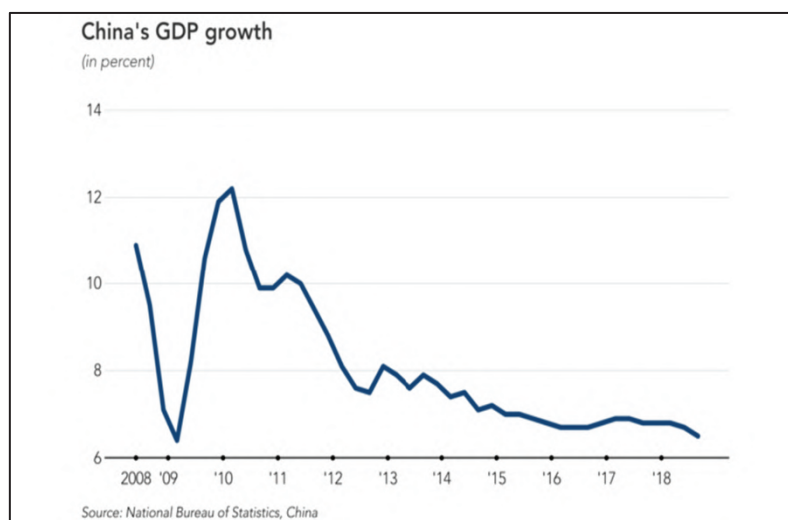
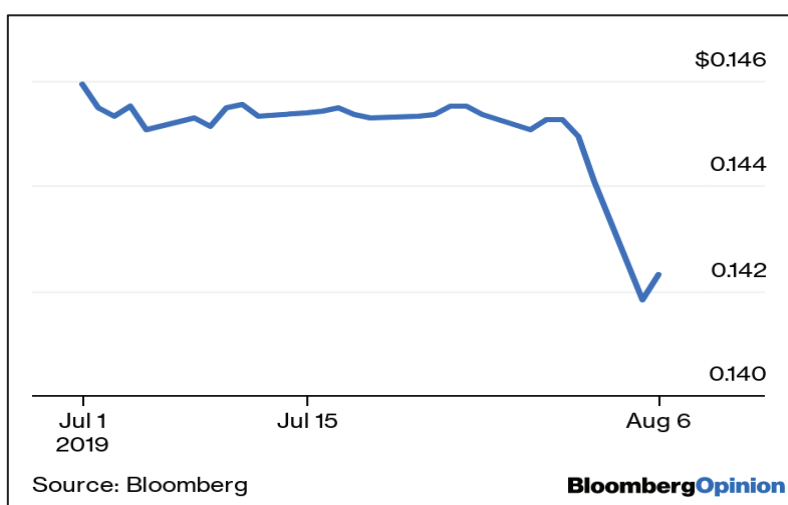


Figure 23: Chinese yuan- U.S. dollar exchange rate

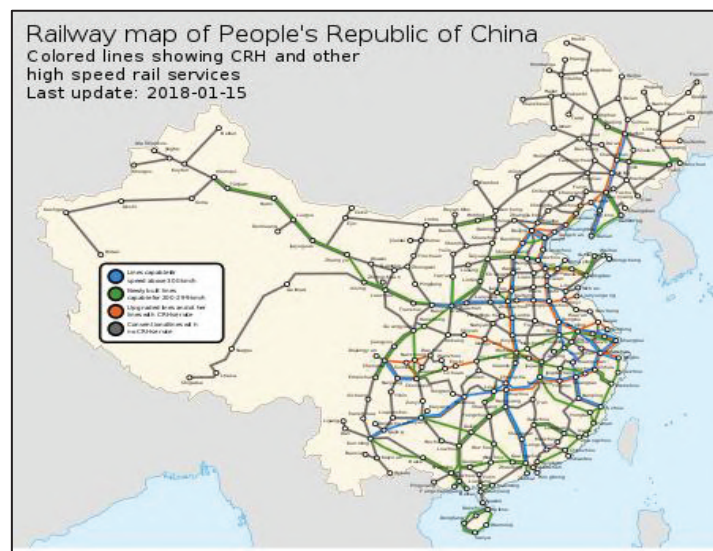


The Chinese currency has been depreciating over these last days (see figure 23), this could open a time slot for China to move freely and liberalize parameters taking advantage of not being constrained by the US anymore. Recalibration would allow China to gain much of the dependence from coupling with the US in making monetary policy and China would have the opportunity to push for the liberalizing of interest and exchange rates and more to more flexible system of macro parameters to cushion external shocks.

China has great potential for growth for the next two decades largely because it still has 20% of the population living in rural areas, getting them out from the rural areas means that they have to push harder the urbanisation process. Other issues to consider include building a closer regional integration, continue investing in education to improve the quality of human resources and catching up with the technological frontier.

Nowadays, Chinese government is doing propaganda for the high-quality growth path, the hope is that the growth for the next decade is around 6 -6.5%, which seems enough. In addition, China has to catch up with the hard and soft technologies and find new sources of growth through entrepreneurship and technological innovation. China has been leading in the sectors of the Internet economy, including online payment. These are all new things created by the young chinese people, entrepreneurs. A package of policies came down over the past couple of years to support the expansion of this new economy. China could generate over 10 million jobs, a number higher than the current figure, thanks to this new economy. This could position China near another round of structural changes in the economy, in which the service sector would contribute a lot more to sustain the growth of China.

Figure 24: Railway Map of China



Finally, figure 24 shows the railway map of China. Everyone has heard that China enjoys a high speed train system and it is a very efficient one in terms of transportation. The color lines in the map show the spreading network of the high speed trains which is ,in total, over 30 thousand km and there are other 20 thousand km under construction. This will also be a driver of the chinese economy for the next decade because the high speed

train system has created a huge spillover effect to the rest of the economy. Figure 25 shows the high speed trains.

Figure 25: High Speed Trains



6. Biography of the author



Zhang Jun, PhD

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Professor Zhang is one of the leading economists in China with many publications in both Chinese and English. In the last 20 years he has published, as an author or publisher, numerous books including *The Economic Transition with Chinese Characteristics: Thirty Years of Reform and Opening*, *The Transformation of Chinese Enterprises*, and *Incomplete Reforms of the Chinese Economy*. In addition, his recent academic contributions have been published in *The World Economy*, *China Economic Review*, *Journal of Asian Economics*, *Journal of the Asia Pacific Economy*, *Journal of Chinese Economic and Business Studies*, and *East Asian Review*.

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