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## New Perspectives on Contemporary Chinese Growth: The Developmental State Model and China's Success in the Reform Period

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New Perspectives on Contemporary Chinese Growth: The Developmental State Model and  
China's Success in the Reform Period

Senior Project Submitted to  
The Division of Social Sciences of Bard College

By Adam Savino

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**Dedication:**

This essay is dedicated to my Senior Project Advisor, Professor Robert Culp, as well as the entire Economics and Global-International Studies Staff at Bard. Thank you for helping me grow into a person with a greater wealth of knowledge, I would have never understood heterodox economics and international relations without all your aid.

**Abstract:**

The success of China since 1979 has often been boiled down to market fundamentals, neglecting its largely state directed system. This essay compares the developmental state theory of growth, established by historian Chalmers Johnson, to China's economic practices over the last 40 years. Ultimately, the purpose of this essay is to demonstrate that China's growth is based on a unique application of the developmental state model, and that this model is potentially transferable to other economies that have yet to develop as robustly.

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China's phenomenal growth is often regarded as a victory for liberalism inside academic circles. In fact, much of the growth in East Asian states has been explored by historians as a victory for the guiding forces of America and their allies until Chalmers Johnson set out an alternative theory of growth in Japan. The narrative Johnson had published revolved around the idea that Japan's growth was due to the unique role that Japanese bureaucracy had played in the economic development of the country. This model has been described as the "developmental state" approach, where state guidance plays an active role in shaping economic outcomes. The theory of the developmental state has been applied to a variety of countries over the years: Japan, South Korea, Taiwan, and even countries like France. However, China's growth is often overlooked by developmental state theorists, who have historically viewed China as plan ideological rather than plan rational. Although China's state apparatus is highly ideological, the approach that China has taken to development may surprise liberal economists in how strong the presence of the state has been. Rather than simply identifying the reforms that have been made since 1979 and demonstrating that China has liberalized, this paper seeks to prove that China's growth was not caused by the loosening of restrictions alone. After all, many countries that remain poor are much more liberal than China is, and yet do not experience the explosive growth that China has. This is where the developmental state thesis becomes applicable to China, as the state bureaucracy has been involved in quite a few means of indirectly planning the economy. The developmental state theory will be used to explain how China's growth facilitated itself, and point out the conclusion that state-led economic guidance may be more useful than previous scholars have let on.

In order to accomplish this goal, this paper is divided into three 'chapters'. The first chapter is focused on establishing how China has engaged in reform since 1979 and contextualizes the changes in the economic environment. It serves to highlight what the core features of the contemporary Chinese economy are and informs the reader why surface-level historical accounts of China's growth point to liberalism as the guiding cause. The second

chapter focuses on defining the idea of the developmental state, starting with the core ideas in developmental economics as a whole and moving on to the theorists who have developed the theory of the developmental state over time. The purpose of this chapter is to establish what a developmental state looks like, as well as who has defined it. It also serves as a reference point for what other economists have considered development to be over time, demonstrating both basic textbook relationships as well as research into other forms of developmentalism, such as Neoclassical, Institutionalist, and Keynesian development. Overall, this chapter helps the reader understand what economists think about development and specifies the beliefs of developmental state theorists. The third and final chapter is the most important, as it covers the ways in which China's post-reform changes transform China into a developmental state. In this chapter, there are six aspects explaining China's status as a developmental state. Chapter three is of the utmost importance because it synthesizes the ideas of the previous chapters in order to highlight China's use of state intervention in order to accumulate national wealth. Ideally, these chapters will illustrate the basic concept of what a developmental state is and expand upon the basic concept to include China's growth model.

### **Chapter 1: The Reforms of Post-Mao China**

This essay has no intention of looking at the Maoist period when making the claim that China's explosive growth was a fulfillment of developmental state tenants, and instead focuses on 1979 onwards, which will be colloquially referenced as the "reform" period under Deng Xiaoping. The Reform period serves as the frame of reference for two reasons; because many see this period as the beginning of China's rapid development, and because this period transforms China by creating a freer market in a formerly command economy. This section will briefly describe the trends in economic reform since 1979, as this is necessary in order to provide a framework of what a Reform economy truly is. China's economic reformation is characterized by neoclassicists and heterodox scholars alike as a cautious mix of market

principles and state-directed growth. Gradual changes to the profit, employment, and price structure would create situations for greater independent management of local firms, as well as greater incentives to privately invest in consumption-based industries. Decollectivization had a hand in generating more efficient agricultural production, and national economic openness encouraged the exchange of industrial information alongside expanding the scale of the economy. However, state directed investment and fiscal deficit spending created more opportunities for private economic bounty, and state-owned industries still played a huge (albeit diminishing) role in the national economy. This chapter is broken up based on the subject, beginning with the formation of private and semi-private industry and followed by the reform of the SOEs, the formation of SEZs and international trade, and final reforms that do not fit into these three categories. The aim of this chapter is to simply highlight what happened- the explanation of why the reforms enabled China's success will be much lengthier. This succinct introduction to contemporary Chinese economics will provide context for the writing's overall claim; China's growth is based on liberalizing reforms that turned a command economy into a developmental state, and the role of the state in the way that it interacts with the market is what has enabled China's success.

### **Reform Aspect 1: The Market-Driven Change within the Economy**

Before privatization was possible in China, the first step towards a non-command economy was decollectivization of agriculture. Decollectivization- a separate process from marketization and privatization- is defined by an agricultural transition away from the processes of collective labor. While farmers did not have ownership of the factors of production, such as land and capital, management of business practices became more localized. These reforms were directed in a top-down fashion to correct the inefficiencies of the agricultural collective economies, such as poor profit retention structures, lacking investment incentives, and coercive

state power over local consumption<sup>1</sup>. In practice, decollectivization took the form of *baogan daohu*, which was the division of land from collective farms to household smallholdings for individual business. Decollectivization not only doled out land, but also distributed the necessary equipment and inputs for successful production. The state still purchased farm products at a quota but granted greater authority to peasants in terms of output above or outside of the quota. In other words, agricultural laborers could now more independently organize their own labor, as meeting the quota was the only requirement imposed on them and opportunity for profit on the private market was now possible. As a bonus, produce diversification as a result of the growth of private demand for non-grain farm goods was encouraged by decollectivization<sup>2</sup>.

Decollectivization is a step towards the enterprise autonomy that occurred during the 1980's and has had broad-reaching positive impacts on the agricultural productivity transformation that was discussed in the introduction, as gross agricultural output rose to approximately 166% of its pre-decollectivization output just 10 years after the reforms and agricultural labor productivity rising by 5.2% annually<sup>3</sup>. It is easy to recognize the importance of agricultural decollectivization in the positive change in China's economic conditions.

Alongside the trend of decollectivization, China began instituting marketization-based reforms to encourage competition. One successful result of marketization was the creation of the "dual-track" program, intending to encourage production and pricing at optimal, market-based levels. In 1985, firms were given the right to sell products outside of the planned quota. Thus, economic activity was divided between the official planned economy, which produced certain goods for purchase by the state for re-selling, and the market economy, which operated

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<sup>1</sup> Bramall, Chris. "The Chinese State and Agriculture." *Sources of Chinese Economic Growth, 1978-1996*. Oxford University Press, 2003.

<sup>2</sup> Unger, Johnathan. "The Decollectivization of the Chinese Countryside: A Survey of Twenty-Eight Villages." *Pacific Affairs*, 1985. Vol 58, No 4. Pp 585–606.

<sup>3</sup> Rozelle, Scott, and Johan F. M. Swinnen. "Success and Failure of Reform: Insights from the Transition of Agriculture." *Journal of Economic Literature*, 2004. Vol 42, No 2. Pp 404–411.

outside of the prices determined by the government and instead operated on the economic intuition of liberalism. Because the government froze the amount of in-plan product it annually demanded from firms, inter-firm competition became commonplace and production of certain commodities increased dramatically<sup>4</sup>. This inter-firm competition is a crucial element of the shifting economic landscape of reformist China, marking the movement away from monopoly power over production by the state. The dual track program also implemented another momentous reform in the form of un-fixed prices. By maintaining a private goods market alongside the state-led product market, China was able to align prices with the amount demanded of a good in relation to its relative scarcity<sup>5</sup>. The dual track system was theoretically appealing to market and state actors alike, as state actors retain some control of the economy and non-state actors were able to buy goods at competitive prices. If this is the case, a dual track system allows a private market to mobilize additional total welfare to the point in which price and quantity are Pareto optimal without detracting from the quantity of production undertaken by the state-owned industries. Similarly, overproduction can also be Pareto improving in a dual-track economy, creating a situation in which states subsidize additional product generation and allow the market to perform optimally otherwise<sup>6</sup>. To be sure, the intuition behind the dual-track system is understandable and useful.

The development of privately-owned business has driven China's economic growth considerably. Beginning in 1988 with the Provisional Regulations on Private Enterprises, the reformists began allowing corporate entities to form outside of the traditionally state-owned sector. Millions of collective firms would privatize, leading to a productivity boom in the various sectors that now had private competitive forces within them. Although state-owned industries

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<sup>4</sup> Naughton, Barry. *Growing Out of the Plan: Chinese Economic Reform, 1978–1993*. Cambridge University Press, 1995. Pp 225-250

<sup>5</sup> Perkins, Dwight Heald. "Reforming China's Economic System." *Journal of Economic Literature*, 1988. Vol 26, No 2. Pp 620.

<sup>6</sup> Lau, Lawrence J., et al. "Reform without Losers: An Interpretation of China's Dual-Track Approach to Transition." *Journal of Political Economy*, 2000. Vol 108, No 1. Pp 121-132.

had to become much more productive in response to the rapid growth of private industry, by 2016 private industry assets were 3.5 times greater than state-owned industry assets in generating return. State-ownership still dominates certain 'critical industries' such as mining and utilities, but highly profitable light industries in manufacturing are dominated by private enterprises, which make up four-fifths of all light industry<sup>7</sup>. The introduction of private industry incentivized and rewarded productivity, allowed loanable funds to be allocated to private investment opportunities, and encouraged the cooperation of firms and markets. These features created an environment conducive to growth in a previously inefficient China. Innovation facilitated itself from the bottom-up, directed by entrepreneurial actors forming cross-market interest groups to allow for the promulgation of new advancements more broadly across the economy. In other words, the initial loosening of regulations allowed for private actors to form networks of mutually interested agents that promoted their own interests by advocating for further privatization and market-based exchange and enforced informal operative norms while legal structures to protect property formed<sup>8</sup>. The growth of China's private sector has been a core factor in the economic growth of China, and it should be recognized as a monumental reform that the reformers undertook. Although this reform was gradual, and highly contested even within the reformist group, one can see that these changes in the 1990's have had a profound impact on China's economy today.

Although not private in-and-of-themselves, the curious case of township-village enterprises (TVEs) gives additional insight into the growth of the market in leading China's economic rise. During the decollectivization period of the late 1970s and early 1980s, areas that had been formerly known as communes now had a new designation: the township. As has been previously discussed, the decollectivization of the Chinese rural sectors allowed for greater

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<sup>7</sup> Lardy, Nicholas. "Private Sector Development." *China's 40 Years of Reform and Development: 1978–2018*, ANU Press, Acton ACT, Australia, 2018. Pp 329–334.

<sup>8</sup> Nee, Victor et al. "Market and Institutional Change in China" in *The Oxford Companion to the Economics of China*. Oxford University Press, 2014.



competition between different locales. The main force in the promotion of competition between townships were the TVEs. TVEs, unlike SOEs, are businesses controlled by the local government of a village rather than the federal government. TVEs largely fly in the face of market approaches to economics, as many Classical economists would describe fundamental property rights as necessary for the successful development of an enterprise. However, several features played into the overall success of the TVE in encouraging rural growth in the 1980s. Not only did the TVEs create an environment in which product differentiation and competition could occur, it also generated a great deal of monetary resources for the local governments that would be re-invested into public works and wages. Because TVEs have a hard budget constraint, they also did not fall into the trap of the SOEs of borrowing large amounts of money with little productive payout. TVEs would stagnate in the 1990s as the market share of private enterprise began to rise, however the TVEs are a successful version of market socialism<sup>9</sup>. It is important to recognize the value of TVEs to more than just agriculture, as industrial TVEs made up half of China's industrial output, profit, and value added in 1994. Some see the general success of TVEs between 1980 and 2000 above private and state-owned firms as a result of their mixed economic status. On the one hand, there were fewer agency costs associated with TVEs compared to state firms, as they were freer to retain economic incentives and provide them to the community. On the other hand, there were fewer transaction costs associated with being a TVE compared to private firms, as TVEs had greater access to loanable funds and experienced fewer restrictions to trade on the market. The fact that TVEs were tied to local government gave it a corporatist nature as well, providing the TVEs with governors that act like a board of directors. The fact that TVEs aligned public and private interests optimized their

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<sup>9</sup> McDonnell, B. H. "Lessons from the rise and (possible) fall of chinese township-village enterprises". *William and Mary Law Review*, 2004. Vol 45 No 3. Pp 954-978.

operative efficiency<sup>10</sup>. The TVE serves as an important predecessor to the private firm in managing China's rise, utilizing local corporatism to generate rapid returns and economic profits.

## **Reform Aspect 2: State-Owned Enterprise Reforms**

Reforms that generated a semi-private sector were matched by reforms that loosened the role of the state in the economy without dismantling it completely. The structure of local state-owned enterprises changed in multiple ways: profit retention now existed, managerial responsibilities were localized, labor relations were decentralized, and dual-track production was implemented. Each of these subjects deserves sufficient time spent on their descriptions. Beginning with profit retention reforms, A clear policy shift over time transpired as marketization reforms induced great success. Starting in 1980, Zhao Ziyang and other central planners determined that individual firms would be allowed to keep a portion of their profits that would be dedicated to worker welfare, bonuses, and productive gains in the form of new investment, determined by taking the ratio of the previous year's finances dedicated to the aforementioned activities to the overall revenue of the firm. In other words, enterprises retained a share of their current real profits while the remainder was allocated to the government. By 1986, however, a new form of profit retention in state-owned industries became commonplace; *chengbao*, or long-term contracting, a system in which individuals would negotiate multi-year agreements of a percentage of profits that said individual would fully command. This scheme was both a further market-based distribution of profits, as these long-term contracts tended to offer greater percentages of profit control, and the establishment of a pseudo-equity market for state-owned

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<sup>10</sup> Ping Li, Peter. "The Puzzle of China's Township-Village Enterprises: The Paradox of Local Corporatism in a Dual-Track Economic Transition". *Management and Organization Review*, 2005. Vol 1, Issue 2. Pp 197-207.

industries<sup>11</sup>. By transforming the managerial system so contract-holders became entangled and responsible for the success of the firms, as contract-holders had to purchase their contracts in the first place, the reformers hoped that firm managers would take a greater interest in profit maximizing behavior<sup>12</sup>. The creation of profit incentives is a considerable economic reform when recounting the Reform period because there had previously only been ideological incentives to production.

The introduction of benefits from profit retention was matched by an increase in local control over managerial practices. Although the Reformist state would be hesitant to give too much power to local enterprises in the early 1980's, managers began to gain control over labor and practical decision making. Managers became the primary directors of their enterprises in 1984, replacing the party directors that initially controlled these firms. As a result, individual state-owned firms became responsible for generating their own production plans. Labor relations changed dramatically as a result of these reforms. Individualized wage allocations were drawn up as a fraction of total profitability, and wage increases (including bonuses) were determined by overall productivity rather than profits retained. Workers also began to shift away from lifetime employment guarantees toward individual contract assessments, leading to negotiable wage increases over time and the opportunity to reevaluate one's employment every five years<sup>13</sup>. Like increased profit retention, changes in the autonomy of managers over decision making for local enterprises was meant to entrust greater responsibility for economic output to local firms, as many had been held afloat by subsidization up until this point and were not as profitable as they could have been. By liberalizing the managerial structure of individual firms,

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<sup>11</sup> Naughton, Barry. *Growing Out of the Plan: Chinese Economic Reform, 1978–1993*. Cambridge University Press, 1995. Pp 101-103 and 210-220.

<sup>12</sup> Brodsgaard, Kjeld Erik et al. "The Emergence and Development of the Socialist Market Economy (1992–2003)." *From Accelerated Accumulation to Socialist Market Economy in China: Economic Discourse and Development from 1953 to the Present*. LEIDEN; BOSTON, 2017, pp. 94–127.

<sup>13</sup> Naughton, Barry. *Growing Out of the Plan: Chinese Economic Reform, 1978–1993*. Cambridge: Cambridge University Press, 1995. Pp 205-220

managers would be incentivized to increase profits due to their newly held stake in the firm's success. Workers would be incentivized similarly by the possibility of wage increases proportional to the profitability of the firm<sup>14</sup>. Over the immediate years to come, these reforms would unfortunately lead to massive losses for the SOE's despite increases in total factor productivity. The rate of wage growth outpaced the rate of productive growth significantly, and this would be detrimental to the success of these enterprises. However, these reforms would lead to the privatization of more than 300,000 SOE's at the turn of the century and demonstrate the marketization of these industries in the long-run<sup>15</sup>. Still, the role of the SOEs during the Reform period should be appreciated for reasons that will be addressed in Chapter 3.

### **Reform Aspect 3: Openness to International Trade**

As China's internal industries became more market-oriented, the nation also became open to international trade through the Open Door Policy. Originally proposed in 1978, the Open Door Policy was a series of reforms dedicated to increasing the interaction between foreign economies and the domestic economy of China in order to promote long-term productivity growth. The reformers realized that isolationist rhetoric was limiting China's comparative advantage in labor availability and natural resources, but creating an economy that would be integrated into the world economic system could lead to an expansion of Chinese enterprise worldwide. In order to encourage overseas investment, the exchange rate was inflated considerably, technological imports were encouraged through low tariffs, and Special Economic Zones in which private enterprise could flourish were established to promote foreign direct investment. The reform was not limited to economics, as China also began to join international

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<sup>14</sup> Perkins, Dwight Heald. "Reforming China's Economic System." *Journal of Economic Literature*, 1988. Vol 26, No 2. Pp. 613-618.

<sup>15</sup> Huang, Yiping. "State-Owned Enterprise Reform." *China: Twenty Years of Economic Reform*. ANU Press, 2012, Pp. 100-107.

organizations and engage in cross-cultural exchange<sup>16</sup>. These reforms mark a clear shift away from the previous trade policies of the Chinese state. Before these reforms, trade was regulated through national corporations that controlled any imports or exports that would arrive in China. These corporations would purchase any imports or exports and change the price to fit the state price apparatus. By dismantling these state corporations, China was able to marketize the trade process and encourage FDI growth<sup>17</sup>. As a result of these reforms, foreign capital investment increased from 2 billion dollars to 18.8 billion dollars between 1983 and 1992, and by 1992 China had exported goods equivalent to 20% of its gross national product<sup>18</sup>. In other words, the purpose of the Open Door Policy was to advance the Chinese economy by loosening the protectionist measures that it had subjected itself to during the Maoist era and engaging in greater international trade. By doing so, the Chinese economy opened itself up to greater opportunities for advancement through joint projects with foreign investors.

Among the reforms of the Open Door Policy, the creation of Special Economic Zones has been of particular import. Beginning in 1979 with four cities, China introduced the concept of SEZs to introduce foreign capital and technology into the Chinese mainland. Firms operating in said SEZs had very little oversight and minimal tax burdens compared with the rest of China. The hope of the reformers was to try and force the industries in these areas to become internationally competitive and advance, leaving the gains from trade to allow the information and investment to diffuse into non-SEZ areas as well<sup>19</sup>. These first four zones were largely successful in attracting foreign investment. These areas' abundance of available space for

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<sup>16</sup> Huan, Guocang. "China's Open Door Policy, 1978-1984". *Journal of International Affairs*, 1986. Vol 39, No 2. Pp 1-18.

<sup>17</sup> Wei, Shang-Jin. "The Open Door Policy and China's Rapid Growth: Evidence from City-Level Data". *Growth Theories in Light of the East Asian Experience*. National Bureau of Economic Research, 1995. Pp 73-75.

<sup>18</sup> Bohnet, A., Hong, Z. & Müller, F. "China's open-door policy and its significance for transformation of the economic system". *Intereconomics*, 1993. Vol 28. Pp 191-194.

<sup>19</sup> Chu, David K. W. "China's Special Economic Zones: Expectations and Reality." *Asian Affairs*, 1987. Vol 14, No 2. Pp 77-81

development, focus on industry befitting the comparative advantage of the region, and well-implemented foundational rules and regulations made China's SEZs particularly enticing to foreign investment, and as a result Shenzhen would become one of China's most business-oriented cities. As a result of these early successes, China began developing offshoot SEZs known as Economic and Technological Development Zones (ETDZs) and Border SEZs in 1984 and 2000 respectively<sup>20</sup>. Shenzhen, more than any of the other initial SEZs, became the model used in developing the offshoot SEZs to come. By relaxing labor laws and wage controls, Shenzhen was able to attract incredible levels of immigration. At the same time, Shenzhen integrated foreign technology by operating numerous joint enterprises with foreign firms. The diffusion of foreign technology throughout Shenzhen allowed for the establishment of numerous competitive domestic firms, leading to a surge in indigenous patents<sup>21</sup>. SEZs changed the way China interacted with the world and delivered impressive improvements to China's foreign trade.

Finally, the Belt and Road initiative has been indicative of China's future in terms of growing economic openness and globalization. In 2013, President Xi Jinping announced the beginning of this initiative meant to develop the infrastructure of underdeveloped areas within China and abroad and strengthen the economic linkages between areas in the plan. Because the OBOR (One Belt One Road) initiative seeks to develop foreign infrastructure as well as domestic, it is largely seen as a means of creating greater economic ties between China and participants in this program. The addition of the OBOR initiative to China's many lasting reforms has promoted the image of China as amenable to free international trade while also allowing it to engage in massive infrastructure development projects to assist both Chinese and foreign interests. The China-Pakistan Economic Corridor is a key example of the benefits of this phenomenon, where both parties benefit economically from a joint development partnership.

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<sup>20</sup> Chen, Xiangming. "Change and continuity in special economic zones: a reassessment and lessons from China". *Transnational Corporations*, 2019. Vol 29, No 2. Pp 49-63.

<sup>21</sup> Yue-man Yeung , Joanna Lee & Gordon Kee. "China's Special Economic Zones at 30", *Eurasian Geography and Economics*, 2009. Vol 50 No 2. Pp 226-232.

The promotion of Chinese manufacturing firms through the extension of these industries abroad allows this plan to promote profit-seeking behavior. The relocation of these firms to lower-cost, higher demand areas is a promising goal of the plan<sup>22</sup>. By 2017, the OBOR initiative had generated a multitude of joint agreements for the development of economic infrastructure abroad. Cooperation between these largely underdeveloped nations also allows for a permeation of Chinese industries into the resource-rich locales of said nations, such as the increasing prominence of Chinese industries in Laotian mining following the development of the Pan-Asian Railway. A similar situation is present in Indonesia, where China contributes to the second largest amount of foreign investment (following Singapore)<sup>23</sup>. Many also see the OBOR initiative as indicative of a new phase of Chinese growth, where China consolidates its economic gains and reaches new levels of international prominence once embroiled in the world economy. By increasing the scale of the economy, in other words, China has given its manufacturing sector an avenue for sustained future growth<sup>24</sup>. The Belt and Road Initiative seems to be the future of the Chinese growth economy, which is why it is of importance.

#### **Reform Aspect 4: Development of Infrastructure**

Much of this chapter has focused on the changes to the market structure of China as it became more liberal, but this should not discount the impact of expansionary fiscal policy on Chinese development. The government engaged in much of the necessary investment behavior to kickstart manufacturing growth in the 1980's and has remained in control of heavy industry development to this day. The development of a more sprawling economic infrastructure began in the 1990's and has been important to China's ability to compete with international firms. The

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<sup>22</sup> Cai, Peter. "Understanding China's Belt and Road Initiative". *Lowy Institute for International Policy*, 2017. Pp 1-17.

<sup>23</sup> Yang, Zi. "Securing China's Belt and Road Initiative". *US Institute of Peace*, 2018. Pp 1-14.

<sup>24</sup> Huang, Yiping. "Understanding China's Belt & Road Initiative: Motivation, framework and assessment". *China Economic Review*, 2016. Vol 40. Pp 314-316

“Go West” and “Reviving of the Northeast” policies of the late 90’s have been examples of China’s infrastructure investment boom and have caused productivity to grow more evenly across China as a whole. As a result of China’s infrastructure spending, China’s transportation, shipping, power, and telecommunications sectors are all some of the most extensive in the world<sup>25</sup>. The improvement of the quality of the infrastructure since 1978 has been noteworthy as well, with the energy consumption of China’s power generation growing at half the rate of the growth in output between 1978 and 2005 and electricity usage growing at a rate of 11% annually. Similarly, investment in telecommunications development dominated national interests in the 90’s to the extent in which it reached 1.5% of GDP in 1995. China’s infrastructure boom dominated the 90’s and has been rising since then, leading to much greater amounts of fiscal expenditure on said investment<sup>26</sup>. Chinese investment is largely a product of fiscal expenditure, borrowing, and market-based financing, However, the extent of the private market in this investment has been extremely slim, and most of the infrastructure investment in China has been directed by national or sub-national groups. Through the years, 5-year plans have broadly expanded the functional infrastructure available to ever-growing manufacturing and urban firms to increase the productivity of the Chinese economy<sup>27</sup>. Infrastructural development has been a state-led factor in China’s output growth that is often ignored in studies of the subject, and yet it has been a core feature in China’s development since the 1990’s.

While the nation became more open to marketization and globalization, reform of the financial sector took place as well. Although the Peoples’ Bank of China still dominates the domestic market for finance, the 1980’s brought about reforms to make the financial sector more competitive by introducing cooperative banks. These banks allowed for the financing of

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<sup>25</sup> Demurger, Sylvie. “Infrastructure in China” in *The Oxford Companion to the Economics of China*. Oxford University Press, 2014.

<sup>26</sup> Naughton, Barry. *The Chinese Economy: A Practical Guide*. The MIT Press, 2006. Pp 336-346

<sup>27</sup> Sahoo, Pravakar et al. *Infrastructure Development and Economic Growth in China*. Institute of Developing Economies Working Paper No. 261. Pp 1-10



private and community enterprise at a local level, mobilizing funds to the previously untapped markets of commercial industry and agriculture. The reforms transformed the layout of the financial sector from a passive, singular institution that accounted for the projects and plans of the economic planners to a deep multiplicity of interlocking credit groups and a market for capital in stock exchanges. State-owned commercial banks make up most of the deposits of the Chinese economy, and still have an immense amount of power over the direction of investment within the country. However, they now operate much more along the lines of commercial banks and finance investment projects outside of the public sector and have become business oriented in the modern day. The Joint-Stock Commercial Banks and the City banks, however, have to perform with a much more profit- oriented framework since they are not a part of the Central Bank and thus have driven a large quantity of China's new commercial investment. The main force causing China's reform of the financial sector was the large quantity of non-proliferating loans that were given out to the failing SOEs that had a soft borrowing constraint. Realizing that the financial system was doomed to collapse, reformers in the 1990's became dedicated to building a much greater stock of savings in the economy and cutting out the toxic lending behavior of the past. At the same time, banks became more focused on securing profitable loans with positive futures regardless of the type of ownership of the firm taking the loan. At the same time, the allowance of the circulation of shares in Chinese businesses allowed for the creation of a stock market, leading to the number of circulating shares to go from 0% of GDP to 15% in just 9 years<sup>28</sup>. The reforms of the financial sector have been a considerable shift in the attitude of the Chinese state and have led to much more responsible domestic finance practices.

The reforms broadly characterize the Chinese post-Mao experience. Although there is clearly more to be said about this subject, these shifts are the core changes that are necessary

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<sup>28</sup> Naughton, Barry. *The Chinese Economy: A Practical Guide*. The MIT Press, 2006. Pp 449-468

to understand what a Reform economy looks like. Despite these specifics not coming up much in the following chapter, it is important to continue to bear these reforms in mind for the third. Consider why these changes in particular lead to Chinese economic success while an outline of developmental economics and developmental state theory is being provided. Why do these changes matter, and do they provide insight into our definition of the developmental state? As the argument of this paper becomes more complex, this base level of knowledge will become increasingly important to understanding why China can be considered a developmental state with idiosyncrasies.

## **Chapter 2: Theories of Economic Development and the Developmental State Theory**

This essay began with a discussion of the reforms within China between 1979 and the present, but in order to understand why these reforms wrought success, the core theories of development economics must be laid out. Thus, this chapter highlights three crucial pieces of information that are necessary to understanding all economic development. The first two sections of the chapter dives into the core theories of development, explaining the perspectives on how growth transpires microeconomically and what factors are necessary to accelerating development. There is plenty of controversy between these thinkers, however the theory this essay advances, the theory of the developmental state, is covered in the third part of the chapter. This final section deals with the theory of the developmental state, which traditionally has focused on East Asia but has broadened its horizons considerably in recent years. The focus on the developmental state will come into play in the later chapters, where having knowledge of the main theories of Amsden, Johnston, Chang, and Evans is a necessity. Overall, this chapter seeks to answer the question of why development occurs at differing speeds at all, and what factors play into an economy's development.

## Part 1: The Basic Quantitative Theories of Development

The primary models of quantitative economic growth employed by contemporary scholars are the Harrod-Domar model and the Solow model. These two models are highly contested regarding which one is more accurate to the expansion of an economy over time, however they both operate within similar bounds and variables. The Harrod-Domar model of economic growth alleges that savings in the economy (the fraction of income not utilized in present consumption) dictates the level of capital investment that will transpire through the loanable funds market. This capital accumulation, which transpires through the repurposing of the extra funds of households to the demand for finance of firms, is the primary agent that inspires economic growth. Growth, then, is a linear process, which facilitates itself through a higher rate of national savings than the rate of annual capital depreciation in a country. Put more specifically, the Harrod-Domar equation is the rate of savings divided by the ratio of capital to output made equal to the rate of growth in the economy plus capital depreciation<sup>29</sup>. This is a crucial economic relationship to understand because it establishes how growth occurs, and what the suggested relationship between savings and investment is. According to Harrod-Domar theories of growth, capital accumulation is the way forward in promoting robust positive change in the economy. This view of growth is extremely basic. However, the Harrod-Domar model is also important to the rest of the piece, in that it suggests high levels of saving are positive for economic growth.

The Solow growth model, on the other hand, diverges from the Harrod-Domar model in its understanding of the determinants of economic growth. Although the Solow model also considers savings as the base in which funding for capital investment is repurposed, it does not see capital accumulation through high rates of saving as the determinant of economic growth. The Solow growth model projects that the relationship between capital accumulation and output

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<sup>29</sup> Debraj, Ray. *Development Economics*. Princeton University Press, 1998. Pp 51-56

exhibits diminishing marginal returns because all other factors are fixed. In other words, the productivity of an additional unit of capital is diminishing as more units are added to a short run economic model. The Solow growth model predicts that the growth of an economy will be moving toward a “steady state” in which the returns on capital in GDP per capita will be equal to the cost of an additional unit of capital, and at that point it will no longer be productive to continue expanding outward, leading to a cessation of growth. The Solow growth theory expects the growth of an economy to be diminishing over time when all else is held equal, as the capital accumulation is approaching the steady state. This contrasts with the Harrod-Domar model, as the solution to growth promotion is no longer a high rate of saving but rather technical progress. In the Solow growth model, the only way to achieve sustained economic growth is to raise the productive efficiency of the capital within the economy through research and development<sup>30</sup>. This will cause the steady state of GDP to continue to expand outwards and allow for capital accumulation to continue to move toward the steady state without worries of it reaching the steady state. Speaking metaphorically, imagine running a race in which the goal is continuing to move farther away. Technological progress turns the attainment of the steady state of GDP per capita into a Sisyphean task and is the core driving force in economic progress in the Solow growth model.

## **Part 2: The Primary Analytical Frameworks of Development**

However, these models do not capture the sociopolitical actions that generate the best path to productive growth. What system of economic thought should we undertake in order to promote the most positive outcomes? Scholarly debate on the subject has been intensive and inconclusive, however this essay carries the torch of the developmental state model. Before we introduce this theory, it is necessary to understand the other fundamental approaches to

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<sup>30</sup> Debraj, Ray. *Development Economics*. Princeton University Press, 1998. Pp 51-56

development as a practice. Neoliberalism is the dominant school of thought, and it has a developmental champion in the form of Deepak Lal. Lal argues that the rise of global capitalism has been the most magnificent source of development for the international economy, leading to astronomical growth in worldwide measures of GDP. This was particularly true for 19th century England, which is the model he uses to formulate his argument that the turn towards anti-globalization and anti-liberalization prevents the economic growth of developing economies. By globalizing the economy, Lal argues the Ricardian model of comparative advantage will carry the economy of a country to its most efficient level of output. Not only that, but competition is said to foster dynamic growth between sectors and generate long-term technological progress. However, according to Lal, domestic distortions of pareto optimality will transpire if protectionist policies are enacted and thus the economy will not operate at its most efficient output. Of course, this causes Lal to lend himself to significant anti-collectivism. For Lal, economies unbound by international regulation will be operating in a much more efficient framework given that international organizations maintain property rights. By engaging in protectionist or dirigiste economic policy, many states are not acting in accordance with the tenants of development. The role of the state is to be a guardian, not to be an actor. Lal also claims that advocates of dirigiste regimes are misrepresenting the causes of poverty and inequality, and that global capitalism has been alleviating the poverty that developing countries experience. He believes that capitalism is not a greed-based system, according to the trends in global development since the 80's<sup>31</sup>. Ultimately, Lal argues that free trade is the core feature in promoting a healthy global economy, but he mischaracterizes the dirigiste as people who do not believe in free trade or globalization. As we will come to see, there can be an intersection between government intervention and global trade.

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<sup>31</sup> Lal, Deepak and Hla Myint, U. *The political economy of poverty, equity, and growth a comparative study*. Oxford University Press, 1998. Pp 17-62 and 127-182

One of the core frameworks of economic development necessary in understanding the argument that this paper makes is Douglass C North's new institutional economics (NIE). To North, institutions play a core role in shaping the economy by reducing economic uncertainty and rising to new features of an environment that may cause disequilibrium. Changes to the economic framework of a society require updating from institutions to adapt to new incentive structures and production functions according to North. Social science is not phenomenologically ergodic, and thus there will be no single "correct" or "optimal" economy but rather a series of dynamic changes to economic success as the institutions of a society change. These institutions are formed through historical analysis of similar situations, though this does not work if the situation is truly novel. Because situations are uncertain and non-ergodic, economic understandings of rationality must be supported by understandings of sociological, cognitive, and environmental features that color the formation of institutions. Organized activity within the economy generates the institutions that are necessary for the movement away from uncertainty, and these institutions take the form of formal rules. The structure and success of economic markets are a reflection of those who create institutions, which is why institutions are necessary for economic change over time. Because this is the case, economies often experience a form of "path dependency"; they have difficulty shifting away from a particular progression of institutions once they become formalized. Often, political institutions take on the role of governing economic processes that are too costly for any individual private actor to profit off. North notes that economic efficiency is often a result of the norms of a society, and that those norms cannot be easily changed. However, institutional change can facilitate itself over time, whether in a path dependent way or a novel way. The organization of institutions that will transpire are largely based on the trends in these changes, and thus one must understand these changes in order to understand economics<sup>32</sup>. North writes that our understanding of the

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<sup>32</sup> North, Douglas. *Understanding the Process of Economic Change*. Princeton University Press, 2005. Pp 13-61

economy is based on the institutions that guide it, and these institutions are what fundamentally determine the pace of economic change.

Finally, the Keynesian perspective on development goes a step further than the institutionalist approach by advocating for a relatively considerable role of the state in encouraging macroeconomic stability and growth through government investment programs. Unlike the institutionalist approach, Keynesian thought requires an active government presence in the markets to prevent them from failing. As we will come to see, this is a crucial part of the developmental state theory that this essay is based on. Keynes himself addresses the role of the government in determining optimal outcomes in Chapters 18 and 21 of his *General Theory*, establishing a few fundamental points that this essay will demonstrate real examples of in the developmental states. First, Keynes believed that employment was based on the relative willingness of the employer to hire more workers given a degree of effective demand for their product. In other words, output to Keynes would only change given a higher demand for the output in question, and this would drive both investment and employment to a higher level. Second, Keynes believed that the role of the government was to prevent the fluctuation of the economy from harming the general level of employment and output during a depression by engaging in countercyclical fiscal policy, spending more during times of crisis in order to keep the output of the economy high<sup>33</sup>. These points are crucial because they are the first real case for interventionism that we get to see that is not explicitly Marxist, and thus the Keynesian line of reasoning has a bit of salience to economic historians that advocate for a developmental state approach. Keynes advocated for the government to engage in appropriate spending in order to keep the general level of investment, employment, and output high, and this kind of reasoning was fundamentally a part of the success of the developmental states.

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<sup>33</sup> Keynes, John Maynard. *The General Theory of Employment, Interest, and Money*. Macmillan Cambridge University Press, 1936. Chapters 18 and 21.

### Part 3: An Examination of the Developmental State Theory of National Growth

The foundational work establishing the theory of the developmental state in its most rudimentary form comes from a historical text on Japanese bureaucracy, *The MITI and The Japanese Miracle: The Growth of Industrial Policy, 1925-1975* by Chalmers Johnson. Johnson's seminal thesis is that Japan has used a particular economic strategy where the state and the zaibatsu/keiretsu have intertwined in what Johnson calls a 'plan rational' economy. For Johnson, the Japanese government has used formative industrial policy and state-led investment to engage in economic planning that was formerly not considered by free market nor socialist economists. Johnson makes this explicit when he says

The issue [of what makes a developmental state] is not one of state intervention in the economy. All states intervene in their economies for various reasons... The question is how the government intervenes and for what purposes. The particular Japanese definition of this role and the relationship between that role and the economic miracle are at once the major components and primary causes of the resurgent interests of political economy in the late twentieth century<sup>34</sup>.

By extending the role of the government outside of the regulation of standards and practices and into the guidance of investment and capital formation, Japan was able to promote high-speed development. This began with the fukoku-kyohei movement of the Meiji period, remained salient in the quasi-fascist Taisho military government, and institutionalized itself after World War 2 in the form of the Ministry of International Trade and Industry. The Japanese government's overarching fixation on rapid development generated a unique system of economic oversight that led the GNP growth Japan experienced. Johnson also argues that this was a non-ideological version of planning, differentiating itself from socialist planned economies by engaging an apolitical bureaucracy<sup>35</sup>. By utilizing rationalization and structural adjustment

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<sup>34</sup> Johnson, Chalmers. *The MITI and the Japanese miracle: the growth of industrial policy, 1925-1975*. Stanford University Press, 1982. Pp 17-18

<sup>35</sup> Johnson, Chalmers. *The MITI and the Japanese miracle: the growth of industrial policy, 1925-1975*. Stanford University Press, 1982. Pp 3-33



policies, the Japanese government has led Japan from a nation that was not even considered for colonization to one of the most powerful economies on the planet.

Johnson goes into further detail about the economic bureaucracy of Japan and its evolution over time. Unlike the Tokugawa era's samurai, the civil officials of the Meiji era and afterward were meant to be highly educated and held broad control over the administration of the law. Although the SCAP did not engage in much post-war meddling with the Japanese bureaucracy, an internal drive for further administrative efficiency characterized the late 1940's. The characteristic of Japanese economic bureaucracy that makes it somewhat unique is its ability to generate laws itself, rather than rely on the Diet to generate laws for it to enforce. In other words, a prime responsibility of the MITI is controlling the process of industrialization, giving it a fundamental power to promote certain industries in their growth. The revolving door politics of the economic bureaucracies and the positions in the Liberal-Democratic Party has further solidified their liberal spending and budget authorities. Japan's history of public-private partnerships extends as far back as the 19th century, beginning in organizations such as the Ministry of Agriculture and Commerce and the Ministry of Commerce and Industry, both of which engaged in extensive joint operations with the Yawata and Mitsubishi zaibatsu. Controlling funds for industrial expansion through the Bank of Japan allowed finance ministers of the 1920's and 30's drive investment in home-grown capital projects both domestically and in Japan's colonies. More than anything else, the bureaucracies shaped the creation of globally competitive firms through industrial rationalization policies that targeted TFP growth. This rationalization targeted the larger owners of capital within Japanese society at that point, creating an environment in which 'big business' and the government colluded to promote technological growth in fishing, mining, and other key sectors<sup>36</sup>. Thus, Japan's pre-war period

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<sup>36</sup> Johnson, Chalmers. *The MITI and the Japanese miracle: the growth of industrial policy, 1925-1975*. Stanford University Press, 1982. Pp 35-115

began the trend of the “developmental state”, and the post war period would come to hone this experimental policy instrument.

Although the attitudes of the Japanese state between the end of the Shogunate and the fall of the military government in 1949 certainly shaped the institutions of “plan rationality”, it was the post-war period in which high speed growth really took off within the developmental state model. The primary agents of this change were the recently formed MITI, which utilized expansionary monetary policy through the state-owned Bank of Japan and Japanese Development Bank to revitalize the commercial atmosphere. Borrowing funds from the bank was cheap and easily managed compared to issuing bonds, and the MITI rebuilt the zaibatsu trading companies while also maintaining oversight over said trading companies. The capital expansion from the government banks induced a greater deal of inter-firm competition between big businesses, generating productivity growth alongside investment growth. The savings necessary for capital accumulation were provided through competitive domestic interest rates and foreign inflows of capital. The government-led growth also gave the state a role in which industries would be financially supported in their endeavors, allowing for the development of firms that would cater to the international market in the long run rather than an express focus on comparative advantage in primary product industries. Alternative industrial policy was also used to promote sectoral growth, such as tax incentives on export or high-efficiency products, low interest on certain industries loans, and technological import funding. At the same time, the MITI guided the marketing and business practices of the firms that it promoted to maximize the potential of said firms, while engaging in selective trade protectionism for developing industries. What we learn from Johnson’s writing is, contrary to neoliberal conceptions of growth, the state can play a prominent role in the success of a nation’s economic development outside of the establishment of property rights and regulations. Johnson uses the MITI to prove that the Japanese economy has been so successful because of the state’s intervention in the economy,

and his writing is the first step in theorizing the structure we recognize as the “developmental state”.

Johnson’s work marks the beginning of a new sect of institutionalist developmental thought but constrains his analysis to Japan alone. Alice Amsden, however, expands upon the concept of a rapidly growing, state-led economy in her piece, *Asia’s Next Giant: South Korea and Late Industrialization*. Amsden proposes that there has been a similar experience between the development experiences of Japan, the Republic of Korea, and Taiwan, and indicates that the growth-promoting state has been fundamental in these regional successes. However, Amsden does not follow Johnson’s trend of focusing solely on the bureaucracy as initiating the high-speed growth. Rather, Amsden describes the basis of Korean growth as industrial policy, factor productivity growth in the global economy, and the generation of large, hyper-systemized firms. Amsden contends that the government has played a crucial role in the development of Korea’s economy, however, noting that the direction of investment by state actors was crucial in sparking entrepreneurial activity in heavy industry, and said investment was a core cause for the capital accumulation Korea achieved. By maintaining large foreign debts, gaining income from foreign aid programs, and utilizing the high level of internal savings, the Korean government was able to direct large amounts of funds to an assortment of planned activities. Five-year development plans for individual sectors were crucial to the formation of profitable firms in high-value sectors, such as electronics. Amsden builds on the developmental narrative by claiming that, by deliberately engaging in substantial governmental subsidization activities outside of the free market, late industrializing countries were able to cause their economies to develop more quickly than countries that have stuck to the prescribed Bretton Woods format of neoliberal, low wage growth<sup>37</sup>. Amsden does not, however, let government spending alone explain away the

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<sup>37</sup> Amsden, Alice. *Asia’s Next Giant: South Korea and Late Industrialization*. Oxford University Press, 1989. Chapters 3, 4, 6

growth of the economy. She goes on to highlight the importance of changes to the firm structure of Korea that financed its growth.

Amsden argues that one of the core features of the high-speed growth of late developed nations was largely based on a drive for productivity growth alongside the state-sponsorship of the chaebol. The transformation of productivity occurred in Korea largely because of the development and expansion of capital as well as the increase in comparative advantage over time. In terms of both human and technological capital, the development of the administrative and engineering capacities of the Korean workforce allowed for rapid industrialization, and allowed for the development of a structured, specialized command chain within firms. Thus, capital went through two primary transformations: “widening” and “deepening”. This means that industrial firms began to rapidly grow in terms of the capital available to it, and the scale of Korean firms began to rise (widening). It also means that capital per worker increased as the scale of the economy widened, leading to a greater level of capital-intensive production (deepening). At the same time, labor productivity increased dramatically through increases in high-value labor and managerial work. Chaebols innovated quickly by raising the level of investment in research and development, alongside massive imports of foreign technology and knowledge systems in order to raise the technological standard. Subcontracting expanded the specificity of individual Korean firms and allowed the big businesses to form linkages with smaller firms, which encouraged further productivity. A substantial contributor to the boom in productivity was the high level of societal investment in education, leading to the aforementioned increase in the quality of managerial groups and engineers. For Amsden, this education is of great importance to the capital development that Korea has experienced<sup>38</sup>. Amsden breaks away from Johnson’s attribution of late industrial growth to industrial policy solely, as she suggests that the intensive focus on total factor productivity growth through

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<sup>38</sup> Amsden, Alice. *Asia’s Next Giant: South Korea and Late Industrialization*. Oxford University Press, 1989. Chapters 7 and 9

capital development within the economy takes form within the chaebols of the era. For Amsden, this non-policy capital development is of import as well.

Amsden continues to add to the theory of the developmental state by explaining that late development facilitated itself in Korea through the national orientation towards strategic comparative advantage formation. In other words, Korea developed industries that were not necessarily of prominence in Korea before the 1960's and 70's with the intention of fostering growth in highly profitable sectors. In doing so, Korea transitioned away from traditional productive undertakings that had been the primary source of national income in the past, indicated by the fade into obscurity of the textile industry. Although these textile industries had been major revenue and job sources during the era of Japanese occupation and long after, the national drive toward industrial and electronics-based chaebol led to the obsolescence of the textile industry over time. Amsden argues that this is because the textile firms, unlike heavy and consumer industry, operated on short-term, static conceptions of profit-maximizing, leading to the stagnation of the industry as investment moved away from new capital formation and training in textiles and towards greater investment in steel, automobiles, and other mechanical products. The lack of traditional industry diversification and growth led to their ultimate downfall. On the flipside, the production of heavy industry flourished due to the large amount of money spent on making chaebol internationally competitive. The export-oriented big businesses had to perform at an optimal level to remain in the market with already developed firms worldwide, so it was necessary for said businesses to learn from their competitors while being subsidized for their short-term losses by government spending. Thus, innovation was a major goal of Korean businesses and said innovation (whether it be from endogenous or exogenous sources) was sponsored by the government in any way possible. As a result, Korean shipbuilding, steel production, cement production, and more all became internationally competitive at a rapid speed, and the prior focus on less growth-oriented textile manufacture faded into the

background<sup>39</sup>. Amsden is crucial in pointing out that development of Korean industrial business was not accidental but instead was a carefully planned endeavor to raise the competitiveness of key firms.

Although Amsden and Johnson are both necessary scholars in building an understanding of the developmental state, they do so through a myopic lens, accounting only for the individual nations that they focus on. Peter Evans, in his book *Embedded Autonomy: States and Industrial Transformation* goes a step further in generating a cohesive model of what state intervention in the growth of the economy can do using multiple states as points of reference. Evans focuses on Brazil, India, and South Korea in generating his theory of the state as an active participant in the growth of an economy. Like the other scholars, Evans questions the neoclassical approach in which the state's only role in the economy is to provide regulatory insight and property institutions. Evans believes that the development of capital and welfare are both tied to the state's role in the economy, but it must be particular and deliberate in the way it intervenes in the market. In order to achieve economic growth, Evans theorizes that it is necessary for the state to foster profitable comparative advantages within the world market rather than passively abiding by one's existing niche. Thus, variations in the speed of development have to do with the role of the state in a society. The term "embedded autonomy" stems from the correct type of state in fostering development, which has a coherent structure of bureaucratic corporatism while maintaining a degree of responsibility to the people of the nation. There are four roles in which a state with embedded autonomy can play in the economy, custodian, demiurge, midwife, or husband. A custodian takes on the role of a regulator, while the demiurge takes on the role of an active producer. Similarly, the midwife encourages private entrepreneurship through actions such as infant industry protection, allowing for the growth of these firms without direct state involvement. The state that engages in husbandry is one that

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<sup>39</sup> Amsden, Alice. *Asia's Next Giant: South Korea and Late Industrialization*. Oxford University Press, 1989. Chapters 10-12

actively assists in the process of entrepreneurial investment, performing subsidization and even state-led enterprise. All four of these tools are meant to be practiced and applied in specific situations rather than any one dominating the discourse, but the nature of the state plays a role in determining which type (or types) of economic actor the state will be<sup>40</sup>. Evans uses this framework to explain which strategies have been useful in fostering state-directed investment in India, Brazil, and Korea, and forms some interesting conclusions about how the state can positively impact the development of a country.

These four roles are discretionary, not one-size-fits-all, but Evans notes that certain sectoral performances depend on the role that the state plays in its development. By optimizing the role of the state in a sector, the comparative advantage of a state can be maximized in turn, which is a notion that builds on what Amsden had written prior. For instance, Evans suggests that mining is often organized by a demiurge state at the local level while controlled by multinational corporations at a global level. He writes that states can be formative in demiurge roles in general, but have difficulty penetrating established international markets of resource ownership. The demiurge role and the husbandry role are capable in transforming the industrial and consumption sectors of a given economy, respectively. However, in order to be effective in these roles the state must be well-embedded into the economic framework of the country and have an efficient bureaucracy in managing these transformations, which India struggled with. In general, a demiurge role is more effective when barriers to entry are large and technology necessary for production is not yet monopolized on a global scale. If either of these things are untrue, husbandry or midwifery are needed in order to encourage transnational corporations to do business with budding national firms. The use of the regulatory arm has also been effective in promoting national economic growth through more indirect interventions, such as protection policies, human and technological capital development in the form of education, and enterprise

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<sup>40</sup> Evans, Peter. *Embedded Autonomy: States and Industrial Transformation*. Princeton University Press, 1995. Pp 3-18

promotion. These were features that Johnson had particularly heralded, but are applicable within the regulatory apparatus of many more state groups. This state promotion and policing are largely responsible for the development of information technology in Brazil, India, and Korea. The Bhabha Atomic Research Center group, the barbudhinos of the military regime, and the Blue House technocrats are all iconic representations of state groups creating private sector jobs in IT through state intervention and regulation. The importance of husbandry as a means of fostering technological innovation and comparative advantage in a competitive, private environment are well represented with Korea's swift IT growth<sup>41</sup>.

The aforementioned scholars have all grown the theory of the developmental state by taking different considerations and approaches in suggesting an alternative path to development that certain countries have practiced, however the formalization of the theory is largely thanks to the works of Ha-Joon Chang. In Meredith Woo-Cumming's *The Developmental State*, Chang expresses that the developmental state may be more suited to promoting economic growth than the neoliberal model of growth in his chapter "The Economic Theory of the Developmental State". For Chang, neoliberals mischaracterize state-led economies becoming corrupt organizations that do not operate within the rationality of the market, as neoliberals frame this possibility as an absolute certainty. However, Chang argues that the nature of the developmental state can foster dynamic efficiency (that is, efficiency when all factors are held variable) better than the liberal market mechanism can, and that liberals do not account for "market failures" where the interests of a multitude of private actors do not necessarily lead to the most socially optimal outcomes. Unlike the liberal market, which only engages in statically efficient outcomes, the state can take a role in promoting the long-term growth of the economy, raising productivity and investment capital in a much more prescriptive way than the so-called invisible hand. The use of the state as a means of coordination of investment efforts, as

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<sup>41</sup> Evans, Peter. *Embedded Autonomy: States and Industrial Transformation*. Princeton University Press, 1995. Pp 74-155



Johnson and Amsden write about in their theses, can be the most effective way of encouraging the growth of the economy. Chang also points out that states are critical institutions in most every economy, including liberal market economies such as the United States and the UK, and the importance of these institutions to determining investment, employment, and economic stability betrays the neoliberal argument that state intervention in the economy will be inherently a maladjustment<sup>42</sup>. Ultimately, Ha-Joon Chang establishes a basic understanding for the reader that the liberal theory of development is flawed, and in his later works he provides a fundamental framework for the developmental state as a concrete theory.

Chang's *Kicking Away the Ladder: Economic Development in Historical Perspectives* has been a formative piece of work in applying the theory of the developmental state more broadly to most developed countries in some way or another. Chang proposes that the laissez-faire economists have approached the development of highly developed nations during the industrial revolution incorrectly. The history of most of these countries, Chang alleges, is fraught with examples of industrial, trade, and technology policies that were extremely important to the success of infant enterprise. It was only after the national industry blossomed that the wealthy countries became free-trade oriented, but this orientation has prevented other countries from applying the same techniques and becoming successful as well. Thus, Chang views the international economy to be characterized by rich nations "kicking away the ladder" of development after they have utilized it to amass great power, wealth, and standing. What is particularly interesting about Chang's analysis is that he goes outside of the countries that are traditionally associated with interventionist state operations, namely Germany, Switzerland, and France, and represents the so-called bastions of free trade, such as the United States and the United Kingdom, as beneficiaries of a developmental state approach. He does so by referencing protectionist policies such as the Smoot-Hawley tariff in the US and the Corn Laws of the UK,

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<sup>42</sup> Woo-Cummings, Meredith. *The Developmental State*. Cornell University Press, 1999. Pp 182-199

both of which were used to protect infant industries from unwanted international competition. He also discusses the use of the state intervening in the development of infrastructure and investment through subsidization, making it clear that the laissez-faire imaginary of the industrial revolution is primarily fictionalized. This critical take on the history of development is crucial to explaining the success of East Asian late industrializers, and also explains why the neoliberal prescriptions of the World Bank and IMF have not been particularly helpful to many developing countries<sup>43</sup>. The purpose of Chang's groundbreaking work is to demonstrate that the way that development has been primarily undertaken is also what highly developed nations characterize as "backwards" or "wrong". Although this is a controversial claim, it sheds quite a bit of light on why the rapid growth of the East Asian giants has been able to facilitate itself.

Going forward, it is imperative to understand that developmental state theorists have not covered China in the same detail that they have covered Japan and South Korea. For Johnson, this is because China is not plan rational, but rather plan ideological. However, this response becomes more dubious over time given China's economic success. It is true that the Chinese state has strong ideological rigidity, but it has given itself a great deal more economic flexibility than many contemporary scholars give it credit for. The crucial elements of a developmental state are all present in China but have been disregarded due to its unorthodox political development.

### **Chapter 3: The Use of Developmental State Programs in Facilitating China's Growth Since 1979**

Both the theory of the developmental state and the core elements of China's reform have been established, and now it is necessary to consider the two in tandem in a way that has not been considered before. Many well-respected theorists of the Chinese economy, such as

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<sup>43</sup> Chang, Ha Joon. *Kicking away the ladder: development strategy in a historical perspective*. London: Anthem, 2007. Pp 21-77

Barry Naughton, point to China's dynamic growth after reformation as an indication that economic liberalism is the driving feature in China's overall success. However, I would argue that a better model to consider in terms of why China became so successful would be the developmental state model discussed in the previous chapter. While it is convenient for neoliberal economists to suggest that Chinese growth aligns well with their theoretical groundwork, a closer analysis finds that the structure of the Chinese economy and its changes throughout contemporary history are not indicative of a clear "win" for global capitalism. In reality, there are many ways that the state has retained control over the direction of the economy over time, despite being often overshadowed by the reforms focusing closely on liberalizing the economy. The developmental state model explains Chinese growth in Reformist China in six primary ways: the generation of Township-Village Enterprises (TVEs) that combined local government enterprise and competitive conditions; the state-directed investment in historical capital development as crucial to modern industrial success; the "dual track system" as a method of transitioning from full socialism to a mixed economy; the export-oriented strategies that attract global markets to engage in investment in China and import from it; the impact of central government planning to prop up certain industries with favorable industrial policies; and the growth of total factor productivity through Chinese R+D and education measures. These factors do not preclude China from becoming more liberal over time; clearly the Reform period made sure of that. However, I argue that China's success comes from the fact that it has integrated the state into the market, not despite the presence of the state in business activity.

### **Section 1: TVEs and the Chinese Experience of Early Mixed Enterprises**

Chronologically, one of the starting points in the Chinese economy transforming from a command economy to a developmental state was the formation of Township Village Enterprises. Although TVEs have been described in Chapter 1 of this essay, an analytic look

into the usefulness of TVEs in practice will elucidate how they are emblematic of the developmental state model's infant industry protection and state-controlled investment policies and demonstrate that the TVEs have been crucial to China's liftoff economically. To begin with, TVEs were not "private" companies in practice. Although differentiated from state-owned industries by the fact that they are owned by local governments, TVEs were still collectively owned institutions commanded by the public sector. The formation of TVEs represented the solidification of property rights and marketization, and generated movement away from a centrally planned economy, but was also an exercise in corporate municipal governance. Local governments jumped on the opportunity to create profit sharing initiatives, and contracted managerial tasks to qualified, entrepreneurial individuals. These reforms are qualified as "informal privatization", where elements of the market are guided by the actions of public officials and revenues generated are retained for local government spending<sup>44</sup>. These cooperatives, when placed in a competitive setting, quickly outpaced the SOEs, given that SOEs had little-to-no profit incentive and fewer opportunities for workers. While the success of TVEs can be considered a move toward liberalization, they are also somewhat of a shock to the conventional rhetoric of liberal economists in discussing property rights. Few would have guessed that local cooperatives could function as efficiently as private firms in price formation and wealth accumulation<sup>45</sup>. This management and operational style in which the cooperative replaces the SOE is demonstrative of a clear government control of the economy mixed with the necessary market qualities to make these apparatuses successful.

The mixed system of financing in China before the turn of the century had profound impacts on the viability and spread of TVEs, as the state-directed nature of the financial undertakings combined with market incentives for success made TVEs develop quickly while

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<sup>44</sup> Peng, Yusheng. "Chinese Villages and Townships as Industrial Corporations: Ownership, Governance, and Market Discipline." *American Journal of Sociology*, 2001. Vol 106, No 5. Pp 1338-1347

<sup>45</sup> Weitzman, Martin et al. "Chinese Township-Village Enterprises as Vaguely Defined Cooperatives". *Journal of Comparative Economics*. Vol 18. Pp 121-136

maintaining their profitability. In fact, China's local governments took on considerable debt in the 80's and 90's while forming the TVEs, and in turn have been required to pay back that debt through profit-driven business practices. The state guided the local development of initiatives while also maintaining requisite competitive forces to incentivize productivity and profitability. In practice, much of the debt that the township governments generated came from loans taken out through the Central Finance Ministry, which provided the necessary investment capital for the formation of individualized rural businesses. Informal rural credit cooperatives were also sources of finance for the TVEs and played a role in the development of locales<sup>46</sup>. Chinese firms' early development was marked by the local government taking a key role in not only managing the businesses, but also obtaining finance for these businesses and supporting the formation of semi-private credit schemes that would transform into rural banks. Thus, by 2013, fixed asset loans to TVEs exceeded 1.4 Trillion Yuan, demonstrating that directed financing has been crucial to their unique success. It has also been empirically demonstrated that there is a statistically significant positive regression between TVE productivity and financial support<sup>47</sup>. The importance of these findings is not so much that they prove that financing has a positive effect on businesses, but that TVEs have been so successful because they were able to channel financing from the central government to the local township.

The dual track market system also encouraged the growth of TVEs, as it established market price-setting while maintaining quotas that involved the state in the TVEs functioning. Contrasting with the post-Soviet sphere's rocky descent into market practices from a largely commanded economy, the gradualism in which dual track reforms provided space for market institutions allowed them to effectively take root in locales. By implementing decentralization as a process of local public ownership, as well as creating the possibility for competitive economic

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<sup>46</sup> Ong, Lynette. "The Political Economy of Township Government Debt, Township Enterprises and Rural Financial Institutions in China." *The China Quarterly*, 2006. No 186. Pp 377-387.

<sup>47</sup> Gao, Xincan et al. *Financial Support and Growth of Township and Village Enterprises in China: Fresh Evidence From Regional Analyses*. SAGE, 2019. Pp 1-10.

transactions to occur by allowing market prices to form alongside the bureaucratic allocation of goods, China was able to create successful businesses without fully privatizing the economy. This “convergence theory” postulates that TVEs were successful because they gave Chinese firms the opportunity to develop and take root in the commercial sector<sup>48</sup>, somewhat similarly to the theory of Ha-Joon Chang that infant industry protection is necessary for a country to modernize properly. Production since 1978 has, as a result, increased and diversified, expanding into non-staple agricultural sectors given regional comparative advantages as well as commercial industry. The development of households, villages, and primary producers within this system, as well as the fact that these TVEs were often generating competitive pricing due to the sheer volume of active TVEs, led to an increase in the productivity of these markets<sup>49</sup>. TVEs benefitted from a dualist system in which pricing could be determined more freely than before, and for this reason many TVEs would become successful private businesses and outshine the state-owned sector.

Considering the role that local governments played in developing the early TVEs and expanding their influence, a clear corollary between China’s development and other developmental state growth emerges. Similarly, the way in which TVEs operated allowed them to become local monopsonies rather than free labor markets, which embedded the developmentalism into a local level more thoroughly than an unregulated labor market would. Evaluating the change in labor productivity is perhaps most demonstrative of the effect that the growth of TVEs had on rural China, which Lucy Zheng et al. demonstrate in their research. Zheng and her fellow researchers use a traditional productivity modeling function ( $Y=f(K,L)*A$  where A represents advancements in technology) to demonstrate that the change in labor productivity was significant within the TVEs between 1980 and 2008. They suggest that the

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<sup>48</sup> Peng, Yusheng. “Chinese Villages and Townships as Industrial Corporations: Ownership, Governance, and Market Discipline.” *American Journal of Sociology*, 2001. Vol 106, No 5. Pp.1332-1358

<sup>49</sup> Putterman, Louis. “Dualism and Reform in China.” *Economic Development and Cultural Change*, 1992. Vol 40, No 3. Pp 479-482.

driving factors in causing this change were the greater development of human capital and real wages, as well as the higher degree of investment in capital in areas with previously low capital bases. In other words, she suggests that there was somewhat of a cyclical nature of growth the TVEs, where greater investment in the community and the laborer led to higher labor productivity and output, reinforcing these behaviors<sup>50</sup>. Private ownership since the 90's has also been suggested to have a positive effect on the TVE labor productivity, but the importance of the era of public ownership was that it allowed human capital investment to become a priority for rural areas. By managing the firm publicly and inviting outside managerial help in many circumstances, local governments were also able to change the structure of the firm and share specialized knowledge on proper management techniques. The hierarchical style of management within the TVEs has generated favorable results as well, as it has generated a functional degree of interrelatedness and trust within these firms<sup>51</sup>. The labor practices of the TVE drastically improved the functionality of China's economy by creating a system of competitive local monopsonies rather than a single centralized price setter.

Although TVEs provided a much more stable approach to employment and management of local firms, it is also necessary to demonstrate how this new system had a positive impact on output and productivity. Beginning as early as 1978, one can see tremendous growth as a result of TVE management styles in rural areas. In part, this growth can be explained by the accessibility of financial support to individual TVEs, giving these institutions the possibility to generate productive capital and organize functional manufacturing sectors at a local level juxtaposed to the previous attempts to command the manufacturing sector at the state level<sup>52</sup>.

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<sup>50</sup> Zheng, Lucy, Batuo, Michael, and Sheppard, David. "The Impact of Regional and Institutional Factors on Labor Productive Performance—Evidence from the Township and Village Enterprise Sector in China". *World Development*, 2017. Vol 96. Pp 591-597.

<sup>51</sup> Wang, Xun. "ONE COUNTRY, TWO SYSTEMS:" CHINA'S ECONOMIC POLICIES TOWARDS STATE & TOWNSHIP/VILLAGE-OWNED ENTERPRISES, 1978-1992." *Journal of Third World Studies*, 2007. Vol 24, No 2. Pp 541-546.

<sup>52</sup> Gao, Xincai et al. *Financial Support and Growth of Township and Village Enterprises in China: Fresh Evidence From Regional Analyses*. SAGE, 2019. Pp 1-11

Other scholars claim that the success of the TVEs is due to the fact that they had hard budget constraints alongside considerable control by the local government, which forced them to be competitive while also granting them a perspective that would be attuned to the best course of action for a local business. Either way, TVEs formed the basis for Chinese consumer industry, increasing their export output by over 70 billion dollars between 1988 and 1997<sup>53</sup>. Similarly, the productivity of these firms also began to outstrip the productivity of the state-owned enterprises and established the TVE as the more profitable and sustainable economic practice. This is particularly relevant in Jiangsu, where rural industrial output was once at the highest level in the nation due to the success of their TVEs<sup>54</sup>. The TVE, compared to previously state-controlled rural initiatives, combined the planning of local economies with the competitive efficiency of the free market very well and allowed for previously underfunded communities to become much wealthier. By structuring the firms in this way, the Chinese government was able to produce considerably more output and consolidate their previous losses from state-owned rural enterprises.

TVEs had such a strong impact because of their mixture of market fundamentals such as competition and hard budget constraints alongside the leadership sourced from local governments. The developmental state model highlighted in the previous chapter is clearly applicable to the actions that the Chinese state took in intervening in the growth of local enterprise, as access to funds and developmental models were applied to certain areas in order to create successful, modernized firms. One could liken the rise of TVEs to the funding of infant industries in the RoK and Japan, and the comparison would be appropriate. Both had state funding available for investment in business infrastructure while maintaining a competitive aspect in their production facilities. TVEs are the first of many idiosyncrasies within the Chinese

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<sup>53</sup> Perotti, Enrico et al. "State Owned Versus Township and Village Enterprises in China". *Comparative Economic Studies*, 1999. Pp 158-161.

<sup>54</sup> Peng, Yusheng. "A Productivity Analysis of Village, Township and Municipal Government Owned Enterprises in Jiangyin." *China Review*, 1999. Pp 156-161.



system that lend themselves to the developmental state model, while also indicating the success of such a model when applied.

## **Section 2: State-Directed Finance and Capital Development within China**

TVEs have had an impressive impact on the growth of the Chinese economy during the transition but were not the singular cause of development. Another feature of China's developmental state has been its state-led finance system, which has directed capital investment and impacted the growth of endogenous Chinese firms. In fact, it would have been nearly impossible for Chinese firms to form as well as they had if not for the intensive financial undertakings of the banking sector, which accounted for 80 percent of financial assets within China and loans accounting for 87 percent of non-financial sector funding as of 2006<sup>55</sup>. Bank loans have been primarily allocated by the People's Bank of China, the state-owned bank that dominates the national financial marketplace. The four largest banks in China have accounted for 50 percent of national asset holdings well into the 2000's<sup>56</sup>, demonstrating the power intranational finance has on Chinese business. These banks have been historically state-owned, although are now also accountable to shareholders, and utilized their position as nationalist investors to promote the growth of both the SOEs and eventually the TVEs as well<sup>57</sup>. The growth that China experienced was partially based on a series of reforms in the 90's that liberalized the banking sector somewhat, allowing for the formation of semi-private and private Chinese companies that could be propped up by state investment. By the late 90's, government

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<sup>55</sup> Bailey, Warren, et al. "Bank Loans with Chinese Characteristics: Some Evidence on Inside Debt in a State-Controlled Banking System." *The Journal of Financial and Quantitative Analysis*, 2011. Vol 46, No 6. Pp 1799.

<sup>56</sup> Bailey, Warren, et al. "Bank Loans with Chinese Characteristics: Some Evidence on Inside Debt in a State-Controlled Banking System." *The Journal of Financial and Quantitative Analysis*, 2011. Vol 46, No 6. Pp 1800

<sup>57</sup> Bailey, Warren, et al. "Bank Loans with Chinese Characteristics: Some Evidence on Inside Debt in a State-Controlled Banking System." *The Journal of Financial and Quantitative Analysis*, 2011. Vol 46, No 6. Pp 1799-1801.

debt made up nearly 30 percent of funds annually created in the credit market, which demonstrates the power of the Big Four Banks in transforming the economic landscape of China<sup>58</sup>. Since 1994, Chinese state lending has included non-SOEs, granting more profitable and productive commercial sectors resources to grow while maintaining state ownership of infrastructural elements. China rapidly became an environment in which business could be supported by the government, and within years multinational corporations indigenous to China would dominate the business landscape both domestically and worldwide<sup>59</sup>. The banking sector has played a major role in China's miraculous growth and should not be neglected in their story.

The role of state-directed banking in the development of common infrastructure is important to any developmental state model, and China is no exception. The financing of specific state-owned enterprises that provide heavy industry, and the development of explicitly public infrastructure such as road systems, indicate that China has been utilizing the Ministry of Finance to accomplish crucial gains in areas that have net positive externalities for the modernization of business and society. The energy production sector, which has remained primarily state-owned, is a demonstration of the influence finance has on China's developmental trajectory. Although there is competition amongst differing energy groups within China, all are subject to the oversight of the State Council, making them state-owned industries. Oil and natural gas are subject to considerable review, while electricity is often less regulated. The Chinese investment system's role energy production makes the product entirely demand driven, responding to the needs of the market rather than being focused on profiteering. In other words, the purpose of the Chinese investment in state-owned energy production is based around the

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<sup>58</sup> Brandt, Loren, and Xiaodong Zhu. "China's Banking Sector and Economic Growth." *China's Financial Transition at a Crossroads*, edited by CHARLES W. CALOMIRIS, Columbia University Press, 2007. Pp. 89

<sup>59</sup> Brandt, Loren, and Xiaodong Zhu. "China's Banking Sector and Economic Growth." *China's Financial Transition at a Crossroads*, edited by CHARLES W. CALOMIRIS, Columbia University Press, 2007. Pp. 86-116

promotion of industry and development in the nation<sup>60</sup>. The implication here is that much of Chinese financing of state-owned industries, even in the modern day, defies conventional aspects of private rationality and is centered around market-building rather than market-sustaining. Rather than having private energy companies determine the level of production most suitable for their own profit, Chinese finance invests in energy in order to support the development of the economy as a whole and reveals the true purpose of state-owned industry financing in the modern day. Similarly, public infrastructure and utilities development have been a crucial aspect of state-oriented finance in China and have improved China's total factor productivity. Since 2004, infrastructure investment has dominated between 25 and 35 percent of all fixed asset investment expenditures in China, showing the Chinese state's focus on modernity and positive peripheral development<sup>61</sup>. Much of this has been municipally implemented and has raised the quality of life of the citizens of China, and although convergence with the standards of living in developed countries has yet to occur, the clear focus of the Chinese state on urbanization and infrastructure development emphasizes the state's role in providing basic adjustments to public safety and livelihood<sup>62</sup>. China's state directed investment in SOEs and public infrastructure demonstrate the core features of a developmental state model, and has been important to the development of the economy as a whole as well.

China's state banks have been successful in recent years partially because of their hybrid structure, not conforming to traditional socialist or capitalist practices. While the PBC and its subsidiaries are controlled by the Central Party, it also maintains public equity in order to remain at least partially responsible to the public and the market. This makes it necessary for there to be risk management, since the bank must perform well in order to attract equity holders,

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<sup>60</sup> Bo, Hong et al. "China's State Energy Investment during 1991–2007: Investment Analysis and Policy Issues". *Regional Studies*, 2015. Vol 50 Issue 10. Pp 1773-1782

<sup>61</sup> Wilkins, Kelsey et al. *Infrastructure Investment in China*. Reserve Bank of Australia Bulletin, 2014. Pp 28

<sup>62</sup> Wilkins, Kelsey et al. *Infrastructure Investment in China*. Reserve Bank of Australia Bulletin, 2014. Pp 27-34

while also allowing for the maintenance of the Central Party's prerogative. This creates a system that encapsulates the best of both worlds, maintaining profitability while also enacting the Central government's economic policy. Since the structure of the banks has changed over time, separating into four distinct entities during the Reform era, China's banking sector has been able to create specialized markets for capital that lend themselves to both the market and the state. By dividing into the Bank of China, the Agricultural Bank of China, the China Construction Bank, and the Industrial and Commercial Bank of China, the banking system became more efficient in undertaking policy and coordinating economic activity, and the formation of joint-stock and agricultural banks allowed local areas access to credit under the supervision of the state. All four major banks, while controlled by the state, are subject to the market through the international holdings of equity and the necessity to engage in competitive international lending, which was a result of Zhu Rongyi's reforms in 1992<sup>63</sup>. City commercial banks and rural credit cooperatives have been crucial to the localization of credit availability as well. The way credit has been distributed to the public in China is a hybrid model of banking and is fundamentally different from a liberal banking sector.

China's state-directed banks have contributed the development of the private sector as well. In fact, the growth rate of real GDP in China over the last 30 years has been consistently symmetrical with the level of investment in the private sector, as well as the growth of credit provided to private sector enterprises. It is thought that the direction of funds to the more profitable non-state sector is partially what unlocked China's potential for growth, as the economy varies positively along the lines of this investment. The PBC also provided a considerable amount of funding to private sector credit institutions in the 1980's, making funds available for entrepreneurship. While concerns about possible inflation curtailed bank lending in

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<sup>63</sup> Stent, James. "China's Hybrid Banks" in *China's Banking Transformation: The Untold Story*. Oxford Scholarship Online, 2016.

1989, the progress made beforehand led to considerable growth in the Chinese economy<sup>64</sup>. Credit-led growth is a crucial contributor to China's economic success, as it has provided funding to untapped markets within the country. Chinese credit published was nearly 150% of GDP in 2001, demonstrating the power of financial institutions in China's continuing growth<sup>65</sup>. Although cross-sectional studies have failed to disprove the possibility of reverse causality on the question of the relationship between financial structures and GDP growth, investment in non-state enterprises has been highly beneficial for the Chinese economy. In sum, there is empirical evidence for the assertion that Chinese credit growth has led to expansion of the Chinese economy<sup>66</sup>. State-directed finance has been kind to both the extensive public works and the success of the private sector. The financial reforms of the 1980's and 1990's promoted a greater freedom of lending within the financial market, and yet still created an environment much like Japan's in which the state dictated the development of private sector enterprises.

State-directed finance has been addressed as a large part of the engine for Chinese economic success, however it was only in conjunction with a greater deal of financial openness that China was able to become so successful. In fact, the partial deregulation and internationalization of Chinese finance has worked hand-in-hand with China's big banks to generate greater prosperity. It is widely agreed upon that China's internationalization was what led to the increase in salience of the credit market in the late 90's, leading to a widespread expansion of borrowing in the interest of emerging Chinese businesses. The publishing of credit is proven to be largely based on the changes made in the 1990's by Jordan Shan, who runs a variance decomposition to find the effects of different factors on GDP growth and infers a causal

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<sup>64</sup> Brandt, Loren, and Xiaodong Zhu. "China's Banking Sector and Economic Growth." *China's Financial Transition at a Crossroads*, edited by CHARLES W. CALOMIRIS, Columbia University Press, 2007. Pp 96-98

<sup>65</sup> Shan, Jordan. "Financial Opening and Economic Growth: a Quantitative Assessment." *China: New Engine of World Growth*, edited by Ross Garnaut and Ligang Song, ANU Press, 2012. Pp 96

<sup>66</sup> Shan, Jordan. "Financial Opening and Economic Growth: a Quantitative Assessment." *China: New Engine of World Growth*, edited by Ross Garnaut and Ligang Song, ANU Press, 2012. Pp 94-104.

relationship between credit published and GDP growth<sup>67</sup>. Introduction into the World Trade Organization has been impactful, although it is limited to commercial dealings, in attracting foreign capital to China. While many are critical of the role that state finance plays in China, particularly since they remain relatively protectionist when it comes to finance, the introduction to the WTO has helped the equity market continue to grow meteorically. Along the same lines, foreign direct investment surged by nearly 50 billion dollars by 2002<sup>68</sup>. There are noteworthy elements of the opening up of China in its modern-day success, much of which is predicated upon the interplay of both the state-directed banks and the foreign inflows of investment capital.

The use of financing directed by the state is perhaps the clearest parallel between the Chinese developmental state and the developmental state theory. Giving favorable loans to industrial businesses and transforming the landscape of public infrastructure within China assisted in the generation of gains in the future, as it allowed for the internal economy to become much more robust and provided large amounts of liquidity to firms that were starting up. The direct control over the specific businesses and enterprises that would obtain funding gave China the ability to be future oriented rather than hyper-focusing on profitable markets, and thus contributed to their long-term growth in the same way that Japan and Korea's financial bureaucracies implemented measures to generate wealth by creating high-value firms and technologies. Ultimately, the use of state-directed finance helped China grow into the competitive international economy it now is.

### **Section 3: SOEs and Their Role in Shaping the Chinese Economy Over Time**

It is important to note that, while the changing of the financial structure and the success of the TVEs contributed to China's economic development from the 1980's onward, state-owned

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<sup>67</sup> Shan, Jordan. "Financial Opening and Economic Growth: a Quantitative Assessment." *China: New Engine of World Growth*, edited by Ross Garnaut and Ligang Song, ANU Press, 2012. Pp 94–107.

<sup>68</sup> Sen, Sunanda. "Finance in China after WTO." *Economic and Political Weekly*, 2005. Vol 40, No 6. Pp 565-567

enterprises have played a consistent role in China's success as well. SOEs have impacted the layout of capital goods prior to the reform period, as well as in the post-reform period continuing to supply necessary infrastructure for basic business transactions. They have contributed a great deal to research, development, and innovation within China. Proving the last of these claims will be a good place to start, as the historical development of the SOE should be considered more later. Although most scholars agree that there has been considerable TFP growth in non-state productive facilities, they often neglect to mention the role research and development by the SOEs has had toward contributing to economic growth. Much of the innovation in machinery, chemical-based, and pharmaceutical-based firms comes from R+D in large-scale SOEs, and an empirical examination of LSSOEs in Beijing has demonstrated that there is a statistically significant impact that SOE R+D has on the overarching economy<sup>69</sup>. What this demonstrates is that privatization alone is not responsible for China's rise in productivity, and we should not be fooled into thinking it is. Rather, SOEs have generated innovation within China quite considerably, despite the continuing perception that they are nothing more than a drain on the economy.

Although this essay focuses on the Reform period, it is also necessary to observe the way that SOEs in the Maoist period may have played a role in the development of China's economy going forward. This is not to suggest that the Maoist period was idyllic in any sense, but to explore the full legacy of SOEs it is necessary to dip into the murky waters of the 50's, 60's, and 70's before addressing contemporary SOEs. Despite the deserved horror and reverence towards the millions of lives taken during the Great Leap Forward, Maoist China set up many of the necessary structures for longer term success in the global competitive economy. One such example is the system of irrigation and the organization of the larger agricultural economy. Although famine is remembered as the hallmark of the Maoist agricultural

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<sup>69</sup> Hu, Albert et al. "Returns to research and development in Chinese industry: Evidence from state-owned enterprises in Beijing" in *China Economic Review*, 2004. Vol 15. Pp 86-105.

cooperatives, infrastructure and capital was invested heavily in order to (try and) achieve the over-inflated goals of growth that Mao demanded. Over the span of Mao's life, irrigation and fertilization became much more common throughout the major agricultural areas of China. Similarly, the growth of industrial capital within China became pronounced between the 50's and 80's, despite growing at ever faster rates after Mao's death. In fact, the production of new machinery made up 24% of the share of net industrial output by 1978, considerably raised from the 5% preceding the shift toward communist governance<sup>70</sup>. It is important to be critical of this period for the flagrant human rights abuses that took place during it, however early capital building in China was largely a result of the SOEs in the Maoist period, and this history is necessary in considering the industrialization of China as a whole.

The history of SOEs has significantly shaped their importance in Chinese society, however their importance is no less palpable now than it ever was. While they may be fading to the background, accounting for less and less of the production process as time goes on, there is something to be said about the way SOEs operate in the post-reform period that demonstrates the value of learning from impractical practices. In fact, the profits of Chinese SOEs since 2005 have nearly doubled due to the importance of the reform period in maintaining general stability. SOEs still play a considerable role in the economy, accounting for an estimated 23% of business income within the country in 2017<sup>71</sup>. The importance of the state sector in the contemporary period is often explained by the reforms in the 1990's, in which the Party decided to focus only on large-scale industries and abandon small, consumer enterprises that were being beaten out by private companies and TVEs. The restructuring of these enterprises has been crucial to their current relative efficiency, and by 2016 it appeared that SOEs were actually becoming favorable once more in China due to the profits they enjoyed in the 2010's. Although

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<sup>70</sup> Bramall, Chris. "Social Capability and Capital Stock at the end of the Maoist Era" *Sources of Chinese Economic Growth, 1978-1996*. Oxford Scholarship Online, 2003.

<sup>71</sup> Huang, Qunhui et al. "State-owned enterprises in China: their reform process, performance efficiency and future road" in *China Political Economy*, 2019. Vol 2 No 2. Pp 204.



the operational efficiency between state-owned and private enterprises has continued to widen, the reform period marked the beginning of a brighter future for Chinese SOEs<sup>72</sup>. Despite this micro-level inefficiency, SOEs have also been crucial in maintaining and promoting economic stability and technical progress. From a Keynesian perspective, these SOEs have retained a necessary level of control over the economy for the continuation of employment and investment during economic fluctuations. Although it may be enticing to call for the privatization of SOEs due to their generally poor comparative performance, they have contributed significantly to the stability of the economy in the contemporary period and have been improving as they become more competitive. SOEs are a major asset to China and will continue in aiding the national economy as time goes on despite the common critique of their inefficiency.

In the contemporary period, SOEs have also played a considerable role in job creation and stability. As was mentioned in the previous paragraph, the Keynesian view of economic stability puts an emphasis on the government maintaining employment to prevent economic crisis. Between 1979 and 1996, there is a clear emphasis within the Chinese economy on state sector employment, where SOE job creation, where state employment grew by around 10 million people and wage rates more than doubled<sup>73</sup>. Although critiques of the widespread welfare provided by the Chinese government colloquially known as the “Iron Rice Bowl” are common, the employment in the state sector provided living quarters and necessities to workers and maintained steady economic growth. These policies affected the countryside as well, as state produce quotas persisted into the reform era despite the diversification of produce on the market, allowing for both urban and rural dwellers to have some form of government employment. Ultimately, because they were faced with few competitive pressures, the SOE employees were guaranteed a level of comfort during the reform period that promoted stable

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<sup>72</sup> Huang, Qunhui et al. “State-owned enterprises in China: their reform process, performance efficiency and future road” in *China Political Economy*, 2019. Vol 2 No 2. Pp 201-208.

<sup>73</sup> Putterman, Louis, and Xiao-Yuan Dong. “China's State-Owned Enterprises: Their Role, Job Creation, and Efficiency in Long-Term Perspective.” *Modern China*, 2000. Vol 26, No 4. Pp 410

urban living standards. This not only allowed for the employment levels of China to remain somewhat stable during a tumultuous period of reform, but also allowed the emerging private sector to have a relatively soft impact on social conditions and living standards. While it is arguable that this feature retarded the growth of China's market, it is also clear that the Chinese working class was already perturbed by the transition away from welfare-state measures, leading to mass protests and rebellions. Instead, SOEs quietly became more capital intensive while still absorbing a great deal of urban unemployment<sup>74</sup>. It may have been a 'necessary evil' for China to retain such a great deal of state employment in a rapidly privatizing economy, as doing so minimized possible civilian unrest and maintained economic stability.

While often overlooked due to their inefficiencies, SOEs have helped China's growth substantially through the historical development of industrial capital and organization. Despite being looked down upon, these enterprises have demonstrated that long-run capital accumulation through state investment can successfully elevate the overall wellbeing of the nation. SOEs provide a unique shift on the traditional developmental state model by factoring in the ability of states to intervene in the economy directly. While developmental states in other cases have mainly used industrial policy guiding their institutions, China utilized outright state ownership of enterprises to enhance the technologies and working conditions of the nation. Nowadays, SOEs play a less direct role, but they have been empowering China for decades through their mass employment and infrastructure projects.

#### **Section 4: Export-Import Ratios, FDI, and Joint Ventures in Generating an Internationally Competitive Economy**

Another crucial feature of the developmental state model's application in China is the use of foreign trade in a way that advances the interests of the home country. In China, this

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<sup>74</sup> Putterman, Louis, and Xiao-Yuan Dong. "China's State-Owned Enterprises: Their Role, Job Creation, and Efficiency in Long-Term Perspective." *Modern China*, 2000. Vol 26, No 4. Pp 403-423.

breaks down into three primary subfactors: export-led growth, joint economic ventures, and foreign direct investment. The export-led growth hypothesis has been prominent in scholarship about China's rapid rise in economic standing, explaining that China's recent economic openness has resulted in huge gains for the country evidenced by the fact that between 1989 and 1994 the value of China's foreign trade rose from under 40 billion US dollars to 236 billion<sup>75</sup>. By loosening control over exports and tariffs, alongside liberalizing the foreign exchange rate, China was able to expand outwards very quickly. China was able to transform their share of exports globally from .9% to 2.6% between 1980 and 1994, demonstrating the clear shift in prominence of exports to the Chinese economy during this time<sup>76</sup>. Similarly, a regression of export growth on investment-output ratio and labor force growth are both positive and statistically significant according to a study undertaken by Andy Kwan and Benjamin Kwok<sup>77</sup>. What this evidence shows is that export growth has been accompanied by positive shifts in the value of investment and labor in China and has positively contributed to the overall growth of the nation. As time goes on, China proves to be growing significantly as a result of their foreign trade balances.

Building on connections made by opening, China began creating joint ventures with other countries and companies, muddling the lines between public and private enterprise while maintaining a competitive environment. In the first 10 years of the reform alone over 12,000 joint ventures were formed through multinational agreement, outnumbering other kinds of foreign firms in China considerably<sup>78</sup>. Thus, the joint venture is a kind of gateway into China for many other countries, allowing China to gain inflows of foreign investment in projects that it can

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<sup>75</sup> Jinjun, Xue. "THE EXPORT-LED GROWTH MODEL AND ITS APPLICATION IN CHINA." *Hitotsubashi Journal of Economics*, 1995. Vol 36, No 2. Pp 193.

<sup>76</sup> Jinjun, Xue. "THE EXPORT-LED GROWTH MODEL AND ITS APPLICATION IN CHINA." *Hitotsubashi Journal of Economics*, 1995. Vol 36, No 2. Pp 189–196.

<sup>77</sup> Andy C. C. Kwan, and Benjamin Kwok. "Exogeneity and the Export-Led Growth Hypothesis: The Case of China." *Southern Economic Journal*, 1995. Vol 61, No 4. Pp 1162.

<sup>78</sup> Beamish, Paul W. "The Characteristics of Joint Ventures in the People's Republic of China." *Journal of International Marketing*, 1993. Vol 1, No 2. Pp 30.

oversee and control. The characteristics of Chinese joint ventures tended to promote a high level of government involvement and oversight, usually formed with neighboring countries such as Japan, South Korea, as well as zones such as Hong Kong (which had not formally become a part of China again until 1997). Joint ventures are often used as tools for less developed economies to gain skills and technologies by working in association with other nations, and in China joint ventures were often much more successful and prominent than multinational private enterprises. China's support for joint ventures is also much higher because of the inclusion of clauses that cede control of the firms to Chinese managers after a variable period<sup>79</sup>. It has also been found that Chinese joint ventures have had a positive empirical effect on both industry performance as well as international cooperation over time, indicating that they have been positive for both the interactions between China and other countries as well as useful in creating a dynamic for a previously insular China in the world economy<sup>80</sup>. It is important that joint ventures are recognized for their success in bringing up the standard of China's economy while maintaining a degree of governmental control over the processes of a newly emerging global market.

The final feature of China's turn towards the global market is inward and outward foreign direct investment. China's FDI inflows were second only to the United States in the late 1990's, but it was necessary to engage in some level of policy control as well. In 1978, the famously cited "Open Door Policy" began to promote foreign investment in Chinese firms, opening internal markets to international buyers. While a system of equity-based investment had yet to be hammered out, this early change extended the invitation of foreign firms to the Chinese market. The major forms of FDI that have developed have been joint ventures and wholly owned subsidiaries, in which foreign firms are partially (if not wholly) in control of the equity of in

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<sup>79</sup> Beamish, Paul W. "The Characteristics of Joint Ventures in the People's Republic of China." *Journal of International Marketing*, 1993. Vol 1, No 2. Pp 29–40.

<sup>80</sup> Luo, Yadong. "Contract, Cooperation, and Performance in International Joint Ventures." *Strategic Management Journal*, 2002. Vol 23, No 10. Pp 913–919.

exchange for Chinese labor and resources. The high levels of technological and skill transference present in the FDI elevated both China and their trading partners, resulting in profitable results for both parties. The National People's Congress determines the approval of different ventures and oversees their implementation, creating a market with the necessary bureaucracy to enforce the contractual elements of the foreign enterprises. Alongside the NPC exist many standards and practices agencies, such as the Ministries of Labor and Personnel, the Ministry of Foreign Trade and Economic Cooperation, and the State Development Planning Commission, which make sure that foreign firms are able to operate within code. From an institutionalist perspective, these organizations promote fair trade between nations and create a proper, trustworthy environment to do business within<sup>81</sup>. The marked boom in FDI in the 90's was redoubled after WTO membership, aside from the financial crisis of the late 2000's. There was also a noticeable increase in countries all around the globe investing in China, where before WTO membership Chinese FDI was dominated by Japan, Taiwan, Korea, and the United States. Between 2001 and 2006 FDI inflows doubled, demonstrating that Chinese attempts to incentivize foreign investment had been quite successful, though most of the FDI has been centered around eastern China while much of the rest is left with very little<sup>82</sup>. Still, China has been particularly skilled at attracting foreign business to the nation, most likely due to the ease of business that the strong bureaucratic atmosphere has facilitated as well as the considerable tax breaks for foreign firms and ventures.

While attracting heavy flows of FDI into the country, China has been able to leverage their own investment in developing countries to further economic growth as well. By 1996, this trend became extremely clear, as China had begun to allocate around 18 billion dollars to

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<sup>81</sup> Yuan, Lu, and Terence Tsai. "Foreign Direct Investment Policy in China." *China Review*, 2000. Pp 223–232.

<sup>82</sup> Chen, Chunlai. "Foreign Direct Investment in China: Trends and Characteristics after WTO Accession." *China - Linking Markets for Growth*, edited by Ross Garnaut and Ligang Song, ANU Press, 2007. Pp 197–209.

foreign direct investment of their own. This trend began in the early 1990's, where China doubled its yearly FDI output as a percentage of GDP annually<sup>83</sup>. This is a grand departure from the half a million dollars of FDI that China engaged in the pre-reform period. Early FDI measures were undertaken by sub-sections of SOEs, known as foreign trade organizations (FTOs) and foreign business-oriented corporations (FBOCs) and were rapidly on the rise between 1980 and 1990. This period was when FDI out of the country began to really take off, and in the 90's it became an even more prevalent feature of the economy. Much of this effort was focused on Latin America, the Caribbean, and surrounding developmental states such as Taiwan, the RoK, and Japan. The purpose of this outward investment is to expand the scale of Chinese industries, furthering China's growth<sup>84</sup>. By 2010, the outward FDI that China has provided has risen to 68.8 billion dollars total<sup>85</sup>, which helps maintain the stability of their upward trajectory by reaffirming available resources for production and acquiring strategic assets. This allows China to further its technological capabilities. It indicates that the domestic industries of China are expanding and looking to obtain cheap labor and natural resources while advancing their technological capital. These knowledge spillovers are a net positive for both countries involved, since the country receiving the investment is also gaining access to advanced technologies that they originally did not have<sup>86</sup>. Overall, one can tell that outward FDI has been a source of increasing Chinese advancement.

Foreign direct investment has been crucial to economic development in a globalizing world system, and China has benefited considerably from the international market growth that has transpired. The use of joint ventures plays into China's interests considerably by providing a

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<sup>83</sup> Cai, Kevin G. "Outward Foreign Direct Investment: A Novel Dimension of China's Integration into the Regional and Global Economy." *The China Quarterly*, 1999. No 160. Pp 857.

<sup>84</sup> Cai, Kevin G. "Outward Foreign Direct Investment: A Novel Dimension of China's Integration into the Regional and Global Economy." *The China Quarterly*, 1999. No 160. Pp 856–869.

<sup>85</sup> Wang, Bijun. "Upgrading China's Economy through Outward Foreign Direct Investment." *Rebalancing and Sustaining Growth in China*, edited by Huw McKay and Ligang Song, ANU Press, 2012. Pp 149

<sup>86</sup> Wang, Bijun. "Upgrading China's Economy through Outward Foreign Direct Investment." *Rebalancing and Sustaining Growth in China*, edited by Huw McKay and Ligang Song, ANU Press, 2012. Pp 149–155.

service to foreign investors that becomes Chinese property in the long term and creates a business environment conducive to Chinese interests. Similarly, outward expansion into neighboring countries has developed the scale of Chinese firms, giving them access to international resources and furthering the industrial capacities of businesses. As a result, China has become an international leader when it comes to the operation of the global economy and has demonstrated that the interests of business and the state can coincide when properly aligned.

### **Part 5: Chinese State Investment in Labor and Capital Productivity**

China has properly invested in indigenous factor productivity growth, which has led to its success in development and allowed it to be competitive on a global scale. One of the core resources that China has tapped into is the education system, which has been historically much more robust during the Maoist and Post-Mao eras than it ever had been before. Since the formation of the PRC, literacy and basic education swiftly became a pressing interest of the party establishment. Although media and information are well regulated by the CCP, leading one to question the validity of the Chinese education system in terms of biases, the basic foundations of education spread rapidly since the PRC came into prominence. Because the ideology of the CCP focuses on the advancement of the proletariat from peasantry to skilled labor, widespread available education was an early goal of the PRC. Although the intellectual culture within China during the Maoist period was relatively myopic, demonstrated by the harsh crackdown on the resulting dissent of the scholars during the Hundred Flowers movement, the promotion of ideology often required literacy and knowledge, and thus the Maoist period was also marked by a genuine scholarly boom during the Cultural Revolution. 1965 was the year when education began to become much more accessible due to the reforms of Liu Shaoqi, forming a greater mass of new intellectual and work-study schools meant for national advancement. By 1978, this desire for greater productivity and skill-building was further

magnified by Deng Xiaoping, aided by new laws in 1993 and 1999 that increased investment in research-oriented education<sup>87</sup>. Nowadays, China is advanced in its education system according to the Organization of Economic Cooperation and Development, as nearly the entire country has access to universal primary and secondary education, and Chinese students in urban hubs outperform other students in high-performing countries in mathematics, reading skill, and science<sup>88</sup>. China has advanced considerably since 1949 from the hectic, poor education system of the Kuomintang and has become very impressive in terms of global education performance.

Education has been a crucial part in the development of human capital, which has been one of China's main improvements during the Reform period. The purpose of human capital advancement is to improve the skills of the working population of a country and allow them to engage in more productive labor. Excluding human capital investment and simply focusing on technological capital is an unproductive approach for a nation to take, since human capital improvement is necessary as a precursor to technological capital advancement. Although national investment in human capital is much lower than the investment in physical capital, this is largely because funding for education is often enacted on a local level. This creates much more palatable options for personal advancement within urban, wealthy areas than poorer, rural areas. Contemporary econometric studies have also highlighted the use of incentivization structures arising in the 80's and 90's to promote human capital advancement as a result of returns to education, and some estimate that it is higher than the rate of return in the United States and Western Europe in the contemporary period<sup>89</sup>. The division between the rural and the urban sectors, emblemized by the hukou system of labor migration prevention, demonstrates that there are further improvements China could make in terms of allowing

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<sup>87</sup> Tsang, Mun C. "Education and National Development in China since 1949: Oscillating Policies and Enduring Dilemmas." *China Review*, 2000. Pp 579–591.

<sup>88</sup> OECD (2020), *Benchmarking the Performance of China's Education System, PISA*. OECD Publishing, Paris. Pp 14-16.

<sup>89</sup> Heckman, James J. "China's Investment in Human Capital." *Economic Development and Cultural Change*, 2003. Vol 51, No 4. Pp 795–797.



greater human capital development in the modern era. That said, the turn of the workforce from being 71% to 30% agricultural during the Reform era is demonstrative of the rapid progress towards urbanization that has been transpiring as we speak<sup>90</sup>. One of the primary motivating factors in developing human capital has been the turn to the private sector within the country, as many of these companies are better equipped to train new workers and compensate well-educated workers better. The incredible rise in college admissions within China has also demonstrated the rapid advancement of human capital and personnel skill<sup>91</sup>. To continue its upward trajectory, China must reconcile some of the issues it has with human capital development while maintaining the favorable elements that have facilitated its rapid growth.

Human capital alone has risen significantly in China, but China has engaged in extremely intensive technological growth as well. Although how much technological innovation alone has factored into productivity growth is fiercely contested, it is overall accepted that it has been a driving force in the TFP growth in the agricultural and industrial sectors alike. In fact, more recent studies have found that between 1990 and 2009, the ratio of TFP to economy-wide output fluctuated between 69% and 81%<sup>92</sup>. One of the main players in the extension of technology has been increased research and development due to the rapid increase in China's educated classes, as well as the private firms that employ them. In other words, the expansion of knowledge within the country has led to the betterment of the facilities of firms across China, including so-called invisible capital goods such as those based in programming. Yanrui Wu's "Productivity, Innovation and China's Economic Growth" demonstrates this growth in all sectors,

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<sup>90</sup> Li, Hongbin, et al. "Human Capital and China's Future Growth." *The Journal of Economic Perspectives*, 2017. Vol 31, No 1. Pp 27.

<sup>91</sup> Li, Hongbin, et al. "Human Capital and China's Future Growth." *The Journal of Economic Perspectives*, 2017. Vol 31, No 1. Pp. 25–33.

<sup>92</sup> Wu, Yanrui, et al. "Productivity, Innovation and China's Economic Growth." *China's New Sources of Economic Growth: Human Capital, Innovation and Technological Change*, edited by Ligang Song et al., Vol 2, ANU Press, Australia, 2017, Pp 216 and 220

where technology growth dominates efficiency growth in terms of TFP growth over the years<sup>93</sup>. Much of this is true of the agricultural sector, which has been demonstrated by Songqin Jin between the years 1990 and 2004. This is of interest because, unlike changes in the industrial sector, the agricultural sector's research and development is largely organized by the state, creating more productive strains and seeds for staple crops and engineering hybrid grains for Chinese consumption. In more recent years China's agricultural system has benefited from importing horticultural technology as well as cooperative research efforts and grants<sup>94</sup>. Overall, the growth of the technological base of China has been one of the most beneficial elements in its contemporary TFP growth, which will be analyzed below.

Altogether, these factors have allowed China to experience an impressive increase in their total factor productivity (TFP). TFP has been growing explosively within China due to the heavy investment in productivity advancement. By focusing on the relative return to wages and capital over time, we can estimate the changes in TFP within China since the reform period. The urban wage growth rate is particularly striking, as it evidences that urban wages have been consistently improving since the reform period between 2.36% at the lowest and 14.76% at the highest since 1978<sup>95</sup>. Annual wage changes within the country have also been consistently positive. The value of China's capital stock has been a striking change over the last 40 years, growing from around 1,200 million yuan to 9,500 million yuan between 1978 and 2002. All the while, China has retained a rate of return to capital that hovers around 11%, demonstrating that a massive expansion of capital does not necessarily equal immense downturn of the rate of

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<sup>93</sup> Wu, Yanrui, et al. "Productivity, Innovation and China's Economic Growth." *China's New Sources of Economic Growth: Human Capital, Innovation and Technological Change*, edited by Ligang Song et al., Vol 2, ANU Press, Australia, 2017. Pp 213–219.

<sup>94</sup> Jin, Songqing, et al. "Productivity, Efficiency and Technical Change: Measuring the Performance of China's Transforming Agriculture." *Journal of Productivity Analysis*, 2010. Vol 33, No 3. Pp 191–197.

<sup>95</sup> Islam, Nazrul et al. "Role of TFP in China's Growth" in *Asian Economic Journal*, 2006. Vol 20 Issue 2. Pp 146.

return<sup>96</sup>. These figures tell a story of massive success in generating highly productive capital while also engaging in deepening. It is striking how these positive indicators of TFP have improved the economy of China substantially between 1978 and 2002 and are demonstrative of how an economic superpower can come about if the country focuses on TFP growth.

Expansive growth is important, but innovation within a developing economy is crucial to success as well. China's government has historically allocated quite a bit of spending to improving their education services, advancing the labor market, and producing new technologies. This has resulted in a massive growth in the total factor productivity of the country and has contributed to their meteoric rise in influence and power. Rather than depending on foreign firms and FDI exclusively in their development of the economy, China invested in indigenous technological and human capital growth along the same lines as Japan and Korea. By creating internationally competitive productive facilities, China has been able to catch up to other developed countries in terms of economic performance in a relatively short period of time and has mimicked the experiences of the other developmental states in this way.

## **Part 6: The Formation, Planning, and Enactment of China's Industrial Policy**

Even before the reform period, The Chinese Communist Party has utilized 'Industrial Policy' to attain economic goals. Industrial policy is often confused with any economic policy. However, industrial policy is much more specific, defined by state intervention in a specific market or sector to encourage its growth. Industrial policy goals have been historically outlined in five-year plans, beginning with the famed First Five Year Plan in 1953. The purpose of Maoist industrial policy was direct and simple; generate extensive growth of industrial plants through Stakhanovite influencing of peoples. In the contemporary era, direct construction goals have been replaced by more abstract principles and economic ideations within the five-year plans.

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<sup>96</sup> Islam, Nazrul et al. "Role of TFP in China's Growth" in *Asian Economic Journal*, 2006. Vol 20 Issue 2. Pp 148-149.

Because this essay is based around the developmental state model, the most important FYPs to our research are the contemporary ones, which create developmental goals and institute them through influence on business rather than direct control of construction. By focusing on the 9th through 12th FYPs, it becomes clear which industrial policies have been utilized by the state to nudge businesses in certain ways. By providing favorable construction conditions, tax exemptions, fiscal injections, and expedited materials and exports, industries favored by the modern FYPs are set up for greater success than other industries. The development of China's pharmaceutical, chemical, mineral, and food processing industries have all benefited a great deal from targeted FYP intervention. Industries preferred by Central Planners have a gateway to success that other firms do not, and this allows China to make decisions in a way that is conscious of the development of the economy as a whole<sup>97</sup>. Five Year Plans have been the Chinese government's means of directing Industrial Policy throughout the last 80 years, and in recent years the industrial policy has been more in line with the type of policy practiced in other East Asian states.

Many of China's ventures into Industrial Policy (IP) have garnered it attention from outside forces in the modern era, particularly foreign firms that decry discriminatory policies that favor Chinese business. However, IP has been present throughout the current millennium as one of China's primary tools for market growth. In fact, use of IP was severely limited until the reform period and has only been rising in prominence in the contemporary era. One of the main triggers for the IP use was the severe worldwide economic recession of 2008-2009, which prompted a more Keynesian approach to countercyclical fiscal injections to the economy. That said, China took direct advice and institutions from Japan when deciding to engage in their own IP expansion in the 80's, so Industrial Policy is not a strictly new tool in China's toolbox. By establishing planning and economic bureaucracies that followed a more Japanese approach

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<sup>97</sup> Wu, Yiyun et al. "The determinants and effectiveness of industrial policy in china: A study based on Five-Year Plans" in *China Economic Review*, 2019. Vol 53. Pp 225-229.

than the historical Maoist planning style, China sought to support specific industries that would be crucial to the functioning of the economy as well as industries that would promote the economy's international competitiveness, somewhat akin to the support of keiretsus in Japan. Two major players in the transformation of Chinese business guidance were the State Structural Reform Commission and the State Economic Commission, both of which organized and administrated large-scale business groups in the hopes of guiding the economy. To outsiders, it seemed as though China was liberalizing, but in reality it was shifting from a regime of direct control to one of indirect guidance. As a result, sectoral and cross-sectoral commissions became commonplace in fueling the growth of key industries in the 2000's, leading to the advancement of the automotive, IT, and machinery production industries<sup>98</sup>. In particular, the subsidization of firms engaging in novel technological innovation were given stimulus and oversight. China has been proactive in modernizing its approach to business, but has still maintained a degree of control over the economy by engaging in Industrial Policy.

The use of Industrial Policy in China has been discussed, but how effective has it been in promoting growth? By analyzing the National Bureau of Economic Research data of the growth of the shipbuilding industry, one of China's main IP targets in the early 2000's, it becomes clearer that IP has played a role in the success of targeted industries. By 2009, China had become the largest shipbuilding country in terms of tons, and new shipyards were flourishing across the Chinese coast. China's direct intervention in this market seems to have led to its explosive growth, as the introduction of shipbuilding subsidies seems to coincide with the rise of new entrants into shipbuilding and capital expenditures associated with the industry. The assumption that NBER makes in their case study is that the introduction of IP in this sector increased the productive returns to investment and entry into shipbuilding, which thus led to a major flow of new indigenous business into the sector. While shipyard costs remained relatively

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<sup>98</sup> Heilmann, Sebastian and Shih, Lea. "The Rise of Industrial Policy in China, 1978-2012". *China Analysis 100*. University of Trier, 2013. Pp 1-13.

static, the supply of shipbuilders increased dramatically to meet the international market demand. Because shipbuilding is a capital-intensive industry, it experiences intense economies of scale that furthers the increased output of subsidization by lowering the marginal costs associated with production when the firms increase in scope. This is important because it explains why IP is so successful with large scale emerging industries, as the subsidized capital can go a long way in reducing the marginal costs of the individual firms. Thus, between 2006 and 2013 China's market share in shipbuilding increased by 40%<sup>99</sup>. Entry was doubled while exit was significantly depressed, and ship-related prices decreased considerably worldwide<sup>100</sup>. In this instance, China's industrial policy allowed it to corner the market for shipbuilding and even beat out its competitors in South Korea and Japan, and this would not have been possible without the government subsidization of the industry.

The final element in this puzzle, the prominence of Industrial Policy in contemporary China, is directly associated with the Developmental State theory of growth in countries like Japan, Taiwan, and Korea. In fact, it is one of the most mentioned elements of the Developmental State by the theorists covered in Chapter 2. China adopting this model and utilizing it to achieve its own growth is crucial to identifying it as a Developmental State as well. In fact, the use of Industrial Policy is perhaps one of the clearest signifiers of China's status among the East Asian Developmental States, though China became involved in IP by liberalizing rather than bureaucratizing further. China's status as a Developmental State should be clear at this point, as all the elements of its reforms involve a strategic mixture of state intervention and competitive markets on a global scale.

### **Concluding Thoughts:**

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<sup>99</sup> Barwick, Panle et al. *China's Industrial Policy: An Empirical Evaluation*. National Bureau of Economic Research, 2019. Pp 29

<sup>100</sup> Barwick, Panle et al. *China's Industrial Policy: An Empirical Evaluation*. National Bureau of Economic Research, 2019. Pp 1-30

The approach that this paper has taken is based on acknowledging China's history since 1979, addressing the fundamental theory of the developmental state, and providing a holistic understanding of China's growth that explains it through the lens of the developmental state without discounting Chinese idiosyncrasies. This has required a thorough examination of multiple facets of the Chinese economy. The six features listed in the final chapter are by no means exhaustive but represent the most relevant aspects of Chinese developmentalism. By highlighting the relevant practices that demonstrate China is a developmental state, many economic historians may argue with the points left unsaid; after all, the dynamics of the labor, capital, and product markets have all significantly liberalized, and yet there is little recognition of this factor in Chinese growth in Chapter 3. To clarify, the purpose of Chapter 3 is not to simply highlight all the features of the Chinese economy that have promoted its growth, but to analyze the specific growth factors that could be interpreted as fitting into the developmental state model. The purpose of this essay not to alienate the free market, but to understand how it can interact with the state in what Chalmers Johnson would call a 'plan rational' economy. China is traditionally left out of the developmental state theory of growth because of its prior era of socialism, and this is a mistake. It is more sensible to expand the theory of the developmental state to include China, and to allow China's growth experience to inform the theory of the developmental state in turn.

This paper expands the very concept of the developmental state by highlighting China's interventionist role in the economy and comparing it to the other examples of developmental states. What ultimately makes China unique is that it took a different route to becoming a developmental state than other countries. While Japan evolved during its Meiji period and beyond to accommodate a centralized bureaucracy from the former scattered feudal daimyos of the Tokugawa period, China expressed a different trajectory, and this is most likely why analysts are so apt to describe China as a success story for liberalism. Rather than engaging in state-building to reach the developmental state model, China engaged in a form of marketization from

a completely state directed economy. Thus, theorists are quick to argue that China's success is primarily a result of the market institutions that had arisen within the country, giving no real thought to the reformation of the role of the state in the economy. In this paper, however, it has been highlighted that China has not grown so quickly because it is a free market country, as it is in many ways still controlled by bureaucrats and legislators. There is an element of nuance missing from academics who describe China as state capitalist, labelling China as authoritarian socially but liberal economically. China's growth is attributable to its more interventionist elements combined with the transformation of the market system to include private and semi-private elements. The essence of the argument I have presented is a rejection of neoliberal economic theories, presented by scholars such as Deepak Lal, in favor of a Keynesian, developmental state-oriented approach to viewing possible economic growth in countries. China is idiosyncratic in the way that it has been able to mobilize resources towards the furthering of their economy but their method does not need to be exclusive to them.

For quite some time, liberal theories of development have dominated the international lending scheme. Organizations such as the World Bank and World Trade Organization advise their members to consciously engage in market-based economics within their countries, believing that this is the best way to attract foreign capital and encourage innovation within the country. China's experience with development counters the narrative of these institutions, demonstrating that it may be more optimal in the long run to utilize strong state bureaucracies and guide the economy toward greater success. After all, there is no reason why other countries would be unable to adopt township-village enterprises, large-scale investment projects in infrastructure and TFP growth, or utilize industrial policy in order to provide benefits for the expansion of crucial sectors. Rather than rely on institutions that have been failing developing countries, it makes more sense for countries to adopt a more Chinese approach to development, mixing market fundamentals and state guidance. Even smaller steps, such as creating state enterprises to perform basic infrastructural construction, would improve the



productivity of the developing world if China's experience is any indication. By analysing China's growth over time, it becomes clear that economic planning has more value than neoclassicals let on. Hopefully, developing countries across the globe can learn from China's experience and advocate for a more systemic approach to economic development than allowing markets to grow through simple deregulation.

Using China as a model may not be the solution to the issues developing countries have had in sustaining growth, but it at least deserves recognition in challenging the conventional prescriptions for economic progress. It is not an overstatement to say that there is a message that many are missing from China's growth; yes, liberalism has its place, but in concert with state direction it is possible for a country to become a world leader and rival to the United States in less than 40 years. Of course, China has had situational arrangements that may not necessarily precipitate themselves in other countries, such as a 40-year history of socialism preceding 1979 that set the stage for capital building and strong bureaucracy in the contemporary era. However, it is worth noting that China's approach to developmentalism has brought about extraordinary change within the country and has given rise to a new form of the developmental state. Hopefully, through China's more recent expansion outwards with the Belt and Road Initiative, other countries will be able to adopt Chinese economic practices and succeed as a result.

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