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## The Road Ahead for Chinese SOEs

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The Road Ahead for Chinese SOEs

Senior Project Submitted to  
Economics Program  
of Bard College

by

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Annandale-on-Hudson, NY

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## Abstract

Many Chinese State Owned Enterprises are facing problems of over-capacity and inefficient productivity. These problems have contributed to the slowdown of Chinese economic growth. Some people believe that this is the time for SOEs to improve their productivity and financial system in order to be more efficient to support future Chinese economic growth. However, the central government has decided to not reform the current SOE system and continue funding SOEs in order to let them play an important role in the "Belt and Road Initiative." Many people think that this is a way to vindicate SOEs, or to excuse the current domestic economic problems that SOEs created in China. The first chapter identifies possible reasons for the recent downturn in China's economic growth and explores its relationship to the SOE system. Chapter 2 reviews the role that China's SOEs play in the Belt and Road Initiative, whether or not they are capable of maintaining their current form in this role, and what kind of difficult challenges they might face in this project. The SOEs' potential for success or failure in this initiative is predicted. Chapter 3 concludes whether or not SOEs' participation in the Belt and Road Initiative is worth the cost to the future of Chinese economy.



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## Chapter 1 - The slowdown of Chinese economic growth and its relationship to the SOE model

The Chinese economy has maintained rapid economic growth since 1978. Its annual growth has reached up to 9.8% during the past 20 years, which was considered one of the highest GDP growth rates around the world. Since 2011, however, China's economic growth has slowed, decreasing from 10.6% in 2010 to 9.5% in 2011 and recently in 2016, the growth rate declined to 6.7%, the lowest point since 1990, leading many to worry about the Chinese economic future and wonder why growth has slowed after 40 successive years of high growth. Some scholars think that the recent 5-year economic downturn was because China's "investment-driven" economic strategy has lost its advantage.<sup>1</sup> This strategy has been adopted and emphasized by the Chinese government for more than 35 years.

The ratio of a fixed-asset investment- to-GDP has been close to 50 percent in recent years. Many large companies mainly concentrate in industries providing production factors that are closely related to fixed-asset investment: finance, energy, commodities including coal, copper, steel and aluminum.<sup>2</sup> Investment stoked China's appetite for these production factors, making it a sponge for raw materials all over the world.<sup>3</sup> The Chinese government tightly controls these markets and does not give private companies many opportunities, the result of which is largely bloated and inefficient giant companies.<sup>4</sup>

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<sup>1</sup> Liu Guanchao, "Causes of Inadequate Consumption in China: a Literature Review," *Modern Economic Science*; Vol. 32 No. 6 (Nov. 2010).

<sup>2</sup> Qiao Liu, *Corporate China 2.0: The Great Shake Up* (New York: Palgrave Macmillan, 2016), 8.

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*

The following table from Qiao Liu's recent book "Corporate China 2.0: The Great Shakeup" shows a comparison of the ten largest listed companies in the US stock market and China's A-share market.<sup>5</sup>

*Table 1 Top 10 listed companies in the USA and China's A-share market<sup>6</sup>*

<i>Rank</i>	<i>US companies</i>	<i>Market cap. (\$ billion)</i>	<i>Chinese A-share firms</i>	<i>Market cap. (\$ billion)</i>
1	Apple	649.8	ICBC	252.1
2	Google	435.2	PetroChina	244.3
3	Microsoft	353.9	China Construction Bank	214.6
4	Berkshire Hathaway	351.4	Bank of China	180
5	Exxon Mobil	312.1	Agricultural Bank of China	161.3
6	Wells Fargo	269.9	China Life Insurance	118.9
7	Johnson & Johnson	265.6	Sinopec	94.8
8	Facebook	264.1	Ping An Insurance	88.6
9	GE	255.1	Bank of Communication	73.1
10	Amazon.com	251.2	CMBC	71

On the Chinese side, many of them are either commercial banks or insurance companies, such as ICBC, Bank of China, Agricultural Bank of China Life Insurance and so on. In contrast, the U.S. side shows more diversity, such as Exxon Mobil in energy, Johnson and Johnson in consumer goods and Google, Apple, Microsoft & Facebook in the internet/technology field. Most of the largest Chinese top companies in A-share stock market are from the sectors providing investments, indicating a highly concentrated financial sector that controls state-led investment. "The Big Four" state-owned commercial banks are on the list, each with its own role and specialization to provide investments for Chinese economy: Industrial and Commercial Bank of China (ICBC) is the largest lender for the Chinese industry.<sup>7</sup> The amount of loans, both on and off balance sheet, go mostly to heavy industries such as steel, iron, aluminum, and cement. China Construction Bank (CCB), the country's second-largest lender, has reported a big rise in the size

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Reuters Staff, "China's ICBC signs \$4 billion debt swap with Shandong Steel: Xinhua," *Reuters*, May 25, 2017.

of loans for infrastructure projects, which the government has identified as a key focus to drive economic growth.<sup>8</sup> From 2010 to 2015, more than 40 percent of the bank's annual loans for public affairs was allocated to infrastructure construction.<sup>9</sup> The Bank of China (BOC) fully leveraged its strength in regional economic development by financing domestic regional economic developments such as the Belt and Road initiative, the Beijing-Tianjin-Hebei regional development and the Yangtze River Economic Belt. The Agricultural Bank of China (ABC) supports the enterprises leading agricultural modernization and new agricultural business entities to enhance their services to large-scale customers in the county areas.<sup>10</sup> Loans for the county areas, in response to the government projects to support infrastructure, energy, transportation and to rebuild shanty areas, increased by RMB 136,000 million.<sup>11</sup>

The functions of these Big Four state-owned commercial Banks are mostly focusing on real-economic developments; especially heavy industries, energy, constructions and urban-rural infrastructures, which are extremely capital and energy-intensive.<sup>12</sup> The central government directly controls these four state-owned banks. They are at the center of a state-led growth plan that focuses on high capital investment.

### **1. Heavy capital-intensive investment, low Total Factor Productivity**

Total Factor Productivity (TFP) growth is a major source of economic growth; and it determined by how efficiently and intensely the inputs are utilized in production.<sup>13</sup> Thus, an understanding of how and why productivity measures change is of great interest to economists and

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<sup>8</sup> Xiang Bo, "China Construction Bank's infrastructure loans surge," *Xinhua News*, March 27, 2015.

<sup>9</sup> Xin Hua, "China Construction Bank's infrastructure loans surge," *China Daily*, August 28, 2015.

<sup>10</sup> Agricultural Bank of China, Annual Report 2014, 15, 2015, accessed November 21, 2017.

<http://www.abchina.com/en/AboutUs/annual-report/201603/P020160405603491905726.pdf>

<sup>11</sup> Agricultural Bank, 21.

<sup>12</sup> Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, Mass: MIT Press, 2007), 330.

<sup>13</sup> Comin, Diego (2008) —Total factor productivity, *The New Palgrave Dictionary of Economics*. Second Edition, eds. Steven N. Durlauf and Lawrence E. Blume, Palgrave Macmillan.

policymakers.<sup>14</sup> China's average TFP during the period from 1979-2014 was very low, only 9.87% toward the GDP. This low TFP rate reveals that the rest of the 90.13% of the growth has required a large investment to provide inputs such as labor and raw materials.<sup>15</sup> Due to a low TFP rate, a 10% GDP growth would require a 30% ratio of fixed investment to GDP.<sup>16</sup> Furthermore, the scenario of low productivity with large investments causes low ROIC rates (Return-On-Investment Capital rate) in Chinese industrial enterprises. Between 1998–2012, the average ROIC (Return-On-Investment Capital rate) of China's large firms was only 3 percent.<sup>17</sup> The example of one of the largest Chinese steel enterprises, the China Group, is only around 3.5% in recent years.<sup>18</sup> Also, the largest Chinese cement group, Shanshui Cement Corp is even worse than China Steel Corp, which is -3.54%.<sup>19</sup>

### **1.1 The low level of investment efficiency**

In the Fig. 1 below, Liu shows that the pile-up of local government debts has a lot to do with a low level of investment efficiency at the local government level. Particularly, he uses the debt-to-fiscal revenue ratio to measure the leverage ratio of a certain province or province-equivalent municipal city (horizontal axis); he uses the local GDP-to-local capital stock ratio to measure investment efficiency. Here, local capital stock is calculated as the sum of the previous 20 years' fixed-asset investments depreciated at an annual rate of 5 percent. Clearly, at the provincial level,

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<sup>14</sup> Bauer, P.W. (1990). "Decomposing TFP Growth in the Presence of Cost Inefficiency, No constant Returns to Scale, and Technological Progress." *Journal of Productivity Analysis* 1, 287–299.

<sup>15</sup> Wu Xianman and Jiang Zhaoyi, "A Research on Financial Support Policy about the Structural Reform in the Supply Side in Wuhan" *Nankai University Magazine* Vol. 5 No. 7 (2016).

<sup>16</sup> Ibid.

<sup>17</sup> Qiao Liu, "Does ROIC Apply to Corporate China?," *Springer Link*, last modified December 25, 2016, accessed November 22, 2017, [https://link.springer.com/chapter/10.1057/978-1-137-55089-7\\_3#citeas](https://link.springer.com/chapter/10.1057/978-1-137-55089-7_3#citeas)

<sup>18</sup> China Steel Corp (OTCPK:CISEY) ROIC %: 2.82% (As of Sep. 2017)," <https://www.gurufocus.com/term/ROIC/CISEY/ROIC-/China-Steel-Corp>, last modified September 9, 2017.

<sup>19</sup> "Asia Cement Corp (1102.TW)," *Reuters*, accessed November 22, 2017, <https://www.reuters.com/finance/stocks/1102.TW/key-developments>

there is a significantly negative correlation between local investment efficiency and local government debt.<sup>20</sup>

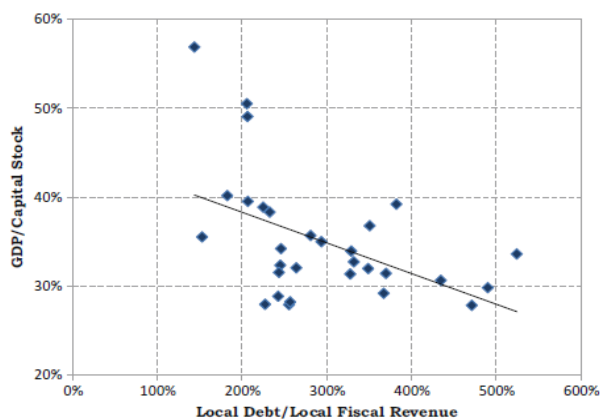


Figure 1. Local investment efficiency versus local government debts<sup>21</sup>

### **1.2 Actual GDP declines as financial investment increases**

By looking at the Figure 2 of the variable changes between the value added in finance/GDP vs real GDP growth, people could see that on the horizontal axis, the increased financing income over GDP during 2005-2016, reveals how finance has become increasingly more important in China. Vertically, the real GDP growth rate from 2005 to 2016, drops over time as finance income/ GDP increases, which is inversely related. It indicates that as the finance sector becomes more important, the real GDP actually starts to decline. Especially when its GDP growth dropped down to 6.7% in 2016, China's financing investment actually increased to almost 0.1 of GDP. This number is actually the largest it has been in 20 years.

<sup>20</sup> Liu, 165-166.

<sup>21</sup> Liu, 165.

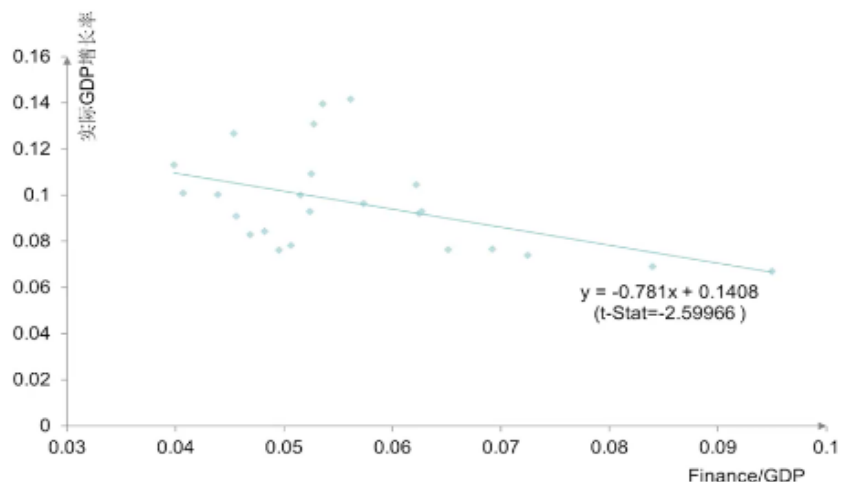


Figure 2. Value added in Finance/GDP vs. Actual GDP Growth, 2005-2016<sup>22</sup>

China's economy mostly relies on bank lending. (Table 1, page 2) As noted earlier, the top giant commercial banks on the list are largely bloated and inefficient, which has resulted in low level investment efficiency (e.g. investment in energy, raw materials, construction, heavy industries etc.).<sup>23</sup> This graph from a finance perspective has shown that the current investment-driven economic model, which has been used to supported Chinese fast economic growth in the past 35 years, cannot be sustained anymore.<sup>24</sup>

### **1.3 Capital productivity drops as capital-labor ratio and capital stock increase**

Table 2 shows, a comparison of the growth in factor productivity and capital ratios between the periods of 1978-1995 and 1995-2005. It reveals that the rates of capital productivity of the period of 1995-2005 had declined to -2.78 from 0.84. However, at the same time, its growth in capital stock and capital-labor ratio increased substantially from 9.19 to 12.38 and 5.39 to 9.52.<sup>25</sup> It

<sup>22</sup> Ibid.

<sup>23</sup> Liu, 9.

<sup>24</sup> 2017 *Guanghua NY Forum: The Future of Corporate China*, 2017 video file, posted Jun 28., 2017 accessed, Nov. 19, 2017, <https://www.youtube.com/watch?v=edV78OWIgal>

<sup>25</sup> Jinghai Zhang, Arne Bigsten, and Angang Hu. "Can China's Growth Be Sustained? A Productivity Perspective." *World Development* 37, no. 4 (08 7, 2008): 874-88.

resulted in a negative return on declined capital productivity while capital stocks and capital-labor ratio increased.

	1978–95	1995–2005
GDP growth	10.11	9.25
Growth in capital stock	9.19	12.38
Growth in capital productivity	0.84	–2.78
Growth in quality adjusted labor	3.60	2.59
Growth in quality adjusted labor productivity	6.14	6.45
Growth in capital-labor ratio	5.39	9.52

Table 2 Growth in factor productivity and capital labor ratios (1978-2005)<sup>26</sup>

## **2. Inefficiencies cause private sector, labor-intensive manufacturing to lose their advantage**

Compared to the size of state sector, which accounts for more than 40 percent of total GDP and about 20 percent of China’s total employment,<sup>27</sup> the private sector accounts for almost 60 percent of total GDP and provides over 80 percent of jobs.<sup>28</sup> China’s private sector produces almost half of the world’s shoes and clothes as well as household gadgets, toys, appliances, furniture, Christmas ornaments, sunglasses and other consumables.<sup>29</sup> Low-end, labor-intensive manufacturing makes China the largest manufacturer in the world. The competitive advantage of cheap labor is the engine of huge manufacturing that boosts living standards by doubling the country’s GDP per capita over the last decade.<sup>30</sup> The low salary of workers in the manufacturing industries serves to reduce enterprises’ production costs, which provides them a price advantage among international market competition.

<sup>26</sup> Ibid.

<sup>27</sup> This information is derived from the *State Department’s Office of Investment Affairs’ Investment Climate Statement*. Any questions on the ICS can be directed to EB-ICS-DL@state.gov, ed., “China - 7-State Owned Enterprises,” export.gov, last modified July 25, 2017, accessed December 9, 2017. <https://www.export.gov/article?id=China-State-Owned-Enterprises>

<sup>28</sup> Eswar Prasad, “The path to sustainable growth in China,” *Brookings Institute*, last modified April 22, 2015, accessed December 9, 2017.

<sup>29</sup> Jeffrey Hays “Cheap labor industries in China and the end of Cheap Labor in China,” facts and details, accessed November 22, 2017.

<sup>30</sup> Karel Eloot, Alan Huang, and Martin Lehnich, “A new era for manufacturing in China,” *McKinsey & Company Operation*, last modified June 2013, accessed November 22, 2017.



Over the past 10 years, however, a continued decline in China's workforce drove up wages faster than productivity gains, thus potentially slowing the growth rate of real GDP. China's labor costs in the urban manufacturing sector reached ¥31,000 (\$4,579) per employee per year in 2010, more than doubling from just ¥12,700 (\$1,534) in 2003. China's costs are growing at a faster rate than many other countries with low overall manufacturing costs.<sup>31</sup> China's manufacturing competitive advantages are lost to India, Bangladesh, Vietnam and Cambodia, which have even cheaper labor.<sup>32</sup> The current average hourly wages for Chinese workers hit \$3.60 last year, more than five times the hourly manufacturing wage in India, and is more on par with countries such as Portugal and South Africa.<sup>33</sup> As economic growth and scale expanded rapidly in recent 10 years in China, so did worker wages. Increased wages translated to higher costs and lower profits for factories and has put China in an inferior competitive position.

Chinese exports have declined since 2009. The export rate has dropped to 7.7 percent in 2016 which is the lowest point in the past 7 years.<sup>34</sup> China's textile export to the European Union reached \$44.86 billion, falling by 10.6 percent year-on-year, the export to Japan fell 12 percent to \$18.8 billion, and the export to Asian countries hit \$29.03 billion, slipping 1.7 percent, according to customs data.<sup>35</sup> In addition, the export value of footwear in the first eight months of this year declined by 3.5% totaling \$34.713 million compared to similar period in 2014 (compares to \$35.957 million).<sup>36</sup> While Chinese exports have declined, at the same time,

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<sup>31</sup> Simon Zhang, "China's Rising Costs," *China Business Review*, last modified July 1, 2012.

<sup>32</sup> R.A. "The end of cheap Chinese labor?" *The Economist*, last modified July 18, 2010, accessed Nov. 22, 2017.

<sup>33</sup> Sophia Yuan, "Made in China' isn't so cheap anymore, and that could spell headache for Beijing," *CNBC News*, last modified February 27, 2017, accessed November 22, 2017.

<sup>34</sup> Kimberly Amadeo, "China's Economy Facts and Effect on the U.S. Economy," *The Balance*, last modified October 26, 2017, accessed November 22, 2017, accessed November 22, 2017.

<sup>35</sup> Wenqian Zhu, "China's textile exports decline in 2015," *China Daily*, last modified Jan. 14, 2016, accessed Nov. 22, 2017.

<sup>36</sup> Elias Glenn and Sue-Lin Wong, "China posts worst export fall since 2009 as fears of U.S. trade war loom," *Reuters*, last modified January 13, 2017, accessed November 22, 2017.

Bangladesh exports inched up 10 percent to 34.24 percent.<sup>37</sup> Thailand increased 0.5 percent, Cambodia increased nearly 17 percent and Vietnam increased nearly 19.8 percent.<sup>38</sup>

### **2.1 Negative marginal productivity while labor-capital force increased**

According to the GDP formula below, GDP gross as an output which is through the inputs of the increasing either the amount of labor or the capital.

$$\mathbf{GDP=AF (capital, labor) or AF(K,L), \text{ where } Y \text{ is GDP, } K \text{ is capital and } L=\text{labor}}$$

However, due to the law of diminishing marginal productivity, Marginal productivity refers to the additional output gained by adding one unit of factor of production when other factors are held constant, and it gradually decreases as the amount of that factor increases. We have note that when the labor-capital factor is growing, however; the TFP (AF) is declining.

Recent statistics show that China's TFP has been declining, while manufacturing production has been dominated by labor-intensive production techniques (Wu, Ma, and Guo 2014). TFP grew at an average annual rate of only 3.4% from 2012 to 2016, compared with 6.0% average growth over the previous five years, 2007-2011.<sup>39</sup> A shortage of skilled labor supply serves as a major bottleneck for productivity improvement and economic transformation in China.<sup>40</sup>

Paul Krugman has mentioned other important factors of TFP for economic growth besides large increases of labor-intensive inputs. In an example he gave, the former Soviet Union's achievement to improve total labor productivity was to take the advantage of the power of the

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<sup>37</sup> Reuters Staff, ed., "Bangladesh exports rise 12.7 pct in December on higher garment sales," *Reuters*, last modified September 28, 2017, accessed December 6, 2017.

<sup>38</sup> Kang Sothear, "Overall Export Values Rise; Garments Slow," *The Cambodia Daily*, last modified February 4, 2016, accessed December 6, 2017.

<sup>39</sup> Dandan Zhang, Xin Li, and Jinjin Xue, "Education Inequality between Rural and Urban Areas of the People's Republic of China, Migrants' Children Education, and Some Implications," *Asian Development Review* 32, no. 01 (2015): 197.

<sup>40</sup> *Ibid.*

central government to have a mobilization to "move millions of workers from cities, pushed millions of women into the labor force and millions of men into longer hours, pursued massive programs of education, and above all plowed an ever-growing proportion of the country's industrial output back into the construction of new factories."<sup>41</sup> However, this extreme strong labor-intensive mobilization was eventually slowed down due to the lack of technological capital productivity support and skilled labor force when its marginal productivity refers to the additional output gained by adding additional workers held at an increasing rate, and it gradually decreases as the amount of labor force increases.

By the contrast, Krugman also described the success of Singaporean economic model during 1966-1990, which also adopted a similar strategy of mobilization as Soviet Union did, and its employed share of the population surged from 27-51 percent.<sup>42</sup> However, unlike Russia, Singaporean government also realized that the importance of boosting its capital stock as well as technology & labor productivity. The government did a large investment physical capital: investment as a share of output rose from 11 to more than 40 percent.<sup>43</sup> Moreover, a large education investment in Singapore also improved the quality of labor force which became more skilled and technically knowledgeable. The education standards have changed dramatically from 1966 when there were no more than half the workers with formal education at all and by 1990 two-thirds had completed secondary education. It improved economic efficiency and elevated the low-end labor-intensive workforce to a high-end manufacturing level. As a consequence, Singapore avoided the stagnation of diminishing return unlike the Soviet Union, which boosted productivity only through putting with labor & capital force.

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<sup>41</sup> Paul Krugman, "The Myth of Asia's Miracle," *Foreign Affairs* 73, no. 6 (November/December 1994): 69.

<sup>42</sup> Krugman, "The Myth," 70.

<sup>43</sup> *Ibid*, 71.

Looking back to China, its manufacturing sector wages have risen rapidly and its surplus labor has diminished. As a result, China's economy now faces extraordinary pressure to upgrade its industrial structure and to enter new and more capital and knowledge-intensive industries to maintain dynamic growth.<sup>44</sup> As China undergoes industrial upgrading to more sophisticated product markets, it will leave market space for other developing countries to enter into more labor-intensive industries.<sup>45</sup> However, most of China's private manufacturing factories still lag behind in human-capital and technological developments. The manufacturing sector lacks sufficient investment in R&D, and cultivating technological and innovative talents, not to mention independent brands, and supply and marketing networks.<sup>46</sup>

### **2.2 State financial policy obstructs private sector's productivity**

In China, financial lending policies have a very negative effect on private firms.<sup>47</sup> The policies are biased toward the state sector leaving private companies with many difficulties accessing financing. The resulting financial repression has profound effects on the private sector's ability to thrive.<sup>48</sup> While large state-owned enterprises and private firms take up much of bank credit and are the main issuers of corporate bonds and equity placements, smaller firms, especially those in the private sector, face significant constraints in accessing capital markets.<sup>49</sup> The big four banks have lending practices and a regulatory framework that favor the state owned enterprises over the private firms.<sup>50</sup>

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<sup>44</sup> Lin, J. and Treichel, V. (2012) Learning from China's Rise to Escape the Middle-Income Trap. A new structural economics approach to Latin America. Policy Research Working Paper No. 6165. Washington, DC: *World Bank* 1.

<sup>45</sup> Ibid.

<sup>46</sup> Hangyan Zhang, "How to revive the manufacturing sector?" *China Daily*, last modified December 20, 2016. accessed November 22, 2017, [http://usa.chinadaily.com.cn/opinion/2016-12/20/content\\_27716295.htm](http://usa.chinadaily.com.cn/opinion/2016-12/20/content_27716295.htm)

<sup>47</sup> Jahangir Aziz and Cui Li, "Explaining China's Low Consumption: The Neglected Role of Household Income," 2007 *International Monetary Fund* 07, no. 181 (July 2007): 4.

<sup>48</sup> Liu, Corporate China 2.0: The Great Shake Up 92.

<sup>49</sup> Aziz and Li, "Explaining China's," 9.

<sup>50</sup> Ibid.

As a result, the lack of state financial subsidies makes the private sectors have to save their own money to promote their businesses, which has hindered their technical evolution and growth in the global marketplace. Moreover, enterprise investment relied more on self-retained earnings and saving costs of enterprises is the only way for private sectors to stay profitable.<sup>51</sup>

### **3. Low domestic consumption is part of economic downturn**

Despite China's remarkably high growth during 2000-2010, the share of consumption in total expenditure has been very low.<sup>52</sup> As a proportion of GDP, private consumption has fallen from 49% in 1990, to 45% in 2000, to 29% in 2011.<sup>53</sup> The share of household consumption in GNP, which has fallen to below 40 percent in 2005, despite the remarkable pace of sustained high economic growth.<sup>54</sup>

Lardy (2008) measures the implicit tax that households are forced to pay because of the suppressed interest rate policies and calculated the implicit tax imposed on households by the decline in real rates of return on savings deposits.<sup>55</sup> He cites an example of the first quarter of 2008 when households received the same real rate of interest on their net Renminbi-denominated savings deposits as in 2002.<sup>56</sup> Household deposits at the end of the first quarter of 2008 stood at RMB 19.1 trillion while household borrowing stood at RMB 5.3 trillion, making their net deposits RMB 13.8 trillion.<sup>57</sup> The estimated implicit tax on these deposits is RMB 255 billion

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<sup>51</sup> Dennis Tao Yang, Junsen Zhang, and Shaojie Zhou, "Why Are Saving Rates So High in China?," *Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor*, no. 5465 (January/February 2011): 11-12.

<sup>52</sup> Arslan Razmi, "Is the Chinese Investment- and Export-Led Growth Model Sustainable? Some Rising Concerns," *Department of Economics – University of Massachusetts Amherst*, 2008, 4.

<sup>53</sup> Frank Van Lerven, "Money Creation: explaining what's happening In China?" *Positive Money*, Sept. 1, 2015.

<sup>54</sup> Aziz and Li, "Explaining China's," 9.

<sup>55</sup> Lardy, Nicholas. "Financial Repression in China." *Peterson Institute for International Economics*. Policy Brief. September 2008, 2.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

(\$36 billion), the equivalent of 4.1 percent of GDP, in the first quarter of 2008.<sup>58</sup> This implicit tax is more than three times the proceeds from the only tax imposed directly on households—the personal income tax.<sup>59</sup>

Moreover, Bai, et al. (2001) and Dennis Tao Yang, Junsen Zhang, and Shaojie Zhou (2009) also argue that a combination of suppressed interest rates and wages, strict capital controls, low land rentals and state control of the banking system allows the government to increase its net revenue by reducing interest expenses.

These repressive financial policies in turn have played a significant role in promoting the propensity of Chinese households to save.<sup>60</sup> Chinese household savings have risen from 16% of GDP in 2000 to 23% of GDP in 2008.<sup>61</sup> The rise in household savings is the result of two competing influences.<sup>62</sup> From 1992 to 2008 there was a 10 percentage point decline in the household income share of GDP and a 10 percent point increase in the average propensity to save from household disposable income.<sup>63</sup> Together, these two trends have led to the marked decline in household consumption from 55% of GDP two decades ago to 33% in 2009.<sup>64</sup>

Zhuliang James Zhang (2011) notes that the root of the savings propensity has been hotly debated in the literature with suggested causes including income uncertainties engendered by the transition to the market economy, limited availability of instruments to borrow against future incomes to finance purchases, lack of international portfolio diversification, a severely lacking

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<sup>58</sup> Ibid.

<sup>59</sup> Lardy, Nicholas. "Financial Repression" 4.

<sup>60</sup> Yang, Zhang, and Zhou, "Why Are Saving, 26.

<sup>61</sup> Ma, Guonan, et al. "China's high saving rate: myth and reality." *Bank of International Settlements Working Papers*. #312. 2010.

<sup>62</sup> Ibid.

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

and under-funded social safety net, and an aging society.<sup>65</sup> Of these, recent literature has pointed to future income uncertainty due to suppressed incomes and the lack of a viable social safety net as the two core causes for high precautionary saving.<sup>66</sup>

To prove the idea of the phenomenon of “investment/consumption imbalance”, a clear way is to look at the traditional formula for GDP, which is as follows:

$$Y=C+I+G+NX$$

where *Consumption (C)* represents private-consumption expenditures by households and nonprofit organizations, *Investment (I)* refers to business expenditures by businesses and real estate purchases by citizens, *Government Consumption (G)* denotes investment and expenditures on public goods and services by the government, and *Net Exports (NX)* represents a nation’s exports minus its imports.

### **Investment (I) - The fixed capital investment in China**

*Industries and manufacturing:* Since the fixed-asset investment holds a key role in the economic growth and performance of the People’s Republic of China (PRC), and fixed capital formation has taken up roughly one third of gross domestic product (GDP) and kept a double digit growth on average, albeit with remarkably volatile dynamics.<sup>67</sup>

Many industrial sectors, including steel and chemical products, private enterprises witnessed rapid expansion. From 2003-2010, the share of heavy industry in total industrial output increased

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<sup>65</sup> Yang, Zhang, and Zhou, "Why Are Saving", 26.

<sup>66</sup> Ibid.

<sup>67</sup> Andong Zhu and David M. Kotz, "The Dependence of China's Economic Growth on Exports and Investment," *School of Marxism of Tsinghua University, Economics Department of University of Massachusetts Amherst*, July 2010, 23.

from 55 percent in 2002 to 67 percent in 2010.<sup>68</sup> At the same time, manufacturing investment made up 16 percent of total investment.<sup>69</sup>

However, the massive investments in these sectors are reaching the point of diminishing returns.

*Real Estate:* There is extremely high and excessive investment in real estate. Real estate has been a key engine of China's rapid growth in the past decades. From 2002-2017, house prices more than doubled and in some big cities in the eastern areas, such as Shanghai, Beijing, Nanjing and Hangzhou, prices more than tripled. By 2005, the real estate bubble became noticeable, was not controlled, and further expanded into the so-called "second-front cities".<sup>70</sup> The results indicate that the bubble is about 25 percent of the equilibrium value implied by the fundamentals at the end of 2009. The bubble is particularly huge in the cities in the southeast coastal areas and special economic zones.<sup>71</sup>

Distortions render China's property market susceptible to both price misalignment and overbuilding. On the supply side, the market is distorted by local governments' control over land supply and their reliance on land sales to finance spending. On the demand side, the market is prone to overvaluation—housing is attractive as an investment instrument given a history of robust capital gains, high savings, low real deposit interest rates, a lack of alternative financial assets, as well as capital account restrictions.<sup>72</sup> When many households face a policy regime of financial repression with implicit taxes and low real rates of return on their savings deposits,

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<sup>68</sup> Mark Magnier, "As Growth Slows, China Highlights Transition From Manufacturing to Service," *Wall Street Journal*, January 19, 2016, 1, accessed November 22, 2017.

<sup>69</sup> Ibid.

<sup>70</sup> Yu Kong, John L. Glascock, and Ran Lu-Andrews, "An Investigation into Real Estate Investment and Economic Growth in China: A Dynamic Panel Data Approach," *sustainability, MDPI*, January 15, 2016, 5.

<sup>71</sup> Aziz and Li, "Explaining China's," 3.

<sup>72</sup> Martin North, "Assessing China's Residential Real Estate Market," *Digital Finance Analytics Blog*, last modified November 17, 2017, accessed December 6, 2017.



purchasing real estate might be the only stable way for people to invest their money to avoid its low rate saving through financial repression.<sup>73</sup>

**Government Consumption (G):**

Government budgetary consumption is still used as a major fiscal policy tool and this has enabled the State to underwrite enormous consumption in infrastructure, housing, new cities, state-owned enterprises (SOEs), space programs, national defense and the like.

However, this strategy has caused a low-multiplier effect, which did not put enough government consumption for social welfare payments and many economists argue that this has slowed the growth of a consumer economy. The lack of government investment for social welfare development depresses domestic household consumption.

For example, Chinese government spending is only around 3 percent of GDP on health and education, a rate that is one of the lowest in the world. The low government spending in these areas adds additional financial burdens to Chinese households.<sup>74</sup>

Through looking at the government's disposable income, which is mainly from properties, taxes on all production, income taxes, and social insurance revenue but minus labor compensations, it has risen from 1.608 trillion RMB in 1999 to 6.308 trillion RMB in 2007<sup>75</sup> due to increased tax revenue with lower social welfare spending. Among the 1.081 trillion RMB of social insurance

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<sup>73</sup> Qing Zhu and Xiao Hu Wang, "Structural Changes of Public Expenditures in China," *J. of Public Budgeting, Accounting & Financial Management* 23, no. 4 (Winter 2011): 581.

<sup>74</sup> Zhuliang Zhang, "Interest Rate Policy in China: The Impact of Suppressed Deposit Rates on Household Income from 2000-2007," *Undergraduate Economic Review* 8, no. 1 (2011): 30.

<sup>75</sup> Yang, Zhang, and Zhou, "Why Are Saving," 14.

fees in 2007, it only spent 1.028 trillion RMB on social welfare payments, social insurance provisions, and other transfers.<sup>76</sup>

High investments diverted from social welfare causes resulted in lower social welfare development and dampened people's outlook into an uncertain future. Therefore, to keep the current household income favorable in the face of such uncertainty, they save a lot.

Prasad (2010) found that over half of the increase in China's urban households' savings rate can be traced to the main causes mentioned above: the rising income uncertainty of future income and pension reforms resulting in a reduced social safety net.<sup>77</sup> Thus, households have responded to increased future income uncertainty by saving more in order to adjust their buffer stock of savings to the riskier environment,<sup>78</sup> and it has caused a huge decline of household consumption in China.

#### **4. Fiscal policies to stimulate economic growth**

The Chinese government had long proposed policy plans to stimulate economic growth, such as the "Twelfth Five-year Plan," (Implemented by the government from 2011 to 2015). It implemented several anti-cyclical macro-fiscal stimulus policies to enhance the economic growth potential through promoting social consumption, thus adjusting the economic structural imbalance.<sup>79</sup>

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<sup>76</sup> Ibid, 15.

<sup>77</sup> Zhang, "Interest Rate," 16.

<sup>78</sup> Ibid.

<sup>79</sup> Xinhua News, "Major Achievements During 12<sup>th</sup> Five-Year PLAN (2011-2015), *Xinhua News*, last modified March 7, 2011, accessed November 22, 2017.

#### 4.1 Consumption-Driven Economic Growth

A number of key goals in the 12th FYP were directed at moving the economy away from investment-driven and export-led growth, raising domestic consumption, and narrowing income inequality.<sup>80</sup> These goals included:

1. 7 percent annual GDP growth<sup>81</sup>
2. 4 percent increase of the service sector as a percentage of GDP by 2015.<sup>82</sup>
3. An increase in annual urban disposable income to >26,810 Renminbi (RMB) (US \$4,143) and annual rural disposable income to >8,310 RMB (US \$1,284) by 2015.<sup>83</sup>
4. An expansion of urban insurance coverage by 100 million people by 2015.<sup>84</sup>
5. Construction of 36 million new housing units to increase the availability of affordable urban housing.<sup>85</sup> The central government has already pledged to build 10 million units of government-subsidized housing in 2011, allocating 103 billion RMB from the central government budget, 400-500 billion RMB from the local governments, and expecting commercial developers to contribute 500-900 billion RMB for the 1.3 trillion RMB project.<sup>86</sup>

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<sup>80</sup> "Central Economic Work Conference Convened in Beijing, December 3 to 5," *People's Daily*, December 6, 2004, <http://www.people.com.cn> .

<sup>81</sup> Report on the implementation of the 2011 plan for national economic and social development and on the 2012 draft plan for national economic and social development, National Development and Reform Commission (Beijing, China: *Fifth Session of the Twelfth National Peoples Congress*, 2012), 5.

<sup>82</sup> Ibid.

<sup>83</sup> Report on the implementation of the 2016 plan for national economic and social development and on the 2017 draft plan for national economic and social development, National Development and Reform Commission (Beijing, China: Delivered at the *Fourth Session of the Twelfth National People's Congress* on March 5, 2017), 7.

<sup>84</sup> Ibid.

<sup>85</sup> The government hopes to increase the total of urban households living in partially government state-subsidized housing from 11 percent in 2007 to 20 percent by 2015. Jamil Anderlini, "Housing subsidies at heart of Beijing's new deal", *Financial Times*, May 31, 2011.

<sup>86</sup> Huang Yiping, "The United States and China: The Next Five Years," *Brookings Institute*, Washington, DC, May 19, 2011.

#### **4.2 Small private enterprise support**

Meanwhile, the central government started the Work Plan on Reducing the Costs on small private Enterprises in the Real Economy in order to constantly improve their competitiveness and market opportunities. The the 12th FYP focused on reducing the tax burden of businesses and raised VAT and business tax thresholds for small and micro businesses.<sup>87</sup> Until 2016, at the conclusion of the 12th FYP, across-the board implementation of trials to replace business tax with VAT reduced the tax burden on businesses by 573.6 billion RMB.<sup>88</sup> In addition, industrial enterprises with annual revenue of 20 million RMB or more from their main business operations spent 74.1 billion RMB less on interest payments than they did in previous years.<sup>89</sup> Meanwhile, transportation costs were cut by 6 billion RMB as a result of trials of drop and pull transport, by 29 billion RMB as result of reductions and exemptions of expressway tolls for fresh agricultural products.<sup>90</sup>

#### **4.3 Relaxing state control of investment and financing system:**

The government used the public-private partnership (PPP) model and other measures such as granting franchise and subsidizing private investment to encourage and guide the involvement of nongovernmental capital in the construction and operation of infrastructure and public utilities.<sup>91</sup>

Until 2016, at the conclusion of the 12th FYP, the non-governmental sourced investment has increased to 61.2% (excluding rural households) of GDP.<sup>92</sup>

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<sup>87</sup> Report on the implementation of the 2011 plan for national economic and social development and on the 2012 draft plan for national economic and social development, National Development and Reform Commission (Beijing, China: *Fifth Session of the Twelfth National Peoples Congress*, 2012), 5.

<sup>88</sup> Report on the implementation of the 2016 plan, 7.

<sup>89</sup> Ibid, 9.

<sup>90</sup> Ibid, 13.

<sup>91</sup> Report on the implementation of the 2014 plan for national economic and social development and on the 2015 draft plan for national economic and social development, National Development and Reform Commission (Beijing, China: Delivered at the *Fourth Session of the Twelfth National People's Congress*, 2015), 6.

<sup>92</sup> Report on the implementation 2016, 7.

The Chinese government made the development of a “harmonious society” a key priority for its administration, and the 12th FYP continued that focus under the rubric of “inclusive growth,” which meant spreading the benefits of economic growth to a wider community.<sup>93</sup> Interestingly, the 12th FYP Guidelines previous creed of “Strong State, Wealthy People” (国强民富 or guoqiang minfu) was edited into “Wealthy People, Strong State”, (民富 国强 or minfu quoqiang), implying that “Wealthy People” was now the greater priority.<sup>94</sup> Improved livelihoods were in turn expected to boost consumption as a percentage of GDP growth, a key goal for the 12th FYP.

### **5. Despite “Twelfth Five-year Plan,” GDP still fell**

All of these policies aimed to increase economic growth, strike a balance between the proportion of consumption and investment in the GDP structure. But in general, these series of policies introduced by the government did not effectively increase consumption. The rate of economic growth still continued to fall from 10.4% in 2011 to 6.7% in 2016.<sup>95</sup>

#### **5.1 What is wrong of the “Twelfth Five-year Plan?”**

As economist Tyler Cowen writes, “China’s transition from an investment-driven growth and the prominence of manufacturing – relying on cheap local inputs (labour, capital, energy, land), foreign technology and foreign demand – to a domestic consumption-driven growth model, with a dominant tertiary sector and high local innovation capabilities, is not a simple, linear, or brief

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<sup>93</sup> “China’s 12th Five-Year Plan-How it actually works and what’s in store for the next five years,” *APCO Worldwide*, September 10, 2010.

<sup>94</sup> *Ibid.*

<sup>95</sup> Li Yongyou, Pei Yu “Public Expenditure and National Output: An Empirical Analysis Based on Wagner's Law,” *Journal of Finance and Economics*, Vol. 131 No. 17 (July 2017).

endeavor.”<sup>96</sup> Consumption, services have not been strong enough to offset the decline in manufacturing and construction.<sup>97</sup>

Lin Yifu further breaks from the economic consensus when he advocates for what China should do: growth should continue to be led by investment rather than consumption.<sup>98</sup> One of the biggest mistakes it is making today is to pursue so-called “consumption-driven” growth.<sup>99</sup> The myth here – that everyone in the market seems to buy into – is that China invests too much and growth can only be maintained if it shifts to a consumption-driven model instead.<sup>100</sup> Lin’s fear is that consumption without investment — especially investment in industrial upgrading, environmental protection, tech innovation, and infrastructure improvement — will restrain productivity growth.<sup>101</sup> Without healthy productivity growth, incomes will remain low and therefore the expected consumption-led growth won’t materialize.<sup>102</sup> Moreover, some of the Chinese specialists state that the artificial stimulation of consumer spending could be more dangerous than investment, providing examples from the 1997-1998 Asian financial crisis and from the global collapse of 2008-2009.<sup>103</sup>

The Development Bank of Singapore Group Research Institute has also put forward a similar question to Chinese economy:

*“In world economy, since when did consumption ever drive growth? When the industrial revolution took off in the 18th century? When the US laid its railroads*

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<sup>96</sup> Tyler Cowen, “A simple primer for understanding China’s downturn,” *Marginal Revolution*, September 2, 2015.

<sup>97</sup> Ibid.

<sup>98</sup> Cardiff Garcia, “China and traditional industrialisation-led development: the world was not enough,” *The Economic Journal*, January 22, 2016.

<sup>99</sup> DBS Group Research, “Enduring themes in global economic mythology,” *The Development Bank of Singapore*, August 24, 2017.

<sup>100</sup> Cardiff Garcia, 2016.

<sup>101</sup> Garcia, “China and traditional, 6.

<sup>102</sup> Ibid.

<sup>103</sup> Sarmiza Pencea and Iulia Monica Oehler-Sincai, “Investment-led development in China – From past accomplishments, To future challenges.” 93.

*and interstate highways in the 19th and 20th? When the Asian Tigers roared after WWII? No. All these growth phases were driven by massive amounts of saving and investment, not the purchase of watches and sports cars and nights on the town.*<sup>104</sup>

Therefore, not the axiom “spend more and invest less” should be the solution for rebalancing the Chinese economy, but the quality of investment in high technology and education, in order to increase the total factor productivity.<sup>105</sup> Other studies underscore that China needs to increase the efficiency of input use, to innovate and make the shift to higher value services.<sup>106</sup> Still, investment should continue to play a significant role.

With any doubt, the current economic development strategy can no longer drive the Chinese economy into long term rapid growth by either building a consumption-driven economic growth model or maintaining a current investment-driven model. Further aggressive fiscal policy and loose monetary policy (e.g., interest rate cut, and the Chinese version of quantitative easing)<sup>107</sup> to retain a high investment rate will not generate a high GDP growth. China’s economic growth entered into a new stage, characterized by a slower economic growth and numerous pending structural challenges.<sup>108</sup>

### **6. SOEs as a key role in China's economic problem**

Corporate governance reform in China is one of the key tasks of SOEs reform and its approach was based on the argument that domestic investment mainly reflects government behavior, because the investment of SOEs makes up of one third of domestic investment, accounting for

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<sup>104</sup> DBS Group Research, "Enduring themes."

<sup>105</sup> Cai, P., 2014. Does China over invest and under spend? *China Spectator*, March 21.

<sup>106</sup> Zhu, A., Kotz, D. M., 2011. The Dependence of China’s Economic Growth on Exports and Investment, *Review of Radical Political Economics*, 43(1), 9–32.

<sup>107</sup> Liu, 20.

<sup>108</sup> Liu, Corporate China 2.0: The Great Shake Up 19.

more than 40 percent of total GDP.<sup>109</sup> SOEs are the main tool to boost national economic development and growth in China. However, they are seen as being bloated in size and inefficient while commanding significant resources but also low productivity and high debt.<sup>110</sup>

Research on the structural problems of the SOEs mainly deals with the inefficacy of financial mechanisms in the Chinese economy and the economic behavior of SOEs to see whether the functional corporate governance shows healthy progress in Chinese economic development and growth. The SOEs' performance in the Chinese economy is a useful indicator with which to begin.

### **6.1 Central government authorizes SOEs to lead the investment-driven strategy in China**

With heavy state banks' funding, the state-owned enterprises (SOEs) are primed to dominate Chinese economic growth. Looking at the list of the Chinese companies in the world's 500 largest companies, the Future Global 500 companies, one sees that there are 98 total mainland Chinese companies in this list, and 88 of these Chinese companies are SOEs.<sup>111</sup> These centrally owned firms, or yangqi, controlled more than \$5.6 trillion in assets at the end of 2013, including more than \$690 billion abroad.<sup>112</sup> Moreover, the SOEs have many privileges through government protection, such as having preferential access to external financing, low financing costs,

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<sup>109</sup> This information is derived from the *State Department's Office of Investment Affairs' Investment Climate Statement*. Any questions on the ICS can be directed to EB-ICS-DL@state.gov, ed., "China - 7-State Owned Enterprises," export.gov, last modified July 25, 2017, accessed December 9, 2017. <https://www.export.gov/article?id=China-State-Owned-Enterprises>

<sup>110</sup> Meng Jie, ed., "Economic Watch: China's SOEs move ahead on market reform," *Xinhua News*, last modified July 26, 2017, accessed November 22, 2017, [http://news.xinhuanet.com/english/2017-07/26/c\\_136474847.htm](http://news.xinhuanet.com/english/2017-07/26/c_136474847.htm)

<sup>111</sup> Liu, *Corporate China 2.0: The Great Shake Up* 18.

<sup>112</sup> Guoziwei 'modi' zhongyang jingwai zichan" [SASAC "Feels Bottom" on Central State-Owned Enterprises' Overseas Assets], *Xinhua News*, March 18, 2015.



government contracts and bailouts, tax benefits, government subsidies and favorable policies, such as soft budget constraint.<sup>113</sup>

### ***6.2 The early SOEs' reform and Dual-track system in the 1980s***

In the 1980s, China moved to corporatize SOEs into a competitive market economy and improve their governance mechanism<sup>114</sup> to let these big state enterprises become joint-stock corporations, sold shares to public and listed them on the Shanghai Stock Exchange. They still remained under state control, however.<sup>115</sup>

The SOEs in the early of 1980 did not have many market demands to target. China's initial departure from the planned economy was to bridge between the two with a coexistence of a traditional planned economy and market channels for the allocation of a given good.<sup>116</sup> This "dual-track system" was able to keep the central governmental as the main national economic target while opening the market economy. Rather than dismantling the plan, reformers acquiesced to a continuing role for the plan in order to ensure stability and guarantee attainment of some key government priorities (in the Chinese case, primarily investment in energy and infrastructure).<sup>117</sup> Even until today, when China has transformed from a planned economy into a relative market economy, the dual-track system still exists for the government as a tool to reach its national economic targets while discounting the role of market merchandise. The central government's uninterrupted financial support of SOEs makes state-owned enterprises the dominate financial priority. With vast governmental financing and its prior policies, SOEs are

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<sup>113</sup> Li, Lin, and Selover, "Chinese State-owned," 25.

<sup>114</sup> Naughton, *The Chinese*, 298.

<sup>115</sup> *Ibid*, 302.

<sup>116</sup> *Ibid*, 120, 335.

<sup>117</sup> *Ibid*, 126.

able to distort marketplace to their advantage without worrying about “normal” demand market forces in the economy.

### **6.3 Politburo/corporate leadership corrupt marketplace**

Since the behavior of SOEs mostly depends on the delegation of power in the Chinese government, SOEs’ economic targets are not fully market driven. SOEs’ performance diminishes in the absence of effective external monitoring mechanisms.<sup>118</sup> In China, the central government considered each province’s GDP growth rate as a factor to judge and grade each province’s progress of economic achievement. If one of the provinces could boast a relative higher GDP growth rate, the general secretary of that province would get a chance at political promotion. Even until today, the central government still uses this factor as a standard to judge a provincial governor's progress. As a result, the goal for SOEs in each provincial government is to boost the GDP growth rate as high as possible without any consideration of market demand. This incentivizes each provincial government to promote local economic expansion through investment without considering of potential costs.<sup>119</sup> Many large investments are not market behavior, but government practice, which leads the state-owned enterprises to turn a blind eye to the cost of project expansion. The capacity, production, and market share goals are not profitability or efficiency as to would follow the benchmarks of market supply.<sup>120</sup> The direct support from state banks for SOEs capacity growth through direct and indirect measures—

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<sup>118</sup> Liu, 111.

<sup>119</sup> Biliang Hu and Jian Zhuang, “Knowledge Work on Excess Capacity in the People’s Republic of China,” *Asian Development Bank*, July 2015, 9.

<sup>120</sup> “Overcapacity in China: An Impediment to the Party’s Reform Agenda,” *European Chamber of Commerce in China*, February 2016, 14.

including preferential loans, subsidies, and discounted resources for production, are estimated to lower financing costs 40 percent to 50 percent below the benchmark lending rate.<sup>121</sup>

“Under this kind of investment-led strategy, economic stimulus program appears to have been too large, too intensely focused on fixed assets capital intensive strategy.” Mukherji wrote in 2012.<sup>122</sup> The investments are sometimes misallocated by the government without a correct market-demand measurement.<sup>123</sup> The excess capacity led to deflation in output prices (Lin, 2014).<sup>124</sup> At the macroeconomic level, investment in inventories has been negative, signaling excessive production capacity (Zhang, 2006).<sup>125</sup> Also, the problem of industrial overcapacity in the contribution of GDP has shown a rule of diminished return of capital in economics and it has also shown a declining Return-On-Investment Capital rate (ROIC) in heavy industries.<sup>126</sup> Chinese SOEs started to face, sluggish demand, weak pricing, and high leverage<sup>127</sup> and SOEs profits have been steadily declining in recent years, falling 6.7 percent year-on-year in 2015 and 8.5 percent year-on-year in the first half of 2016.<sup>128</sup>

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<sup>121</sup> *International Monetary Fund*, “The People’s Republic of China: 2016 Article IV Consultation: Selected Issues,” August 2016, 38; Gabriel Wildau, “China’s State-Owned Zombie Economy,” *Financial Times*, February 29, 2016.

<sup>122</sup> *Business Insider News*, “China Stimulated Its Economy Like Crazy After The Financial Crisis ... And Now The Nightmare Is Beginning,” Nov 10 <http://www.businessinsider.com/chinas-excess-capacity-problem-2013-6>.

<sup>123</sup> Alexander Radygin, Yury Yury Simachev, and Revold Entov, “The state-owned company: “State failure” or “Market failure?” *Russian Journal of Economics*, 2015, 59.

<sup>124</sup> Jinghai Zheng, Arne Bigsten, and Angang Hu, “Can China’s Growth be Sustained? A Productivity Perspective,” *World Development* 37, no. 4 (08 7, 2008): 877.

<sup>125</sup> *Ibid.*

<sup>126</sup> Liu, *Corporate China 2.0: The Great Shake Up* 19.

<sup>127</sup> James Kyng, “Corporate Credit Shock Beckons for China,” *Financial Times*, January 26, 2016.

<sup>128</sup> Xinhua, “China’s SOE Profits Post Milder Decline,” July 25, 2016; Mark Magnier, “IMF Warns China of Risks of Mounting Corporate Debt,” *Wall Street Journal*, June 12, 2016.

#### **6.4 The overcapacity problem**

Overcapacity initially sustained China's economy through pricing and market advantages. These policies have distorted resource allocation and diverted investments from productive uses, resulting in damaging consequences for China's domestic economy at large.<sup>129</sup> (Table 3)

In China's steel industry, for example, 40 percent of domestic producers are state-owned.<sup>130</sup>

Chinese steel producers experienced losses of \$15.5 billion due to overcapacity in 2015.<sup>131</sup> This has led approximately half of China's medium and large-sized steel firms being unprofitable.<sup>132</sup>

Meanwhile, aluminum utilization rates in China have also seen declines, dropping to 76 percent in 2015, a two percentage point decrease from 2008 levels.<sup>133</sup> Of the world's six largest aluminum producers, two—Aluminum Corporation of China Limited (Chalco) and China Power Investment Corp. (CPI)—are Chinese SOEs.<sup>134</sup>

Aluminum	Copper	Paper and Pulp
Chemicals	Cotton	Power Generation Equipment
Cement	Glass	Rubber
Ceramic	Iron	Solar Panels
Coal	Oil Refining	Steel

*Table 3 Select Chinese Overcapacity*<sup>135</sup>

<sup>129</sup> "Overcapacity in China: An Impediment to the Party's Reform Agenda," *European Chamber of Commerce in China*, February 2016, 2.

<sup>130</sup> Tom Mitchell and Yuan Yang, "China Rails against Global 'Hype' on Overcapacity," *Financial Times*, June 6, 2016.

<sup>131</sup> "Chinese Steel Makers Suffer Heaviest Loss in 2015," *Xinhua News*, April 7, 2016.

<sup>132</sup> China Iron and Steel Association via CEIC database; *Xinhua News*, "Chinese Steel Makers Suffer Heaviest Loss in 2015," April 7, 2016.

<sup>133</sup> "Overcapacity in China: An Impediment to the Party's Reform Agenda," *European Chamber of Commerce in China*, February 2016, 3.

<sup>134</sup> Rusal, "Aluminum Producer." <http://www.rusal.ru/en/aluminium/manufacturers.aspx>.

<sup>135</sup> *Ibid.*

The state-owned enterprises' unmeted expansion of local construction under the conditions of extremely unmeted governmental funding resulted in the newly produced capacity that cannot be absorbed by the market. In the long run, the problem of over-capacity with uninterrupted cash flow had increased the pressure of debt problems in the Chinese economy. In the first quarter of 2016, corporate debt for all Chinese companies rose to 169 percent of GDP (up from 108 percent in 2008), compared to 72 percent in the first quarter of 2016 for the United States., which is considered having very high debt.<sup>136</sup> Dr. Lipton indicates that SOEs account for around 55 percent of corporate debt. According to Chinese regulators, nonperforming loans (NPLs) held by Chinese banks amounted to \$300 billion, or 2.15 percent of total loans, at the end of May 2016.<sup>137</sup> He concluded that Chinese SOEs are “essentially on life support,” warning that if the problem is not dealt with soon it could evolve into a larger crisis.<sup>138</sup> Since local government only focuses on maximizing the achievements but neglecting costs, once the excessive expansion of the production scale cannot be digested by the market, the loss can only be borne by the whole society.

### **6.5 How will China deal with the overcapacity problem?**

China's central government-administered state-owned enterprises (SOEs) have pledged to cut production overcapacity in some industrial sectors. For example, SOEs unveiled plans to cut its steel and coal capacity by at least 10% over five years, reducing potential global supply by 5% in early 2016.<sup>139</sup> However, the solution for how to deal with the current existed excessive capacities has become a very hard nut to crack for Chinese government. Since 2013, the Communist Party

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<sup>136</sup> “Credit to the Non-Financial Sector,” *Bank of International Settlements*, September 18, 2016.

<sup>137</sup> Jiang Xueqing, “Regulators Tighten Bank Risk Management, Warn on Asset Bubbles,” *China Daily*, July 8, 2016.

<sup>138</sup> David Lipton, “Rebalancing China: International Lessons in Corporate Debt,” *International Monetary Fund*, June 2016.

<sup>139</sup> “Making sense of capacity cuts in China,” *The Economist*, last modified September 9, 2017, accessed December 10, 2017.

started to outline the strategy and road map for comprehensive reforms to meet China's overcapacity challenges. One such solution is implement the "going out" strategy through the old "Silk Road" route, known as the "Belt and Road Initiative" plan to boost overseas economic demand and cooperation.<sup>140</sup> Since many BRI countries are in the "developing world" with infrastructure and construction projects, they provide opportunities for Chinese industry to sell their inventory abroad. If Chinese enterprises shift it out, it will be a win-win situation.<sup>141</sup>

It's the Chinese version of a Bretton Woods system, complete with its own monetary framework using RMB (yuan).<sup>142</sup> It has also been compared to the U.S. Marshall Plan, which provided export markets for new post-war North American industry.<sup>143</sup>

However, some economists think China's Belt and Road Initiative will not solve the problem for Chinese enterprises because many of the developing countries along the Belt and Road are politically volatile, economically vulnerable and the investment capital overseas cannot provide the stability or security necessary to see these projects through, nor guarantee that counterparts will hold on to their end of the bargain.<sup>144</sup>

In the next chapter, we review the Belt and Road Initiative to discover the advantages and challenges for SOEs during this large, international economic cooperation.

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<sup>140</sup> "China's overcapacity crisis can spur growth through overseas expansion," last modified January 7, 2014.

<sup>141</sup> Ibid.

<sup>142</sup> Simeon Djankov and Sean Miner, "China's Belt and Road Initiative Motives, Scope and challenges."

<sup>143</sup> Zhou, Jiayi, Karl Hallding, and Guoyi Han. "The Trouble with China's 'One Belt One Road' Strategy." *The Diplomat*. Last modified June 26, 2015.

<sup>144</sup> Ibid, 2-16.

## Chapter 2 - China's Belt and Road Initiative: Strategic rationales, risks, challenges & implications for SOEs

### **1. What is the Belt and Road Initiative?**

In the fall of 2013, President Xi Jinping officially announced the strategic framework of

building the “Silk Road Economic Belt” and a counterpart “21st Century Maritime Silk Road.”

The official name of this economic initiative is collectively referred to in abbreviated form in

Chinese parlance as the “Belt and Road Initiative” (BRI) – from the Chinese *yi dai yi lu* (一 带 一

路 ), literally One Belt One Road,<sup>145</sup> The Silk Road Economic Belt is a land route connecting

China with BRI markets through a network of rail lines, roads and airports, a modern-day

version of the ancient Silk Road trade route connecting China to the Mediterranean Sea.<sup>146</sup> The

New Maritime Silk Road runs through a vast sea area, starting from China's coast and reaching

Eastern Europe and East Africa through the South China Sea and Indian Ocean in one route, and

reaching South Pacific through the South China Sea in the other route.<sup>147</sup> Therefore, the Belt and

Road Initiative is a commitment to easing bottlenecks to trade by improving and building

networks of connectivity across Central, Western and Southern Asia, but also reaching out to the

Middle East as well as East and North Africa.<sup>148</sup> Paolo Magri writes that “This economic project

refers to what was historically called the Silk Road, stretching from China through Central

Asia.”<sup>149</sup>

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<sup>145</sup> Alessia Amighini, *China's Belt and Road: A Game Changer?* (Milano: ISPI, 2017), Introduction p 1.

<sup>146</sup> Fred Kleiterp and Clarence Wong, “China's Belt & Road Initiative: the impact on commercial insurance in participating regions” *Swiss Re Institute*, March 2017, 3.

<sup>147</sup> Kleiterp and Clarence Wong, “China's Belt & Road,” 5.

<sup>148</sup> Amighini, *China's Belt*, introduction 1.

<sup>149</sup> *Ibid.*

## MERICS China Mapping

## One Belt, One Road: With the Silk Road Initiative, China Aims to Build a Global Infrastructure Network

Projects completed and planned: June 2015

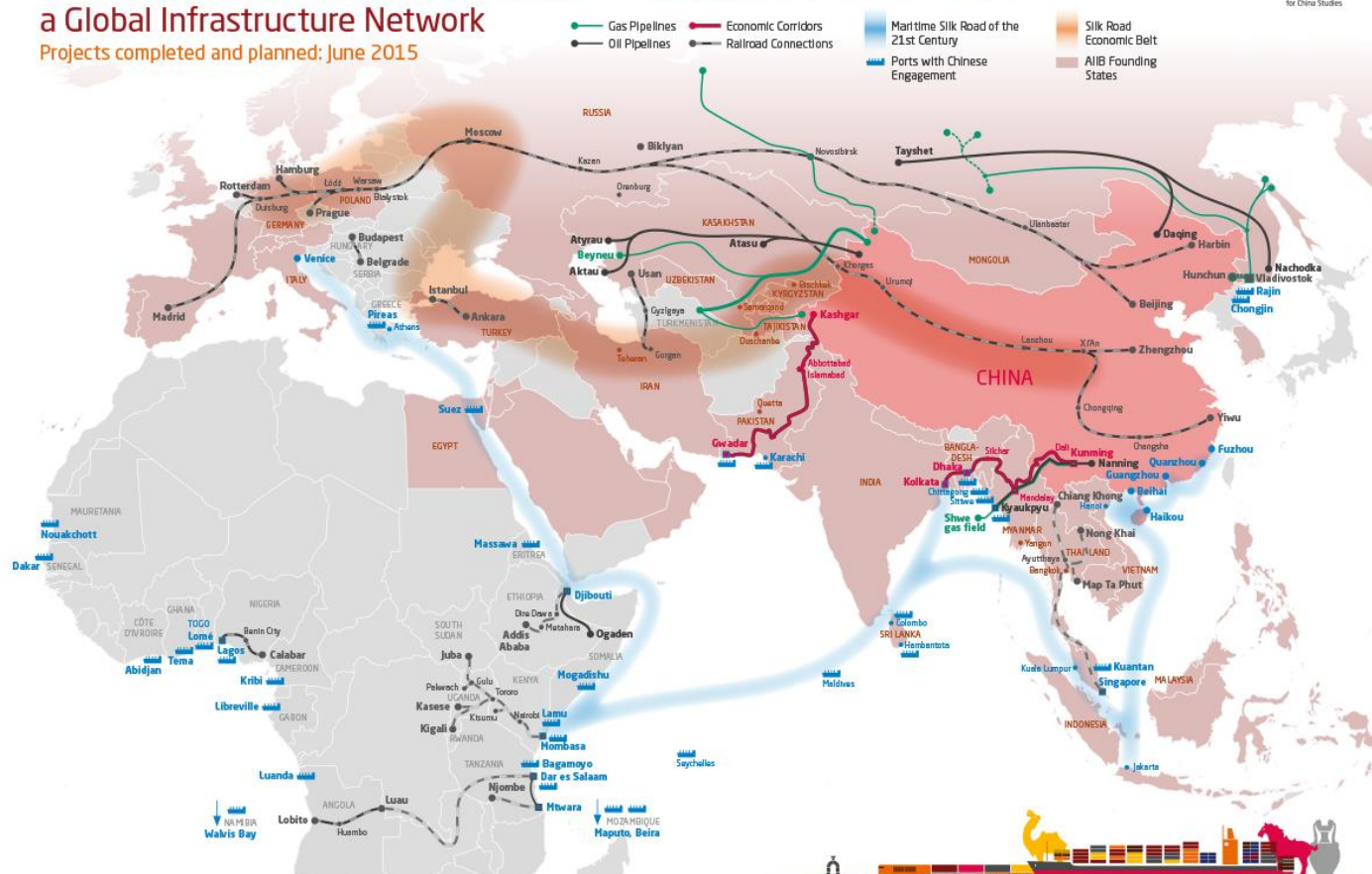


Figure 3 Source: Image from Roman Wilhelm/ MERICS June 2015<sup>150</sup>

Not a surprise, there is a plan to build a contemporary Silk Road economic corridor, and it will be much broader in scope than its predecessors. It will connect and strengthen economic capacity with South East Asia, Middle East, Eastern Europe as well as east coast of Africa<sup>151</sup> through building efficient transport conduits in various BRI countries which will create more effectively support supply chains and lower transportation costs.<sup>152</sup>

<sup>150</sup> <https://thediplomat.com/2015/09/chinas-silk-road-initiative-is-at-risk-of-failure> June 2015.

<sup>151</sup> Michael D. Swaine, "Chinese Views and Commentary on the 'One Belt, One Road' Initiative," Swaine, *China Leadership Monitor*, no. 47: 2.

<sup>152</sup> Kleiterp and Clarence Wong, "China's Belt & Road," 3.



## **2. Belt and Road Initiative is the current world's largest economic cooperation**

According to the proposed BRI development plan, there are 65 countries along the Belt and Road that have been mentioned as being eligible in this project.<sup>153</sup> The Global Sourcing Fung Business Intelligence Center has published a research paper, computation by Helen Chin, Winnie He, saying that the Belt and Road Initiative comprises roughly 62.3%, 30.0% and 24.0% of the world's population, world's GDP and world's household consumption, respectively, today.<sup>154</sup> Furthermore, the emerging markets in this initiative are very diverse in terms of economic and socio-political structures, and also cultural and religious backgrounds.<sup>155</sup> Economically, many BRI countries are low- to middle income countries, with per capita GDP ranging from less than USD \$1,000 to slightly over USD \$20,000.<sup>156</sup>

China's SOEs will play a primary role in infrastructure-related industries in the BRI focusing on infrastructure projects of building highways, railways, and ports etc. until 2017, about 50 Chinese state-owned corporate giants have invested or participated in nearly 1,700 projects in countries along the new BRI routes.<sup>157</sup>

As the main financial founder of the BRI, China will finance the various types of connectivity at the core of the initiative, supporting infrastructure projects in strategically located developing countries by extending huge loans to the host governments.<sup>158</sup> "The core of the initiative is China's capital abundance and efforts to export capital in the form of investment and loans

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<sup>153</sup> Industrial Cooperation between Countries along the Belt and Road (《“一帶一路”沿線國家產業合作報告》), *China International Trade Institute*, August 2015.

<sup>154</sup> Chin and He, "The Belt," 2.

<sup>155</sup> *Ibid.*

<sup>156</sup> Chin and He, "The Belt," 4.

<sup>157</sup> Wu Gang, "SOEs Lead Infrastructure Push in 1,700 'Belt and Road' Projects," *Caixin*, May 9, 2017.

<sup>158</sup> Brahma Chellaney, "China's Debt-Trap Diplomacy," *Project Syndicate*, January 23, 2017, <https://www.project-syndicate.org/commentary/china-one-belt-one-road-loans-debt-by-brahma-chellaney-2017-01?barrier=accessreg>.

abroad, with the PRC government proposing to push as much as \$1 trillion out of China through [BRI]. Included in this funding is a New Silk Road Fund of \$40 billion and, most significantly, as much as \$900 billion from the China Development Bank, under China's State Council, the highest executive body in the PRC government."<sup>159</sup> Most of the loans will be in transport facilities such as road, rail, port construction, which will cover the area of Asia, Eastern Europe and east Africa, as well as less developed parts of China.<sup>160</sup> China is once again using the investment-driven and capital-intensive strategy as it used in domestic economic development.

### **3. Non-BRI countries invited to invest**

In 2016, China launched a new multilateral development bank called the Asian Infrastructure Investment Bank (AIIB). The bank's stated goals are to synergize non-BRI financial partner resources with China's expertise in building infrastructure to help development in other parts of Asia and it is a key mechanism for building "infrastructure connectivity".<sup>161</sup> As of 2017, there were 57 countries that had submitted their applications and became the founding members of the AIIB. At the same time, the AIIB quickly began financing activities, and has now approved \$2 billion of loans for twelve infrastructure projects in member states (Table 4, Next page).<sup>162</sup> Swiss Re Institute has estimated that total investments in BRI projects (including but not restricted to infrastructure) up to the year 2030 will amount to around USD \$7.4 trillion, of which more than 80% will be in infrastructure.<sup>163</sup> China is the largest voting veto power has the shareholding of 30.34 per cent

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<sup>159</sup> Bert Hofman, "China's One Belt One Road Initiative: What we know thus far," *The World Bank*, December 4, 2015, <http://blogs.worldbank.org/eastasiapacific/china-one-belt-one-road-initiative-what-we-know-thus-far>

<sup>160</sup> Chellaney, "China's Debt-Trap".

<sup>161</sup> Christopher K. Johnson, "President Xi Jinping's 'Belt and Road' Initiative, A Practical assessment of the Chinese Communist Party's Roadmap for China's Global Resurgence," Center for Strategic & International Studies, March 2016, 18.

<sup>162</sup> Jeffrey D. Wilson D. Wilson, "What does China want from the Asian Infrastructure Investment Bank?" *Indo-Pacific Insight Series* 5 (May 2017): 8.

<sup>163</sup> Kleiterp and Clarence Wong, "China's Belt & Road," 5. Fred Kleiterp and Clarence Wong, "China's Belt & Road Initiative: the impact on commercial insurance in participating regions," *Swiss Re Institute*, March 2017, 8.

and it has retained 26.06 per cent of the voting rights for certain key decisions. The decisions in the AIIB where China has a veto power include: increasing the bank's capital, increasing the capital subscription of a member, expanding the operations of the bank, changing the size of the

Funding Date	Country	Name	Lead Lender/s	AIIB Involved at outset?	Total Loans	AIIB Loans
Jun 2016	Bangladesh	Power distribution system upgrading	AIIB	Yes	262	165
Jun 2016	Indonesia	Slum upgrading project	WB	No	1743	216.5
Jun 2016	Pakistan	Shorkot-Khanewal M-4 Motorway upgrade	ADB	No	273	100
Jun 2016	Tajikistan	Dushanbe-Uzbekistan road improvement	EBRD	No	106	27.5
Sep 2016	Pakistan	Tarbela-5 Hydropower extension	WB	No	823	300
Sep 2016	Myanmar	Myingyan CCGT power plant	IFC, ADB	No	137	20
Dec 2016	Oman	Railway system preparation planning	AIIB	Yes	60	36
Dec 2016	Oman	Duqm Port commercial terminal	AIIB	Yes	353	265
Dec 2016	Azerbaijan	TANAP Pipeline	WB	No	8600	600
Mar 2017	Indonesia	Dam Operational Improvement and Safety	WB	No	300	125
Mar 2017	Indonesia	Regional Infrastructure Development Fund	WB	No	406	100
March 2017	Bangladesh	Natural Gas Infrastructure upgrade	ADB	No	453	60
<b>Total</b>					<b>13516</b>	<b>2015</b>

Table 4. AIIB funded projects, April 2016<sup>164</sup>

board of directors, changing the structure of the board, appointing or removing the president, suspending a member; terminating the bank and distributing its assets; and amending the articles.<sup>165</sup>

#### **4 How does the BRI benefit China?**

##### **4.1 Political achievement**

The Belt and Road Initiative is China's new economic strategy aimed at further connecting its domestic market with the global market,<sup>166</sup> as well as a new diplomatic strategy to enhance China's foreign relations with countries along the belt and road.<sup>167</sup>

<sup>164</sup> Wijeratne et al., "Repaving the ancient," Page 8.

<sup>165</sup> Callaghan and Hubbard, "The Asian," 130.

<sup>166</sup> Daniel C. O'Neill, "One Belt, One Road, One Regime Type: The Limits of Chinese Influence in Developing States,"

Daniel C. O'Neill, University of the Pacific School of International Studies has analyzed several cases about China's political-economic relations with BRI countries. He has pointed how Chinese foreign aid and loans provide influence over authoritarian government leaders, securing protection for major investments by Chinese SOEs – investments necessary for China's continued economic development, a key pillar of the Chinese Communist Party's legitimacy.<sup>168</sup> This influence is often referred to as "soft power."

#### **4.2 Economic Industrial Relief**

While the central government's official statement said that the BRI is a welfare program from Chinese industry for the country's poorer neighbors, many analysts have discussed a range of more self-interested Chinese economic motives. A key motive behind the initiative is to mitigate the current overcapacity in Chinese heavy industries and construction sectors with the large infrastructure projects that the initiative would require. China's BRI strategy represents an option to investing abroad to use this excess capacity<sup>169</sup> In steel, aluminum, and cement; sustaining gross domestic product growth, which is needed to maintain social stability and to provide capital for struggling Chinese national and state-owned enterprises.<sup>170</sup>

#### **5 Risks and challenges for China's BRI**

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University of the Pacific School of International Studies, ISA International Conference 2017 Hong Kong, June 5, 2017, 3.62.

<sup>167</sup> Xie, Tao, "China's One Belt, One Road: Will it reshape global trade?" 2016.

<sup>168</sup> O'Neill, "One Belt," 16.

<sup>169</sup> Chhibber, Ajay. "China's One Belt One Road Strategy: The New Financial Institutions and India's Options." Cross-listed with the *National Institute of Public Finance and Policy*, New Delhi), March 2017, 2.

<sup>170</sup> Rolland, China's Eurasian Century? 95–108; Simeon Djankov, "The Rationale Behind China's Belt and Road Initiative," in *China's Belt and Road Initiative: Motives, Scope, and Challenges*, ed. Simeon Djankov and Sean Minder (Washington, DC: Peterson Institute of International Economics, 2016), 7–8.

The path to establishing BRI is not easy. Chinese firms must face unfamiliar systems. In each zone, they must adapt to the host country's political system, policies and laws, languages and cultures, etc. Also, since these zones are primarily located in developing countries, SOEs also have to face structural challenges, macroeconomic risk, political risk, security risk, legal and regulatory challenges, poor governance and corruption in partner states.<sup>171</sup>

### ***5.1 Political risks***

Political risk can be a major obstacle for any infrastructure scheme, especially cross-border projects. It is particularly problematic if foreign investors face not only potential change in government but also actual change in regime type, which could lead to a governing coalition with radically different policy preferences.<sup>172</sup> Potential leadership change in Angola, Thailand, Kazakhstan, Zambia, and Kenya is a source of general political and policy uncertainty.<sup>173</sup>

One particular example is when the negotiations to build a section of high-speed rail line from Kunming to Singapore temporarily broke down after Thailand refused to grant China development rights to adjacent land, and claimed to be able to get financing from Japan at better rates.<sup>174</sup> Wang Weixing writes that internal instability in Thailand led to the cancellation of a China-Thailand high-speed rail plan.<sup>175</sup>

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<sup>171</sup> Joel Wuthnow, "Chinese Perspectives on the Belt and Road Initiative: Strategic Rationales, Risks, and Implications," CHINA STRATEGIC PERSPECTIVES, 13, Center for the Study of Chinese Military Affairs Institute for National Strategic Studies National Defense University.

<sup>172</sup> O'Neill, "One Belt," 27.

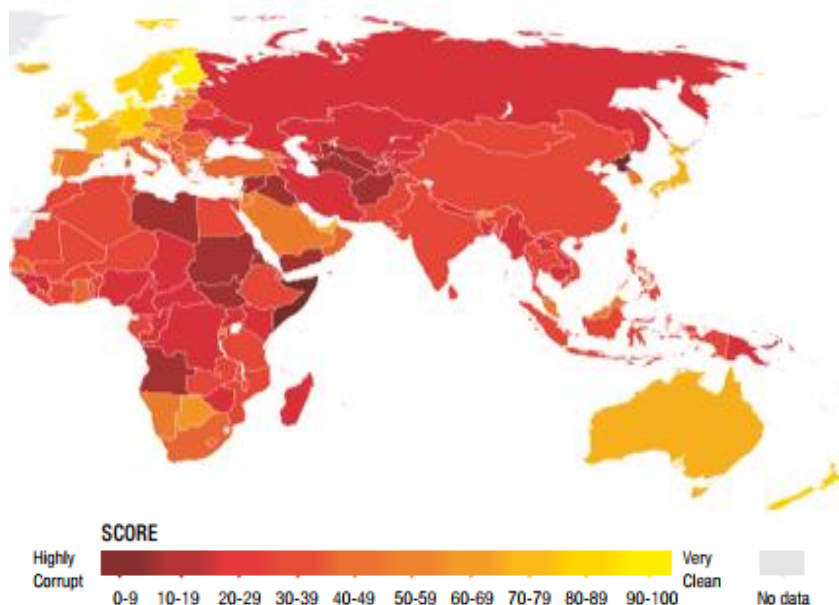
<sup>173</sup> Sze and Wu, "One Belt," 18.

<sup>174</sup> China's Silk Road Ambitions Face Obstacles," Reuters, 4 June 2016, <http://www.reuters.com/article/us-china-infrastructure-asean-insight-idUSKCN0YR010>

<sup>175</sup> Fu Mengzi and Xu Gang, "'One Belt, One Road': Progress, Challenges, and Responses [一带一路: 进展, 挑战与应对]," China International Studies [国际问题研究], no. 3 (2017)..

### **5.2 Corruption along the planned BRI**

Infrastructure projects are vulnerable to corruption. Based on expert opinion from the book of Corruption Perceptions Index 2015,<sup>176</sup> the 65 countries along the Belt and Road are considered corrupted according to their map. (Figure 4<sup>177</sup> right)



In Southeast Asia, corruption remains a

huge challenge. In India and Sri Lanka, leaders are falling short of their bold promises, while governments in Bangladesh and Cambodia are exacerbating corruption by clamping down on civil society.<sup>178</sup> In Afghanistan and Pakistan a failure to tackle corruption is feeding ongoing vicious conflicts, while China’s prosecutorial approach isn’t bringing sustainable remedy to the menace. This inability to tackle root causes holds true across the region.<sup>179</sup> In addition, Laos’ corruption is a key constraint at all levels: “The politically powerful avoid paying tax, accept ‘commissions’ for facilitating projects or awarding contracts, and pocket pay-offs for reducing charges, duties or taxes for family and friends.”<sup>180</sup>

<sup>176</sup> Rachel Beedow, ed., *Corruption Perceptions Index 2015* (n.p.: *Transparency International*, 2016). [https://www.iaca.int/images/news/2016/Corruption\\_Perceptions\\_Index\\_2015\\_report.pdf](https://www.iaca.int/images/news/2016/Corruption_Perceptions_Index_2015_report.pdf)

<sup>177</sup> *Ibid.*, 5.

<sup>178</sup> *Ibid.*, 11.

<sup>179</sup> *Ibid.*

<sup>180</sup> John Kidd and Frank-Juergen Richter, *Fighting Corruption in Asia: Causes, Effects, and Remedies* (New Jersey: *World Scientific*, 2003), 245.

In the Middle East, most countries have maintained serious corruption, and some (Egypt, Libya, Morocco, Syria and Tunisia) have deteriorated slightly. Political corruption in particular remains a huge challenge.<sup>181</sup>

In Eastern Europe, Ukraine also does badly, as the government drags its heels on reform.<sup>182</sup> In Hungary, Poland and Turkey, politicians and their cronies are increasingly hijacking state institutions to shore up power, a worrying trend also affecting the Balkans.<sup>183</sup> Also, Russia uses corruption to infiltrate not only the political system, but especially their country's economy. Non-transparent privatization of major economic objectives allows Russia to infiltrate its capital into the economy, or to take control of enterprises it sees as competitors, and weaken them. Yet the main drive of corruption in these countries is not Russia but local elites, most of them with direct ties or the same people from the former (communist) regime.<sup>184</sup>

### **5.3 Corruption within China**

Corruption is considered as one of the biggest hurdles facing the Chinese government, as it has the effect of thwarting economic growth by perpetuating poverty and income inequality, and discouraging foreign investments into the country.<sup>185</sup> Also, corruption is a major problem for business in China.<sup>186</sup> Regionally, corruption follows power and money.<sup>187</sup> Reports of bribes were most common in the Beijing Region, where officialdom is concentrated, and least so in the West.<sup>188</sup> (Fig 5, Next page) In fact, the incidence of corrupt payments was above average in all

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<sup>181</sup> Beddow, Corruption Perceptions, 15.

<sup>182</sup> Ibid, 13.

<sup>183</sup> Westcott, C. (2001). Combating corruption in Southeast Asia. Manila, Philippines: *Asian Development Bank*.

<sup>184</sup> Beddow, Corruption Perceptions.

<sup>185</sup> Yin, Xiangru, "An Analysis Of Corruption In China: The Guanxi Network Of Chinese High Level Officials And Governors" (2017). *International Development, Community and Environment (IDCE)*. 140.

<sup>186</sup> Craig Charney and Shehzad Qazi, "Corruption in China: What Companies Need to Know," *Charney Research*, January 15, 2015.

<sup>187</sup> Ibid, 2.

<sup>188</sup> Ibid.

the more developed and dynamic regions—Beijing (43%), Guangdong (39%), Chongqing (38%), and Shanghai (34%)—and below average in the less developed and peripheral North (29%), Northeast (27%), Southwest (27%), and West (19%).<sup>189</sup>

Corrupt practices committed by insiders, especially those by the Chief Managers have harmed China's state-owned enterprises (SOEs).<sup>190</sup> Wenhao Cheng analysed 264 corruption cases involving SOEs from 1999 to 2001 and published by the Justice Network of the Procuratorate Daily (*Jiancha ribao zhengyi wang* 检察日报正义网), a government publication about corruption cases. He carried out an empirical study on subjects, motivations and patterns of corruption in SOEs.<sup>191</sup>

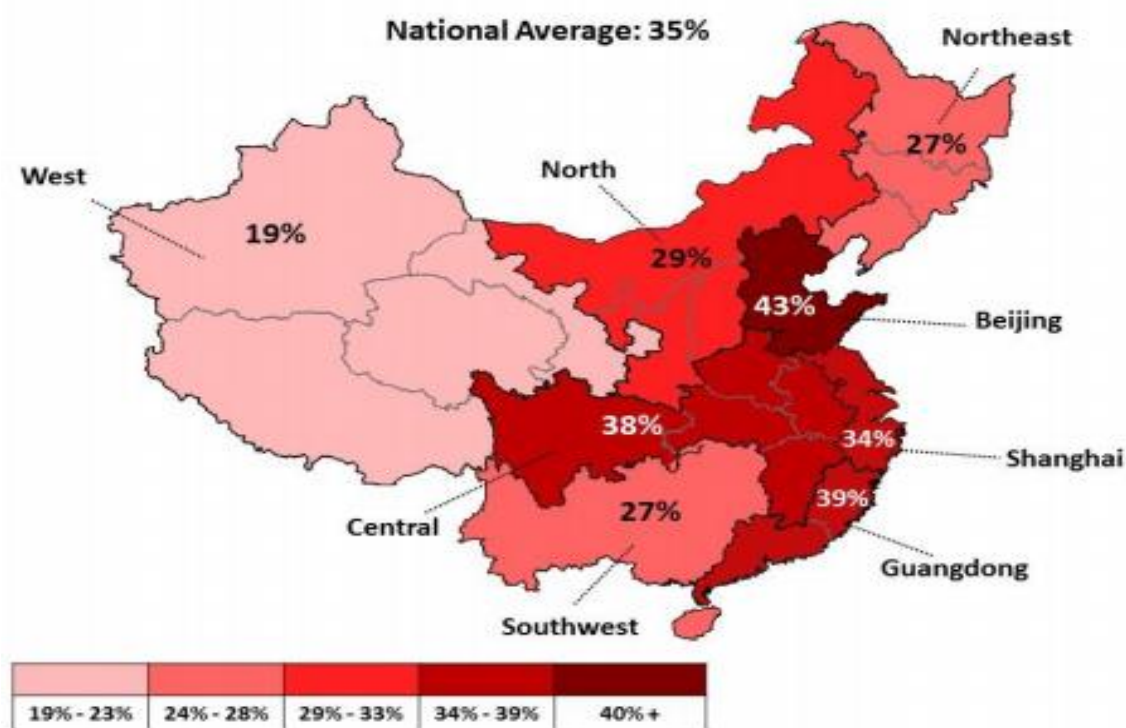


Figure 5: Reports of Corruption – By Region (Percent reporting paying bribes to operate)<sup>192</sup>

<sup>189</sup> Ibid.

<sup>190</sup> Wenhao Cheng, “An empirical study of corruption within China’s state-owned enterprises,” *The China Review*, Vol. 4, No. 2 (2004), pp. 55–80, 55.

<sup>191</sup> Ibid, 58.

<sup>192</sup> Ibid.



#### **5.4 Who benefits most from corruption?**

Local-level officials, who enjoy the power and regulatory control to help or make life hell for business in their domains, are also the main beneficiaries of corruption.<sup>193</sup> The second most-frequent takers were tax collectors (56%), who can make companies' tax bills swell or shrink. These results were fairly uniform across the country, underlining that bribery risks from local and tax officials are real.<sup>194</sup>

#### **6 The terrorism issue along the BRI countries**

A related issue is the impact of nontraditional security challenges on BRI projects. Perhaps the most commonly cited problem in the Chinese literature is the threat of terrorism and violent extremism.<sup>195</sup> Some scholars contend that extremists might oppose the BRI on ideological grounds, since economic development strengthens existing regimes, whereas radical groups often seek to subvert them.<sup>196</sup> Wang Yiwei also notes that development makes it harder for extremists to recruit new members and influence public opinion.<sup>197</sup> BRI projects and workers might make attractive targets for financially motivated attacks, including kidnappings for ransom and theft of property, such as drilling machinery, oil, and communications equipment.<sup>198</sup> Also, aside from

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<sup>193</sup> Charney and Qazi, "Corruption in China," 3.

<sup>194</sup> Ibid.

<sup>195</sup> Joel Wuthnow, "Chinese Perspectives on the Belt and Road Initiative: Strategic Rationales, Risks, and Implications," *China Strategic Perspectives*, 13, Center for the Study of Chinese Military Affairs Institute for National Strategic Studies National Defense University.

<sup>196</sup> Wang and Zhang, "Non-Traditional Security Challenges Facing One Belt, One Road," 22–23.

<sup>197</sup> Wang Yiwei, "One Belt, One Road": Opportunities and Challenges [‘一带一路’ 机遇与挑战] (Beijing: *Renmin University Press*, 2015), 114.

<sup>198</sup> Shi Xiehong, "The Influence of Central Asian Religious Extremists on 'One Belt, One Road' Construction and China's Response [中亚宗教极端势力对‘一带一路’建设的影响及我国的应对]," *World Religious Cultures [世界宗教文化]*, no. 2 (2016), 16–17. Shi is a postdoctoral researcher in the *Chinese Academy of Social Sciences (CASS) National Institute of International Strategy*.

direct losses, attacks could also impose indirect economic costs as firms spend more on security services and insurance premiums rise.<sup>199</sup>

There are also physical dangers facing BRI personnel at the operational level.<sup>200</sup> From a Chinese perspective, this is an evolving but not intrinsically new problem. Chinese firms and citizens have “gone out” in search of economic opportunities over the last two decades, often in dangerous developing world locations.<sup>201</sup> Chen Xiangyang, deputy director of CICIR’s Institute of World Politics, assesses that a reduction of U.S. forces will negatively impact the security situation in Afghanistan and “surrounding countries,” which could pose dangers for BRI projects in the region (including Pakistan).<sup>202</sup> Fu Mengzi and Lou Chunhao write that an intensifying India-Pakistan conflict, reflected in an October 2014 border incident in Kashmir that was the deadliest since 2003, will threaten projects under both CPEC (China Pakistan Economic Corridor) and the BCIM (Bangladesh–China–India–Myanmar Forum for Regional Cooperation) economic corridor.<sup>203</sup>

In some of these cases, Chinese workers have been subject to terrorist attacks, such as those which resulted in the deaths of 14 Chinese nationals in Afghanistan and Pakistan in 2004 and which led to suspended projects as Chinese workers were withdrawn.<sup>204</sup> These large-scale

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<sup>199</sup> Zhang Jinping, “The Threats to ‘One Belt, One Road’ of the Strategic ‘Eastward Shift’ of International Terrorist Forces [国际恐怖势力战略‘东向’对‘一带一路’的威胁],” in *Assessment of China’s Peripheral Security Situation*, 206.

<sup>200</sup> Ye Hailin, “India’s South Asia Policy and its Influence on China Promoting ‘One Belt, One Road’ [印度南亚政策及对中国推进‘一带一路’的影响],” *Indian Ocean Economic Research* [印度洋经济体研究], no. 2 (2016), 15.

<sup>201</sup> *Ibid.*

<sup>202</sup> Chen Xiangyang, “A Snapshot of External Security Risks of Building ‘One Belt, One Road’ [绸缪“一带一路”建设外部安全风险],” *Liaowang* [瞭望], April 14, 2014. Fu and Lou similarly argue that political strife, economic challenges, and “security chaos” in Afghanistan and Pakistan are difficult to address in the near term. Fu and Lou, “Some Thoughts on Building the 21st Century Maritime Silk Road,” 6.

<sup>203</sup> Fu and Lou, “Some Thoughts on Building the 21st Century Maritime Silk Road,” 6. The incident involved firing of shells from both sides, resulting in a reported five Indian and four Pakistani civilian casualties. “Kashmir: Nine Civilians Killed in India-Pakistan Border Firing,” BBC, October 6, 2014.

<sup>204</sup> Mathieu Duchâtel, Oliver Brauner, and Zhou Hong, *Protecting China’s Overseas Interests* (Stockholm: *Stockholm International Peace Research Institute I*, 2014), 41.

disruptions have led to the destruction of property and required Chinese government to carry out evacuations. Most famous is the 2011 evacuation of 35,000 Chinese citizens from Libya, though China conducted a dozen other evacuations between 2006 and 2014 in areas such as Thailand, Syria, and Vietnam.<sup>205</sup>

Lin Limin, director of CICIR's Foreign Strategy Research Center, assesses that the BRI traverses a "geopolitical black hole,"<sup>206</sup> marked by "unstable regimes."<sup>207</sup> This has led many investors to "turn back," and made it difficult to launch a high-speed rail network.<sup>208</sup> Major General Wang Weixing, director of the Foreign Military Studies Department at the Academy of Military Sciences (AMS), likewise notes that "the BRI route passes through many geopolitically fragile areas, with complex historical issues, intense ethnic and religious disputes, and frequent armed conflict."<sup>209</sup> In another article, Wang argues that "religious violence," in particular, can "completely throw the BRI's construction into chaos and threaten the security of China's investment projects and personnel."<sup>210</sup>

### **7 High financial risk in BRI**

Financial risk takes on a different facet in BRI projects. The high capital intensity of these projects might lead to a high debt service ratio, long pay-off periods, and uncertainty of forecast

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<sup>205</sup> Ibid, 46.

<sup>206</sup> Lin Limin, "Advancing 'One Belt, One Road,' Highlight the Focus [推进'一带一路', 要突出重点]," *World Affairs* [世界知识], no. 21 (2016), 66.

<sup>207</sup> Ibid.

<sup>208</sup> Ibid.

<sup>209</sup> Wang Weixing, "'One Belt, One Road' Under Global Vision: Risks and Challenges [全球视野下的'一带一路': 风险与挑战]," *Frontiers* [学术前沿], no. 5 (2015), 10.

<sup>210</sup> Wang Weixing, "Research on the Risks and Challenges Facing the 'One Belt, One Road' Strategy and Responses [一带一路'战略面临的风险挑战及对策研究]," *China Leadership Science* [中国领导科学], no. 8 (2015), 44.

demand.<sup>211</sup> The challenges are often exacerbated in cross-border projects where the structuring of finance needs to take into account different currencies and national financial capacities.<sup>212</sup>

*“As the size of the public debt increases, there is growing uncertainty about actions and policies that the government will resort to in order to meet its debt servicing obligations, with adverse effects on investment. In particular, as the stock of public sector debt increases, there may be expectations that the government’s debt service obligations will be financed by distortionary measures (the inflation tax, for example), as in Agénor and Montiel (1996). The extensive literature on uncertainty and investment suggests that in these circumstances, potential private investors will prefer instead to exercise their option of waiting (Serven (1997)). Moreover, any investment that takes place is likely to be diverted to activities with quick returns rather than to long-term, high-risk, irreversible projects. Rapid accumulation of debt can also be accompanied by increasing capital flight if the private sector fears imminent devaluation and/or increases in taxes to service the debt (Oks and Wijnbergen (1995)).”<sup>213</sup>*

The Chinese government has taken on the lead financing role, since many developing countries have limited financial condition to fund the BRI projects in their countries.<sup>214</sup> Reviewing the map of the global public debt 2015, the majority of BRI countries are considered “high debt” countries. They include the Philippines, Kazakhstan, Kyrgyzstan, Indonesia, Sri Lanka, Egypt, Turkey, Laos, Vietnam, Ukraine, Armenia, Belarus, etc. Many of these developing countries default on foreign lending and investment projects as they are especially dysfunctional with corrupt governments.<sup>215</sup> This lack of creditworthiness makes these countries poor bets for investment on the part of China’s government and Chinese financial institutions and businesses.<sup>216</sup>

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<sup>211</sup> Wijeratne et al., "Repaving the ancient," 39.

<sup>212</sup> Ibid.

<sup>213</sup> Benedict Clements, Rina Bhattacharya, and Toan Quoc Nguyen, "External Debt, Public Investment, and Growth in Low-Income Countries," *IMF Working Paper*, 2003, 4.

<sup>214</sup> Wijeratne et al., "Repaving the ancient," 39.

<sup>215</sup> Wyman, "Navigating the New Silk," 8.

<sup>216</sup> Ibid.

In Sri-Lanka, several completed projects are now bleeding money borrowed from China.<sup>217</sup> The example of “Sri Lanka’s Mattala Rajapaksa International Airport, which opened in 2013 near Hambantota, has been dubbed the world’s emptiest. Sri Lanka is now struggling to deal with debt from Chinese-backed infrastructure projects.”<sup>218</sup>

Meanwhile, “Hambantota’s Magampura Mahinda Rajapaksa Port remains largely idle, as does the multibillion-dollar Gwadar port in Pakistan. The former Pakistani Prime Minister Shaukat Aziz spoke at the Belt and Road forum emphasizing his experience in office restructuring his country’s foreign debt. That default is unlikely to be Pakistan’s last.”<sup>219</sup> Part of the debt renegotiation resulted in control of the Hambantota Port being given back to China for 99 years.<sup>220</sup>

Moreover, Laos faces a huge debt burden. The International Monetary Fund warned in 2017 that the country’s reserves stood at two months of prospective imports of goods and services.<sup>221</sup> It also expressed concerns that public debt could rise to around 70 percent of the economy.<sup>222</sup> In 2017, Laos has an \$800 million loan from China’s Export-Import Bank and agreed to form a joint venture with China that will borrow much of the rest.<sup>223</sup>

### **8 High risk fears predict low ROI (Return on Investment)**

Andrew Warner assesses the econometric evidence to reveal small positive and instantaneous associations in many developing countries between public investment booms and economic

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<sup>217</sup> Brahma Chellaney, "China's Debt-Trap Diplomacy," *Project Syndicate*, January 23, 2017, <https://www.project-syndicate.org/commentary/china-one-belt-one-road-loans-debt-by-brahma-chellaney-2017-01?barrier=accessreg>.

<sup>218</sup> Ibid.

<sup>219</sup> Chellaney, "China's Debt-Trap."

<sup>220</sup> Sri Lanka: Here's why ships don't want to stop at Chinese run Hambantota port," WION, last modified August 20, 2018, accessed April 29, 2018.

<sup>221</sup> JANE PERLEZ and YUFAN HUANG, "Behind China's \$1 Trillion Plan to Shake Up the Economic Order," *The New York Times*, May 13, 2017.

<sup>222</sup> Perlez and Huang, "Behind China's."

<sup>223</sup> Ibid.

growth, but little long run impact.<sup>224</sup> He notices that several aspects of the evidence cast doubt on the idea that past booms triggered or accelerated GDP growth through public investment. Most of the positive association occurs immediately; a spending boom tends to be immediately associated with a rise in GDP this year, but not subsequent years.<sup>225</sup> He states that F-tests fail to reject that the long run impact, given by the sum of the coefficients on lagged investment booms, is zero.<sup>226</sup> It is argued that the booms only had a causal impact, since this kind of evidence is consistent with reverse causality, from GDP growth to investment booms, as spending is cut in slumps and increased in good years.<sup>227</sup>

In addition, Presbitero finds that investment and infrastructure projects are less likely to be successful when they are undertaken during periods of higher-than-average public investment, which is particularly relevant in light of the BRI “big-push” approach to infrastructure investment.<sup>228</sup>

Furthermore, he writes that a recent trend in several low-income developing countries has been a rapid scaling-up of public investment. However, he argued that in the presence of limited absorptive capacity, countries are not able – in terms of skills, institutions, and management – to translate additional public investment into sustained output growth.<sup>229</sup>

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<sup>224</sup> Warner, Andrew. "Public Investment as an Engine of Growth." *IMF Working Papers*, no. 148 (2014): 1. doi:10.5089/9781498378277.001,3.

<sup>225</sup> Ibid.

<sup>226</sup> Ibid, 4.

<sup>227</sup> Ibid.

<sup>228</sup> Presbitero, Andrea F. "Too much and too fast? Public investment scaling-up and absorptive capacity." *Journal of Development Economics* (2016): 17-31. doi:10.1016/j.jdeveco.2015.12.005. p.23.

<sup>229</sup> Ibid, 17.

Keefer and Knack (2007) show evidence that public investment is “dramatically higher in governments with low-quality governance and limited political checks and balances.”<sup>230</sup> They attribute this to the fact that public investment is conducive for rent-seeking.

### **9 Testing the wisdom of the BRI and SOEs**

As we have seen before, the BRI has security risks, political risks, social risks, and legal risks.

SOEs will face much more complicated conditions than their conditions in China.

In order to stand out as internationalized competitive enterprises, China’s SOEs should first consider the following issues:

- How to integrate the BRI with the enterprise’s own long-term strategy.
- How to adjust the company’s industry and product portfolios.
- If applicable, how will SOEs overcome the difficulties mentioned above.
- How can the company comprehensively manage risks? How can it establish a system of crisis management, including early warning and post-crisis feedback mechanisms?<sup>231</sup>
- Which internal and external abilities need to be improved? <sup>232</sup>

#### **9.1 Many SOEs have immature overseas market development**

Overall, the proportion of total revenue coming from overseas operations for China’s SOEs is significantly lower than that of leading multinational companies in the Global 500.<sup>233</sup>

Meanwhile, a survey shows that for 43 percent of China’s SOEs, their overseas revenue currently accounts for less than 5 percent of their total revenue; for 60 percent of China’s SOEs, the

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<sup>230</sup> Keefer, Philip and Stephen Knack (2007), Boondoggles, Rent-Seeking, and Political Checks and Balances: Public Investment under Unaccountable Governments, *The Review of Economics and Statistics*, Vol. 89, No. 3, pp. 566-572.

<sup>231</sup> Sze and Wu, "One Belt," 11.

<sup>232</sup> Ibid.

<sup>233</sup> Xiao Geng, Xiuke Yang, and Anna Janus, State-owned Enterprises in China, *Reform Dynamics and Impacts*, 2009, 155.

proportion is less than 10 percent.<sup>234</sup> This demonstrates that the majority of China's SOEs are still in the early stage of overseas market development and their overseas revenue potential has yet to be realized.

Moreover, most of the senior management teams of large Chinese SOEs who may potentially engage with BRI-related projects are appointed by the Communist Party and equipped with industrial expertise. They are usually unfamiliar with the market environments of host countries with little understanding of local labour union politics.<sup>235</sup> Their understanding of local environments is still insufficient at the bidding stage, the risk control mechanism is unsound at the construction stage and post-construction management is weak.<sup>236</sup>

Generally, SOEs' supply-driven projects are victim to waste, inefficiency and unaccountability.<sup>237</sup> Apart from a large number of engineers, evaluating the viability of BRI projects requires SOEs be familiar with the respective regions inside-out, demand project management teams have special knowledge of the local labor market and understand the host countries' fiscal and monetary policies.<sup>238</sup> The track-record of Chinese SOEs in Africa are exemplary of these problems.<sup>239</sup>

### **9.2 Will SOEs domestic failures be duplicated abroad?**

Low profitability of SOEs has been a major concern by economists. It is closely related to SOEs' unhealthy assets, which bring little or no return to the firms.<sup>240</sup> As shown in Tables 5-7 below, the relationship between the ratio of unhealthy asset to total asset and the profitability of SOEs depends on the measure of profitability and methods of estimation. The ratio of unhealthy assets

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<sup>234</sup> Ibid, 165.

<sup>235</sup> Yu Jie, "China's One Belt, One Road: A Reality Check," *Ideas*, July 2017, 3.

<sup>236</sup> Sze and Wu, "One Belt," 5.

<sup>237</sup> Jiayi Zhou, Karl Hallding and Guoyi Han, "The Trouble With China's 'One Belt, One Road' Strategy

<sup>238</sup> Jie, "China's One Belt," 3.

<sup>239</sup> Xu Yi-Chong, "Chinese State-Owned Enterprises in Africa: Ambassadors or Freebooters?" *Journal of Contemporary China* 23, no. 89 (2014): 822-840.



to total assets, is negatively related to the profitability of SOEs in all of the cross-sectional regressions when profitability is measured by ROE (return on equity), ROA (return on assets), PMNA (profit margin on net assets).<sup>241</sup>

Return on equity, ROE, the relationship between profitability and liability–asset ratio becomes insignificant (see Table 5). Also, when return on assets, ROA is used as a measure of profitability, the relationship of the coefficient of liability–asset ratio become significantly negative in one of the two cross-sectional regressions, but insignificant in all of the panel regressions (see Table 6). PMNA, profit margin on net assets, of SOEs negatively affect the profitability of the SOEs and the coefficients are highly significant in all cross-sectional and panel regressions (see Tables 7, Next page).

	Cross-sectional regression analysis					Panel regression analysis							
	reg 0	reg 1	reg 2	reg 3	reg 4	reg 5		reg 6		reg 7		reg 8	
						Fix	Random	Fix	Random	Fix	Random	Fix	Random
Constant	0.045 (7.378)*	-0.013 (-0.223)	0.032 (1.402)	0.139 (1.960) <sup>†</sup>	0.109 (6.155)*	-0.002 (-0.030)	0.004 (0.090)	-0.025 (-0.870)	0.010 (0.740)	0.032 (0.570)	0.047 (1.090)	0.013 (0.670)	0.048 (4.440)*
export		0.083 (2.383) <sup>#</sup>	0.060 (1.825) <sup>+</sup>	0.082 (2.538) <sup>#</sup>	0.065 (2.241) <sup>#</sup>	0.135 (0.930)	0.060 (2.020) <sup>#</sup>	0.145 (1.010)	0.053 (1.840) <sup>+</sup>	0.138 (0.950)	0.083 (2.860)*	0.141 (0.980)	0.083 (2.960)*
nonstate		0.105 (2.175) <sup>#</sup>	0.110 (2.575) <sup>#</sup>			0.107 (2.330) <sup>#</sup>	0.085 (2.890)*	0.108 (2.230) <sup>#</sup>	0.088 (3.020)*				
govern				-0.187 (-3.133)*	-0.170 (-3.921)*					0.204 (2.220) <sup>#</sup>	-0.056 (-1.230)	0.241 (2.220) <sup>#</sup>	-0.057 (-1.280)
alratio		0.017 (0.221)		-0.090 (-1.076)		-0.031 (-0.450)	0.003 (0.050)			-0.030 (-0.440)	0.001 (0.010)		
unhealthy			-0.212 (-2.101) <sup>#</sup>		-0.265 (-2.924)*			-0.010 (-0.170)	-0.036 (-0.760)				
eastcoast	0.016 (-1.620)	-0.017 (-1.221)	-0.023 (-1.845) <sup>+</sup>	-0.016 (-1.364)	-0.019 (-1.870) <sup>+</sup>								
Adjusted R <sup>2</sup>	0.051	0.278	0.380	0.378	0.511	0.493	0.116	0.492	0.121	0.491	0.075	0.492	0.076
F value <sup>a</sup>						2.510*		2.420*		2.560*		2.530*	
m value <sup>b</sup>						1.330		3.040		11.260 <sup>#</sup>		16.650 <sup>#</sup>	
N	31	31	31	31	31	155	155	155	155	155	155	155	155

roe = return on equity; export = export-GDP ratio; nonstate = investment share of non-state enterprises; govern = government expenditure share in GDP; alratio = liability-asset ratio; unhealthy = unhealthy asset-total asset ratio; eastcoast = east coast provinces.

t values are in the parenthesis.

\* F test for no fixed effects.

<sup>b</sup> Hausman test for random effects.

<sup>#</sup> Significance level of 1% for a two-tailed test.

<sup>+</sup> Significance level of 10% for a two-tailed test

<sup>†</sup> Significance level of 5% for a two-tailed test.

Table 5. Determinants of profitability, return on equity<sup>242</sup>

<sup>240</sup> Qiao, 92.

<sup>241</sup> Carsten A. Holz (2002). The impact of competition and labor remuneration on profitability in China's industrial state-owned enterprises. *Journal of Contemporary China*, 11, 515– 538, 518.

<sup>242</sup> *Ibid*, 521.

	Cross-sectional regression analysis					Panel regression analysis							
	reg 0	reg 1	reg 2	reg 3	reg 4	reg 5		reg 6		reg 7		reg 8	
						Fix	Random	Fix	Random	Fix	Random	Fix	Random
Constant	0.011 (6.526)*	0.016 (-1.153)	0.011 (2.470) <sup>#</sup>	0.740 (4.635)*	0.037 (11.006)*	0.010 (0.760)	0.014 (1.470)	-0.003 (-0.480)	0.002 (0.520)	0.016 (1.250)	0.026 (2.450) <sup>#</sup>	0.002 (0.510)	0.012 (4.300)*
<i>export</i>		0.024 (2.736) <sup>#</sup>	0.017 (2.583) <sup>#</sup>	0.023 (3.197)*	0.019 (3.452)*	0.029 (0.880)	0.021 (2.820)*	0.036 (1.100)	0.022 (3.070)*	0.027 (0.820)	0.029 (3.720)*	0.032 (0.980)	0.032 (4.210)*
<i>nonstate</i>		0.043 (3.580)*	0.038 (4.478)*			0.021 (2.020) <sup>#</sup>	0.026 (3.680)*	0.019 (1.700) <sup>+</sup>	0.027 (3.680)*				
<i>govern</i>				-0.072 (-5.313)*	-0.052 (-6.376)*					0.065 (3.140)*	-0.015 (-1.300)	0.072 (2.960)*	-0.010 (-0.890)
<i>alratio</i>		-0.290 (-1.548)		-0.069 (-3.644)*		-0.017 (-1.110)	-0.019 (-1.570)			-0.019 (-1.220)	-0.018 (-1.390)		
<i>unhealthy</i>			-0.101 (-4.980)*		-0.117 (-6.860)*			0.005 (0.350)	-0.016 (-1.420)				
<i>eastcoast</i>	0.008 (2.636) <sup>#</sup>	-0.006 (-1.657)	-0.007 (-2.589) <sup>#</sup>	-0.005 (-1.842) <sup>+</sup>	-0.004 (-2.320) <sup>#</sup>								
Adjusted R <sup>2</sup>	0.166	0.526	0.734	0.658	0.816	0.630	0.207	0.627	0.219	0.646	0.136	0.644	0.123
F value <sup>a</sup>						3.080*		2.720*		3.480*		3.560*	
m value <sup>b</sup>							0.450		12.210*		26.260*		53.270*
N	31	31	31	31	31	155	155	155	155	155	155	155	155

*roe* = return on equity; *export* = export-GDP ratio; *nonstate* = investment share of non-state enterprises; *govern* = government expenditure share in GDP; *alratio* = liability-asset ratio; *unhealthy* = unhealthy asset-total asset ratio; *eastcoast* = east coast provinces.

t values are in the parenthesis.

<sup>a</sup> F test for no fixed effects.

<sup>b</sup> Hausman test for random effects.

\* Significance level of 1% for a two-tailed test.

<sup>#</sup> Significance level of 5% for a two-tailed test.

<sup>+</sup> Significance level of 10% for a two-tailed test.

Table 6. Determinants of profitability, return on asset<sup>243</sup>

	Cross-sectional regression analysis					Panel regression analysis							
	reg 0	reg 1	reg 2	reg 3	reg 4	reg 5		reg 6		reg 7		reg 8	
						Fix	Random	Fix	Random	Fix	Random	Fix	Random
Constant	-0.035 (-4.848)*	0.192 (4.419)*	-0.018 (-1.836) <sup>+</sup>	0.385 (8.062)*	0.073 (6.183)*	0.120 (2.160) <sup>#</sup>	0.180 (5.540)*	-0.135 (-4.620)*	-0.059 (-4.170)*	0.165 (3.190)*	0.225 (5.430)*	-0.089 (-4.650)*	-0.035 (-2.870)*
<i>export</i>		0.069 (2.561) <sup>#</sup>	0.051 (2.757) <sup>#</sup>	0.068 (3.122)*	0.055 (2.837)*	0.153 (1.120)	0.059 (2.570) <sup>#</sup>	0.268 (1.800) <sup>+</sup>	0.096 (3.340)*	0.147 (1.100)	0.103 (3.630)*	0.243 (1.690) <sup>+</sup>	0.155 (4.640)*
<i>nonstate</i>		0.137 (3.655)*	0.074 (3.042)*			0.156 (3.580)*	0.127 (5.260)*	0.152 (3.300)*	0.119 (4.020)*				
<i>govern</i>				-0.238 (-5.893)*	-0.073 (-2.556) <sup>#</sup>					0.382 (4.510)*	-0.040 (-0.900)	0.480 (4.400)*	0.089 (1.710) <sup>+</sup>
<i>alratio</i>		-0.369 (-6.299)*		-0.504 (-8.935)*		-0.342 (-5.270)*	-0.351 (-8.430)*			-0.346 (-5.480)*	-0.337 (-6.680)*		
<i>unhealthy</i>			-0.619 (-10.825)*		-0.641 (-10.631)*			-0.059 (-1.010)	-0.174 (-3.500)*			-0.150 (-2.380) <sup>#</sup>	-0.119 (-2.250)*
<i>eastcoast</i>	0.045 (3.760)*	-0.010 (-0.927)	-0.004 (-0.547)	-0.008 (-1.022)	-0.002 (0.367)								
Adjusted R <sup>2</sup>	0.305	0.773	0.896	0.852	0.887	0.699	0.502	0.633	0.299	0.715	0.356	0.660	0.174
F value <sup>a</sup>						1.660 <sup>#</sup>		2.130*		2.650*		3.460*	
m value <sup>b</sup>							1.190		30.440*		39.490*		82.020*
N	31	31	31	31	31	155	155	155	155	155	155	155	155

*roe* = return on equity; *export* = export-GDP ratio; *nonstate* = investment share of non-state enterprises; *govern* = government expenditure share in GDP; *alratio* = liability-asset ratio; *unhealthy* = unhealthy asset-total asset ratio; *eastcoast* = east coast provinces.

t values are in the parenthesis.

<sup>a</sup> F test for no fixed effects.

<sup>b</sup> Hausman test for random effects.

\* Significance level of 1% for a two-tailed test.

<sup>#</sup> Significance level of 5% for a two-tailed test.

<sup>+</sup> Significance level of 10% for a two-tailed test.

Table 7. Determinants of profitability, return on profit earning on net assets (*pmna*)<sup>244</sup>

Shaomin Li, Ying Chou Lin, and David D. Selover noted that SOEs tend to hold larger inventories than privately owned firms, and this can have a negative effect on earnings.<sup>245</sup> In

<sup>243</sup> *Ibid*, 524.

<sup>244</sup> *Ibid*, 525.

corporate finance perspective, large inventories usually have significant negative effects upon the return on assets (ROA), return on equity (ROE), return on sales (ROS), productivity, and on firm growth.<sup>246</sup> In addition, by looking at the WACC (Weighted average cost of capital) perceived by SOEs and local governments; it is likely lower than the market rate or the rate applied to private companies.<sup>247</sup> Perceiving a much lower WACC, SOEs and local governments likely over-invest, while more efficient private firms may under-invest.<sup>248</sup>

Furthermore, Figure 6 below indicates that the average ROIC of China's SOEs is much lower than that of non-state firms including collective firms, foreign firms, Hong Kong/Taiwan invested firms, private firms, and mixed firms. Based on Qiao Liu's estimation, between 2001 and 2005, the average ROIC of the SOEs ranged from 5.3 to 5.8 percent, implying that one

dollar of capital used in firm operation, after controlling for regional and industrial differences, generates less than six cents of after-tax profit.<sup>249</sup> Non-state firms in China on average generate an ROIC 4 to 6 percentage points higher than that of SOEs.<sup>250</sup>

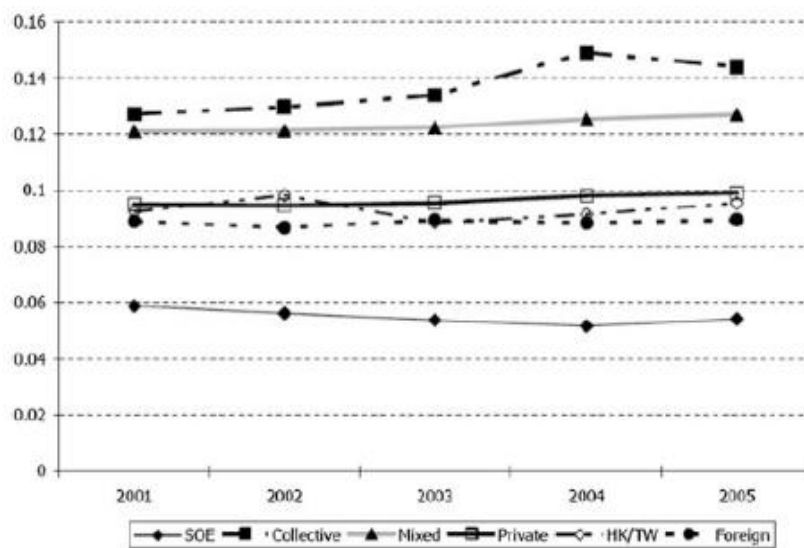


Figure 6<sup>251</sup>

<sup>245</sup> Li, Shaomin, Lin, Ying Chou, & Selover, David D. (2014). Chinese State-Owned Enterprises: Are They Inefficient? *The Chinese Economy*, 47 (5-6), 81-115,111.

<sup>246</sup> Ibid.

<sup>247</sup> Liu, Corporate China, XXVII.

<sup>248</sup> Ibid.

<sup>249</sup> Liu, Corporate China, 99.

<sup>250</sup> Ibid.

<sup>251</sup> Ibid.

Moreover, Shaomin Li, Ying Chou Lin, and David D. Selover investigated that large accounts receivables in SOEs have a generally negative effect upon firm performance, including ROA, ROE, productivity, and growth of sales.<sup>252</sup> Large accounts receivables may indicate that the firm is not aggressive enough in pursuing the money owed to it or that, perhaps, it chooses to carry some bad accounts. SOEs generally show higher accounts receivables than other types of firms.<sup>253</sup>

Table 8 presents measures of the support and aid provided by the government to different types of firms, including state-owned enterprises.<sup>254</sup> The hypothesis is that more state support goes to SOEs than are other types of enterprises. This aid may take the form of subsidies, bank loan availability, low interest loans, tax breaks, and other resources and benefits. With regard to subsidies, it is expected that larger firms in general require larger subsidies.<sup>255</sup> Both SOEs and COEs (collective-owned enterprises) receive more subsidies than do the purely private firms. If it scales subsidies by dividing by total sales (Column 2), then the subsidy-sales ratio is, by far, higher for state-owned enterprises than for any other type of ownership, followed by the subsidy-sales ratios for COEs, joint-stock enterprises, and joint ventures, and far lower for the domestic and foreign private firms.<sup>256</sup> The difference between the two measures may reflect the large amount of assets held by SOEs.

Under these conditions, state-owned enterprises do not have to worry as much about competition and survival.<sup>257</sup> They do not depend upon making profits for their own survival, growth, or

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<sup>252</sup> *Ibid.*

<sup>253</sup> *Ibid.*

<sup>254</sup> Shaomin Li, Yingchou Lin, 96.

<sup>255</sup> *Ibid.*, 94.

<sup>256</sup> *Ibid.*

<sup>257</sup> Kornai, J.; E. Maskin.; and G. Roland. 2003. "Understanding the Soft Budget Constraint."

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2000 Ownership	ROA	ROE	ROS	Productivity	Average employees	Sales growth rate (2001)	Cash flow/assets <sup>1</sup>
SOEs	-0.0051	0.0413	-0.0604	30.32	564.27	0.1760	-
Joint stock	0.0473	0.1589	0.0195	45.79	194.92	0.0960	-
Joint venture	0.0458	0.1310	0.0100	60.42	219.94	0.0803	-
Private	0.0664	0.1913	0.0246	53.72	168.59	0.2380	-
HKMT	0.0333	0.0841	0.0057	70.04	300.11	0.1513	-
Foreign	0.0513	0.1182	0.0159	109.32	298.11	0.1875	-
Total	0.0361	0.1246	-0.0028	53.60	358.11	0.1710	-
2005 Ownership	ROA	ROE	ROS	Productivity	Average employees	Sales growth rate	Cash flow/assets
SOEs	0.0043	0.0617	-0.0449	97.27	669.85	0.4632	0.0306
COEs	0.0941	0.2833	0.0419	116.11	190.62	0.3438	0.0588
Joint stock	0.0697	0.1945	0.0323	95.41	147.42	0.3090	0.0430
Joint venture	0.0537	0.1642	0.0213	120.56	221.79	0.2006	0.0371
Private	0.0808	0.2325	0.0343	101.91	139.57	0.4943	0.0543
HKMT	0.0485	0.1177	0.0178	105.07	339.80	0.3515	0.0376
Foreign	0.0679	0.1547	0.0287	164.48	335.18	0.4182	0.1524
Total	0.0667	0.1894	0.0254	113.90	260.72	0.4509	0.0609

<sup>1</sup> Only for year 2005.

Table 8. Average Enterprise Performance in 2000 and 2005<sup>258</sup>

investment. This creates a distortion of its incentive structure.<sup>259</sup> The SOEs do not bear risk alone, and, consequently, there is a moral hazard risk that the firm will become lax, in terms of controlling costs, marketing its products, and promoting innovation.<sup>260</sup>

As a result, SOEs are afflicted with a pervasive "investment hunger" problem and are prone to overinvesting regardless of the demand for their products.<sup>261</sup> SOE employees may have the tendency to develop rent-seeking behavior in order to seek for themselves more resources from the government,<sup>262</sup> increasing costs and for inefficiency.<sup>263</sup>

<sup>258</sup> Li, Shaomin, Lin, Ying Chou, & Selover, David D. (2014). Chinese State-Owned Enterprises: Are They Inefficient? *The Chinese Economy*, 47 (5-6), 81-115, 96.

<sup>259</sup> Kornai, refers to an "almost insatiable demand for investment by SOEs," 1986.

<sup>260</sup> Ibid.

<sup>261</sup> Huang (2003) Huang, Y. "Selling China: Foreign Direct Investment During the Reform Era." Cambridge, UK: Cambridge University Press.

<sup>262</sup> Jakob, B. (2017). Performance in Strategic Sectors: A Comparison of Profitability and Efficiency of State-Owned Enterprises and Private Corporations. *The Park Place Economist*, 25 (1), 8.

State-owned enterprises (SOEs) are often claimed to be less profitable and less efficient. The unhealthy assets negatively affect a firm's productivity, paint a depressing future for the firm and dampen the firm's incentives to invest.<sup>264</sup> Many economists generally believe that soft budget constraint result in inefficient operation. It not only loosen the financial limitations on the SOE firms, but it also impacts both the psychology and behavior of the SOE employees to be less aggressive in controlling for costs, to be less innovative, and to be less efficient as they don't have to try as hard as the employees of private corporations to ensure the survival of the firm.<sup>265</sup> Typically, state-owned enterprise managers have little incentive to improve their business or work hard to improve profits.

Based on the risks of BRI presented, people might believe that, people might believe that SOEs engaged in BRI must address bribery risks in a long term. However, their weak management, low profitability and poor investment returns make many people think that SOEs' performances so far will suggest failure to make profits in Belt and Road Initiative.

The government has not planned any actions to enhance SOEs' capital efficiency and productivity in order to improve their competitiveness in BRI. SOEs will still maintain their current model to explore BRI market no matter how risky and how inefficient they would be in BRI. Since 2013, President Xi has installed many SOE chief executives as provincial governors, which could improve regional bureaucratic systems as they are often "outsiders" not from the region, or it could further entrench the status quo.<sup>266</sup> This venture might make many people raise

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<sup>263</sup> Li, Shaomin, Lin, Ying Chou, & Selover, David D. (2014). "Chinese State-Owned Enterprises: Are They Inefficient?" *The Chinese Economy*, 47 (5-6), 81-115.

<sup>264</sup> Lin, S., and W. Rowe. 2006. "Determinants of the Profitability of China's Regional SOEs." *China Economic Review* 17, no. 2: 120-141, 128.

<sup>265</sup> Li, Shaomin, Lin, Ying Chou, & Selover, David D. "Chinese State-Owned Enterprises."

<sup>266</sup> Keith Zhai, "China's Xi Mines State Firms for Political Jobs Before Reshuffle," *Bloomberg*, last modified June 21, 2017, accessed April 30, 2018, <https://www.bloomberg.com/news/articles/2017-06-21/china-s-xi-mines-state-firms-for-political-jobs-before-reshuffle>.

a question: “why does the Chinese government still wants to maintain its current SOE model to explore overseas markets with risks even though they realize their weak performance in the past?

Won't they fear this gamble if SOEs fail in BRI?

The next chapter investigates the theory behind the central government's dependency on SOEs in the BRI and the political consequences of abandoning or altering their strategy.

### Chapter 3 - Is SOE participation in the BRI worth the cost and the future of the Chinese economy?

Due to weak financial management and low investment returns for SOEs, many people think it detrimental for China to maintain its current SOE model to explore BRI. What the SOEs should do is update their market efficiencies and competitiveness as well as total factor productivities. On the other hand, many people contend that the BRI is the only way for SOEs to overcome their current domestic stagnation. A significant portion of SOEs cannot allow themselves to truly reform their economic structures.

Many people think it is a misguided idea for China to maintain its current SOE growth model to explore BRI in order to solve China's current exhausted domestic economic growth problem.

They think that the road ahead for SOEs is all about the structural reform of capital efficiency.

The current SOE model has reached a turning point in its development path after more than 35 years of rapid growth and SOEs now face the limits of their unsustainable investment-led growth model. The current low-return on investment capital ratio in SOEs has directly resulted in a lower growth rate in Chinese economy and many people contend that China's lower growth rate in recent years has increased the chance of falling into the so-called the stagnation of a 'middle income trap.' China should therefore improve SOEs' financial management by shifting their model from being labor & capital intensive to a more high-productive, tech-intensive innovation economy.

On the other hand, however, others say the Belt and Road Initiative is a way for SOEs to overcome the 'new normal' stage of the stagnation in Chinese economy. They argue that China exports on a scale never before witnessed and massive domestic infrastructure investments are



reaching the point of diminishing returns.<sup>267</sup> Meanwhile, the migration of surplus labor from the rural economy to the cities and the industrial sectors is ending which has approached the so-called "Lewis turning point."<sup>268</sup>

### **1. The stagnation of Middle Income trap**

According to the International Monetary Fund (IMF) the 'middle-income trap' is a phenomenon of a hitherto-rapidly growing economy's stagnating at middle-income levels and failure to graduate into the ranks of high-income countries.<sup>269</sup>

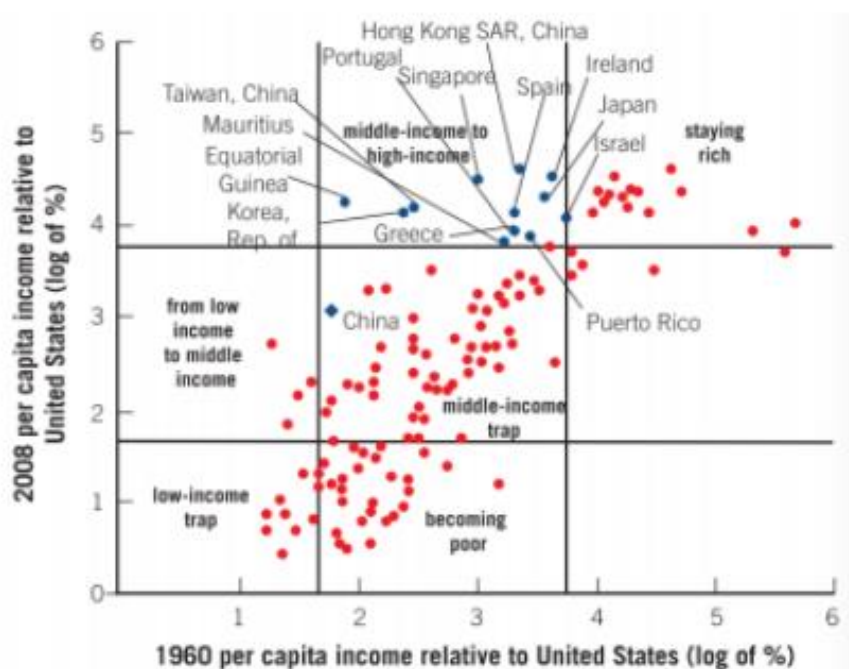


Figure 7<sup>270</sup>

<sup>267</sup> China's innovation challenge: overcoming the middle-income trap / edited by Arie Y. Lewin, Martin Kenney, Johann Peter Murmann. Cambridge, United Kingdom: Cambridge University Press, 2016. LCCN 2015047143 | ISBN 9781107127128.

<sup>268</sup> Du, Y., Park, A., and Wang, S. 2005. *Migration and rural poverty in China*.

<sup>269</sup> Aiyar, S., Duval, R., Puy, D., Wu, Y., & Zhang, L. (2013). Growth Slowdowns and the Middle Income Trap. *IMF Working Paper*.

<sup>270</sup> Ibid.

As Figure 7 shows, China is currently a “upper middle-income country” with a per capital GNI of \$8250.

Many countries achieved a certain economic level but began to experience sharply diminishing economic growth rates, because they were unable to adopt new sources of economic growth, such as innovation.<sup>271</sup>

Garrett (2004) had warned that middle-income countries might stagnate. In his words, “the challenge for the middle-income world is to find ways to “tech-up” and enter the global knowledge economy, so as to escape the trap of having to dumb down to compete in standardized manufacturing and, increasingly, standardized services... the countries of Latin America and eastern Europe are not likely to be able to achieve [the transformation] on their own.”<sup>272</sup>

China, as one-third of the world’s economic engine, has experienced a persistent growth slowdown after it reaches the middle-income level. Chinese SOEs now face extreme pressure to upgrade industrial structure and enter more knowledge-intensive industries to maintain dynamic growth. Many economists contend that “this compilation gathers leading Chinese and international scholars to consider the new agenda of building an innovation-driven SOEs growth model.”<sup>273</sup>

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<sup>271</sup> Morrison, W. M. (2015). China’s economic rise: history, trends, challenges, and implications for the United States. CRS Report RL 33534. Washington, DC: *Congressional Research Service*, 47.

<sup>272</sup> Garret, Geoffrey. 2004. “Globalization’s Missing Middle.” *Foreign Affairs* 83: 84-96.

<sup>273</sup> Arie Y. Lewin, Martin Kenney, and Johann Peter Murmann, *China’s Innovation Challenge: Overcoming the Middle-income Trap* (Cambridge, United Kingdom: *Cambridge University Press*, 2016), Introduction.

## 2. Is innovation-driven strategy a trap for SOEs?

Today, South Korea, Japan, and Singapore have successfully escaped the middle income trap and transformed into high income regions. The success of these four significant economic forces in East Asia was inseparable from their policies and strategies on improving the innovative capacity which contributed to the extraordinary economic growth. These governments absorb foreign technology to enhance their innovative system and they put enormous effort and money in developing Research and Development (R&D) to achieve the economic boom.

Even being among these success stories from other Asian cultures, China has not managed to achieve such high-tech intensive growth, despite creating a range of R&D platforms and business service providers such as engineering research centers and productivity research centers. But many of them lack a market-driven orientation.

Since 1991, China's R&D investment was RMB 15.08 billion (\$2.83 billion), occupying approximately 0.7% of overall GDP. In 2013, it increased to RMB 1.185 trillion (\$191.44 billion), about 2.01% of GDP.<sup>274</sup> In terms of purchasing power parity, China has become the second-largest spender on R&D in the world and may have even surpassed the United States.<sup>275</sup>

Although China's production of triadic patent families and scientific articles is still very low on a per capita basis,<sup>276</sup> but this is a clear indication of the Chinese government's commitment to increasing the economy's innovative capacity.<sup>277</sup>

Also, research funding for top governmental institutes in China increased dramatically, in the overall environment of expanding research institute R&D funding, particularly through the 985

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<sup>274</sup> China 2030: Building a Modern, Harmonious, and Creative Society (Washington, DC: *World Bank*, 2013).

<sup>275</sup> OECD. 2014. *OECD Science, Technology and Industry Outlook 2014*.

<sup>276</sup> *OECD Science, Technology and Industry Outlook 2008* – ISBN 978-92-64-04991-8 – © OECD 2008, <https://www.oecd.org/sti/inno/41559747.pdf>

<sup>277</sup> World Bank & Development Research Center of the State Council, P. R. C. 2013. China 2030: Building a Modern, Harmonious, and Creative Society. Washington, DC: *World Bank*.

Project, which began in 1998, and massively increased research funding for selected groups of governmental institutes with the goal of moving them into the ranks of top-tier elite global research institutes.<sup>278</sup> This is also reflected in the pursuit of sixteen huge national science and engineering projects identified by the State Council in 2006.<sup>279</sup> Each of them addresses major technologies deemed to be of strategic importance for the Chinese economy, national defense, and overall competitiveness.<sup>280</sup> From 2004 to 2013, both university and research institute R&D expenditures increased at a compound annual rate of 18.9 percent and 20.55 percent, respectively – in nine years, R&D funding roughly quintupled.<sup>281</sup>

China has its own State-run patent system, but many patents have been criticized as being ignored or being of little value in China. Much of the increased patenting activity is in response to government pressure for so-called “results” and incentives that reward volume instead of real scientific significance. As Arie Y. Lewin, Martin Kenney, and Johann Peter Murmann discuss in their book, the weakness of technology from government transfer is a combination of unproductive and unclear intellectual property (IP) protection, lacking of research of high quality and commercial relevance, and necessary capacity by Chinese firms.<sup>282</sup>

In China, many of R&D platforms and business service providers lack a market orientation.<sup>283</sup> Many economists contend that innovation is not something that can be achieved through government planning.<sup>284</sup> They argue that the more private enterprises are involved in the trial-

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<sup>278</sup> China 2030, 174.

<sup>279</sup> China's innovation challenge: overcoming the middle-income trap edited by Arie Y. Lewin, Martin Kenney, Johann Peter Murmann. Cambridge, United Kingdom: *Cambridge University Press*, 2016. 9.

<sup>280</sup> *Ibid*, 2.

<sup>281</sup> *Ibid*, 10.

<sup>282</sup> *Ibid*, 10-11.

<sup>283</sup> China 2030, 174.

<sup>284</sup> *Ibid*, 175.

and error process of innovation, the greater the chances for technological breakthroughs, and the more likely that new discoveries will be translated into commercially viable products.<sup>285</sup>

In *Four Tigers*, innovative economies, private companies have successfully created national innovation systems. Most of the applied research and innovation of consequence for the economy is done by private firms.<sup>286</sup>

As Shapin Steven states in his book: “In all innovative economies, be it the United States, the long-time innovation leader, or more recent entrants such as Japan and Korea, private companies have successfully created national innovation systems.”<sup>287</sup> The emphasis on private sector growth is central for the national economic development. Innovation will flourish if firms in particular provide researchers with the freedom to pursue interesting ideas in a stimulating work environment.<sup>288</sup>

Therefore, instead of controlling all the research resources and findings for the state purpose, government highly supports private enterprises in developing technological capabilities and producing innovative products by establishing research and development platforms for those companies.<sup>289</sup> However, the innovative systems in China are mostly controlled by governmental institutes; as well as State Owned Enterprises. This reflects the absolute dominance of the state in China’s factor markets.<sup>290</sup>

The top-down grand plan plays an important role in China even though the bottom-up forces have been proven to be more powerful in incentive individuals and companies to focus on

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<sup>285</sup> Ibid.

<sup>286</sup> Ibid, 159.

<sup>287</sup> Ibid.

<sup>288</sup> Ibid.

<sup>289</sup> China 2030, 174.

<sup>290</sup> Liu, 12.

economic matters rather than other things.<sup>291</sup> The state has committed large amounts of resources to drive innovations in many crucial areas yet ironically left the private companies alone to grow.<sup>292</sup>

Most SOEs operate in industries with high barriers to entry, where competition tends to be weak. Many institutional barriers to innovation and entrepreneurship that limited transform from government-based science, technology, engineering, and mathematics into private sector. The state has committed large amounts of resources to drive innovations in many crucial areas, which private companies alone cannot commit.<sup>293</sup>

Hence, the Chinese government did attempt to push the innovative system, yet did so through supporting the SOEs instead of the private sector.

### **3. Is there any way to improve SOEs' innovative efficiency in China?**

#### **3.1 Proposal A: Downsizing SOEs**

In 2009, Weiyang Zhang, the former head of the Guanghua School of Management at Beijing University, estimated that economic reform, including the future reform of SOEs, was left with technical problems. In Weiyang's opinion, these technical problems can be solved without Party Congresses discussion. In the past several years, Weiyang witnessed that a new phenomena called "as the state advances, the private sector retreats" reversed the reform carried out in the past several years. Weiyang suggested the GDP proportion of SOEs should be expected to drop to no more than 10% in the future, while they now account for more than 35%. What does 10% mean? Before Margaret Thatcher, former UK prime minister, carried out privatization of British SOEs, the proportion of British SOEs in the GDP was just 10%. Considering current situations, it

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<sup>291</sup> Ibid.

<sup>292</sup> Ibid, XXIX.

<sup>293</sup> Ibid, 12.

will be a great change if the proportion of state-owned enterprises in the GDP drops from 35% to about 10%.<sup>294</sup>

Many other economists argue that this idea will hardly work well if integrated with the current institutional ideology. First, the state-owned Assets Supervision and Administration Commission (SASAC) in China specified consistently that Chinese economy must let SOEs to play a dominant role.<sup>295</sup> Mr. Xi has also made similar remarks over the past several years.<sup>296</sup> From the institutional perspective, the strategies to escape the middle-income trap entail a tendency for China to shift to a more democratic system that would threaten the absolute authority of the Party. Thus, the examples of such innovative reform by privatization in South Korea and Japan are unacceptable for China to follow within the established CCP institution.<sup>297</sup>

Besides the political concern, a proportional decline of SOEs would also negatively affect employment by laying off workers and creating social instability. The inefficient and overmanned SOEs have been a big headache for the socialist state. China has approximately 150,000 SOEs which, account for 30 to 40 percent of total GDP and about 20 percent of China's total employment.<sup>298</sup> To preserve their competitiveness, there was no option but to push for reforms throughout, including bankruptcy and massive redundancy. And yet China's unique socio-political context made large-scale lay-offs politically risky.<sup>299</sup>

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<sup>294</sup> Weiyang Zhang, "The Road Leading to the Market" (Abingdon: *Routledge Taylor & Francis Group*, 2017).

<sup>295</sup> Liu, 11-12.

<sup>296</sup> Chris Buckley and Keith Bradsher, "Xi Jinping's Marathon Speech: Five Takeaways," *The New York Times*, October 18, 2017, 158.

<sup>297</sup> Lin, J.Y., & Z. Li. (2008). Policy Burden, Privatization and Soft Budget Constraint. *Journal of Comparative Economics*, 36 (1), 90-102.p.128 Lin, S., and W. Rowe. 2006. "Determinants of the Profitability of China's Regional SOEs." *China Economic Review* 17, no. 2: 120-41.

<sup>298</sup> This information is derived from the *State Department's Office of Investment Affairs' Investment Climate Statement*. Any questions on the ICS can be directed to EB-ICS-DL@state.gov.

<sup>299</sup> L. Wong, and K. Ngok, "Social Policy between Plan and Market: xiagang (Off-duty Employment) and the Policy of the Re-employment Service Centres in China," *Social Policy and Administration* 40 (2006): 158-173.

The government has been reluctant to encourage SOEs to layoff redundant workers for fear of an increase in unemployment and social instability. It is notorious for often requiring the SOEs to maintain a surplus of employees in order to keep a low unemployment level, to provide satisfying level of benefits to the employees, and to sell the products at a lower price to the government.<sup>300</sup>

Under the growing challenge of market competition, the survival of SOEs depends critically on the release of unwanted staff. If not handled well, the massive layoffs could trigger potential protests and erode social stability.<sup>301</sup>

### **3.2 SOEs structural reform during 1990s caused huge social instabilities**

Table 9. Number of *xiagang* workers, 1993-2002<sup>302</sup>

Looking back to the SOE structural reform of the transition from a state-planning to a market-based system during 1987-1999, the Zhu

Number of <i>xiagang</i> workers, 1993–2002	
Year	Number of <i>xiagang</i> workers
1993	300.00
1994	360.00
1995	560.00
1996	891.63
1997	634.31
1998	876.93
1999	937.18
2000	911.31
2001	741.60
2002	617.70

*Note:* Unit: 10,000 persons.

Rongji Administration decided to allow the majority of loss making large and medium-sized SOEs to escape from their current predicaments (*sannian tuokun*).<sup>303</sup> From then on, only the key enterprises would be retained while the rest would be let go, namely ‘grip the large and let go of

<sup>300</sup> Lin, J.Y., & Z. Li. (2008). Policy Burden, Privatization and Soft Budget Constraint. *Journal of Comparative Economics*, 36 (1), 90-102. Lin, S., and W. Rowe. 2006. “Determinants of the Profitability of China’s Regional SOEs.” *China Economic Review* 17, no. 2: 120–41, 128.

<sup>301</sup> Wong, and K. Ngok, “Social Policy between Plan and Market: *xiagang* 158-173.

<sup>302</sup> *Ibid.*

<sup>303</sup> *Ibid.*



the small' (zhuada fangxiao).<sup>304</sup> This strategy gave the green light for the revamping of small and medium-sized SOEs. Most significantly, it legitimized massive lay-offs of the surplus workforce.<sup>305</sup>

The massive lay-offs increased the number of unemployed workers much faster (See Table 9, Previous page). In 1993, there were 3 million unemployment workers. The number rose from 3.6 million in 1994 to 5.6 million in 1995.<sup>306</sup> In 1999, this number approached the peak of 9.37 million.<sup>307</sup> Under these circumstances, massive lay-offs from the SOEs became inevitable. Large layoffs caused China's employment problem in both rural and urban areas. Table 10<sup>308</sup> shows the rate of unemployment and hidden unemployment both in rural and urban areas. China's urban unemployed was 5.7 million in 1996 and its rural unemployment is shown as ranging from 40 to 67 million individuals, while estimates of hidden unemployment figures appear to reach from 120 to 180 million.<sup>309</sup>)

	<i>Rural</i>	<i>Urban</i>	<i>Total</i>
Total population	860 (1)	340 (1)	1,200 (1)
Labor force			834.4 (2)
Employed	490.352 (2)	148.45 (2)	688.5 (2)*
		(Soe: 75) (5)	
Unemployment	40 to 67.2 (3)	5.7 (3.1%) (3)	
Hidden unemployment	120 to 180 (31%) (1)	20 (13%)	140–200 (27%) (4)

Table 10. Labor Forces and Estimated Unemployment in China, 1996 (in millions)

<sup>304</sup> Ibid.

<sup>305</sup> Ibid.

<sup>306</sup> Ibid, 162.

<sup>307</sup> Ibid.

<sup>308</sup> Jingji yu guanli yanjiu (Economics and management research), January 1998; (2) Liu Yong, Di sanci shiye gaofeng (The third peak in unemployment), p. 95; (3) 1998-nian1: Zhongguo shehui xingshifexi yu yuce (1998 analysis and predictions of Chinese society) (Bei-jing: ShehuikexueW enxian Chubanshe, 1998);

<sup>309</sup> Ibid.

According to two surveys polling more than 50 well-known Chinese academics and state officials working on labour and employment issues, the real unemployment rate in urban China had already reached 7 percent or even worse by 2002.<sup>310</sup> The unemployed refers to people with an urban household registration, between 16 and 45 (for women) or 16 and 50 (for men) years of age, who are able and willing to work, but have no work.<sup>311</sup>

A survey conducted in ten cities by the ministry of Labour and Social Security in June 2001, laid-off workers tended to be middle-aged, with an average age of 39.<sup>312</sup> Their educational attainment was also modest: with 39 per cent at junior middle school and 46.7 per cent at senior middle school levels. Equally disadvantageous is their skill level: 40.7 percent were graded as having deficient skills to reach other job levels, 60 percent of unemployed workers wanted help from the state to get back to work.<sup>313</sup>

According to one source, only 13% of employers will hire workers more than 45 years old and 61% are seeking candidates between the ages of 16 and 35.<sup>314</sup> Forty-eight percent of the jobs publicly advertised seek candidates with college-level education and only 4.4% were open to candidates with less than a junior-high education. It is particularly difficult for middle-aged women to find employment.<sup>315</sup> Even for street-cleaning jobs, one has to be less than 35 years old, while 70% of the female Xiagang (laid off workers) were around 40 years old.<sup>316</sup>

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<sup>310</sup> Mo, Rong (2002), *Jiuye Xingshi Yiran Yanjun* (Employment Still Troubling). In Ru Xin, Lu Xueyi and Li Peilin (eds), 2002. (The Year 2002: Analysis and Forecast of Social Conditions in China), *Beijing Social Sciences Documentation Publishing House*, 165-74.

<sup>311</sup> Wong, and K. Ngok, "Social Policy between Plan and Market: xiagang 158-173.

<sup>312</sup> *Ibid.*

<sup>313</sup> *Ibid.*

<sup>314</sup> *Zaijiuye gongzuode yanjiu yu shijian* (Research and practice on reemployment work) (Beijing: Jingji Guanli Chubanshe, 1998), 52.

<sup>315</sup> *Ibid.*, 52.

<sup>316</sup> *Ibid.*, 52.

*“For example, Suzhou municipality has about 33,000 xiagang but could not fill 10,000 jobs largely because laid-off workers found the positions undesirable for reasons of location, wage, or type of work. One source reports that about two-thirds of the xiagang throughout China did not take jobs because the available employment options did not meet their expectations”<sup>317</sup>*

*“The large lay-off in SOEs was caused by enterprise difficulty rather than individual culpability, is grossly unjust.<sup>318</sup> The lack of train and opportunity for skill diversification in state firms further dims people’s employability, on top of their age and education disadvantages.”<sup>319</sup>*

As a result, deprived of the means of livelihood, more and more unemployed workers took their grievances to the streets.<sup>320</sup> Chinese leaders are only too aware that waves of worker protests can explode into rebellions that endanger regime stability. As former President Jiang Zemin admitted, the lay-off of urban workers had already created considerable conflicts among the people and could spark off serious chaos.<sup>321</sup> Hence, both SOEs and society must share the consequences of mass redundancy. Laying off large numbers of workers caused social and political instability in 1990s as manifested in demonstrations, strikes, and petitioning by those who have been laid off.<sup>322</sup>

Laying off large numbers of workers in the late 1980s led China to have a large-scale consolidation and privatization of SOEs, which greatly improved the atmosphere for private business in China.<sup>323</sup>

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<sup>317</sup> Guonli xinxi (May 1998), pp. 65-82; and Jingji gongzuo daokan (October 1997).

<sup>318</sup> Ibid.

<sup>319</sup> Mo, Rong (2002), *Jiuye Xingshi Yiran Yanjun Employment Still Troubling*. 53.

<sup>320</sup> Qiao Jian, Xinyilun Jiegou Tiaozheng Xiade Laodong Guanxi (Labour relations under the new wave of structural adjustment). In Ru Xin, Lu Xueyi and Li Peilin (eds), *Analysis and Forecast on China’s Social Development*, Beijing: Social Sciences Documentation Publishing House.

<sup>321</sup> Ministry of Labour and Social Security, ‘Ministry of Labour and Social Security Introduces the White Paper on China’s Social Security Situation and Policy’ available at: <http://www.molss.gov.cn/news/2004/0907b.htm>

<sup>322</sup> Wong, and K. Ngok, “Social Policy between Plan and Market: xiagang 158-173.

<sup>323</sup> Liu, 10.

Nowadays (since 2006), China has proactively pursued multiple forms of business ownership, through asset restructuring, mergers and acquisitions, and, under certain conditions, bankruptcies, to accelerate the adjustments of the pattern and structure of the state economy.<sup>324</sup> However, there are still approximately 150,000 SOEs which account for about 20 percent of China's total employment. The choice to downsize the proportion of SOEs to a desired goal of 10 percent would likely kick off another undesired unemployment spike that would again threaten social stability.

#### **4. Proposal B: Further Diversify SOEs into Larger Conglomerates**

The second possible solution is to diversify the SOEs. The most common motive for corporate diversification is that it could reduce firm risk, thus helping to improve firm value. Diversified companies are safer and more adaptable to the fast changing business conditions.<sup>325</sup>

While diversification has been feverishly pursued by Chinese companies, some analysis shows that diversification indeed facilitates the quick expansion of scale, but there is no proven evidence that it enhances firm value in China.<sup>326</sup> To a certain extent, according to Liu, evidence even suggests that diversification is detrimental to a firm's value creation. The analysis shows diversification is not associated with enhanced return on invested capital (ROIC) and diversification would only create bloated behemoths, whose ROIC cannot cover cost of capital, giving rise to conglomerate discount.<sup>327</sup>

Liu studied all of the Chinese listed companies (excluding financial and utilities firms) from 2004 to 2010. He examined how these firms' ROICs related to the number of business segments

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<sup>324</sup> Ibid.

<sup>325</sup> Liu, 179.

<sup>326</sup> Ibid, 142.

<sup>327</sup> Ibid, 142.

they boasted (a measure of diversification). Figure 8 presents the results of his analysis. Specifically, Liu classified the Chinese listed companies into five categories, based on the number of business segments these firms had developed over time. Group 1 represents the companies that focus on one product or service; Group 2 refers to the listed companies with two major business segments; Group 3 consists of the listed companies with three major segments, and so on. Group 5 deserves a few more words — it comprises the listed companies with five or more business segments. For each group, Liu computed the firm's average ROIC in the current year (year  $t$ ), and in the next year (year  $t + 1$ ).

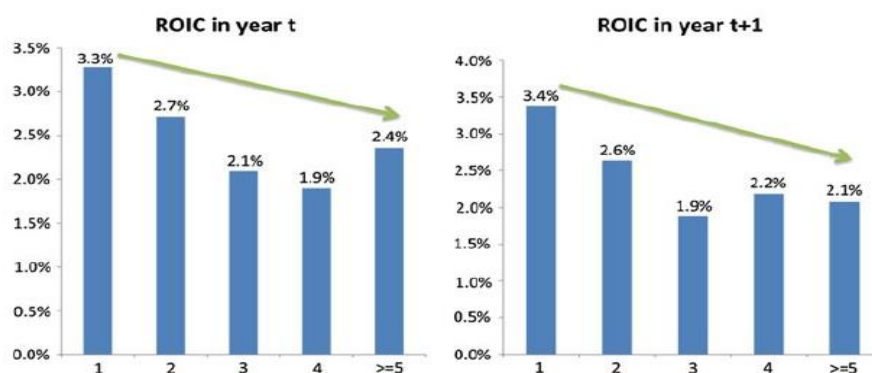


Figure 8. ROIC and the number of business segments<sup>328</sup>

Figure 8 shows the results. When the number of business segments increases, the Chinese listed companies' ROIC does not increase accordingly. In fact, ROIC declines steadily with the increase of the degree of diversification. When Liu extended the analysis to the relationship between the number of segments and firms' ROIC in year  $t + 1$ , Liu found the same results. For a specialized form, that is, a firm with only one business segment, its ROIC averaged at 3.3 percent during the period from 2004 to 2010. When the number of business segments increased to five or more, these firms' average ROIC dropped to 2.4 percent. Diversification leads to

<sup>328</sup> Liu, 141.

bloated corporate dinosaurs, but not high-performing conglomerates in the universe of Chinese companies. Liu's analysis above shows that diversification indeed facilitates the quick expansion of scale, but there is no proven evidence that it enhances firm value.

After examining the two possible solutions for China's current dilemma, it is important to consider the existing institutions and historic elements in order to implement the effective policies to produce the desirable result. Given the current economic circumstance and the failed cases, China likely cannot imitate the economic successes of Japan and Korea to connect SOEs with market economy and successfully achieve the growth.

Although SOEs lack effective corporate governance mechanisms to discipline their managers and mitigate potential agency problems, the government as a regulator of SOEs is pressured with the responsibility of social contract with the public, and they have to serve their best interests in terms of maintaining the social order. This, to a certain extent ROIC-driven strategy is not the SOEs' goal.<sup>329</sup> Since laying off large numbers of workers caused social and political instability, the reform for SOEs should avoid the sensitive issues of selling state firms or closing them and dismissing their employees. In addition, the evidences has also shown that the innovative-driven and firm-diversification strategy cannot necessarily generate SOEs' firm value. Moreover, despite that China's former GDP growth model was quite similar to JTK's (Japan, Taiwan and Korea) pre-democracy development model - a strategy of having a high savings, high investment, political centralization as well as high external competitiveness<sup>330</sup> - China's current political economic structure still has the remains of its previous centrally-planned economy, which cannot allow its economy to further imitate JTK modern democratic model. China has to

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<sup>329</sup> Grout, P.A., & Stevens, M. (2003). The Assessment: Financing and Managing Public Services. *Oxford Review of Economic Policy*, 19. 215-234.

<sup>330</sup> Boltho A., Weber M. (2009), 'Did China Follow the East Asian Development Model?,' *European Journal of Comparative Economics*, 2, 267-286.

find its own and unique solution to fit its current economic stagnation, if it wants to reach a high income level using decentralized economic experimentation in novel institutions and forms of organization.<sup>331</sup>

Finally, the Belt and Road Initiative appears to be the only solution to help SOEs to decrease the drag on domestic growth as well as reinforce their state ownership as a pillar of domestic stability. BRI at least might shore up China's economy against the potential drop in demand from Europe or the US for Chinese exports.<sup>332</sup> Since the slowdown in China is a well-known fact (old news), the single biggest challenge for China now is how to manage its slowdown and maintain long-term social stability. The Chinese government has to be obsessed with economic and political stability and taking a slow, gradual approach to policy reform. Major change to the SOE sector is unlikely in the short term, particularly because the significant size of SOEs which accounts for an estimated 30-40 percent of total industrial output and 20 percent of total employment in urban areas.<sup>333</sup>

The reality of making sweeping changes to China's SOEs, plus the Chinese government's stability-first attitude to policy changes, means that SOEs' structural reform will remain consistent for a long time coming.<sup>334</sup>

BRI as a moderate economic transition tool can help China maintain large employment overseas to increase influence abroad and maintain social stability at home. BRI demands China exports a large proportion of the domestic workforce, which could afford the CCP (Communist Party of

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<sup>331</sup> Perkins D.H., Rawski T.G. (2008), 'Forecasting China's Economic Growth to 2025', in Brandt and Rawski (eds.) (2008).

<sup>332</sup> Grout, P.A., & Stevens, M. (2003). The Assessment: Financing and Managing Public Services. *Oxford Review of Economic Policy*, 19. 215-234.

<sup>333</sup> Spencer Sheehan, "How to Reform China's SOEs," *The Diplomatic*, June 7, 2017.

<sup>334</sup> Ibid.

China) opportunity to refocus domestic economic conditions and implement long-run modern industrial system reforms absent their preoccupation with labor layoffs and resulting unrest. This should include reforms to empower the private sector to stimulate and control innovation (patent management), upgrade to higher tech manufacturing and improve education of future labor in the information and high-tech industries.

### **Conclusion**

In Chapter One, it is argued that the recent downturn in China's economic growth is partially related to SOEs inefficient framework. The main reason for this is that SOEs cannot be sustained to create any economic growth within their current investment-driven and capital-intensive strategy.

In Chapter Two, consideration was given to whether SOEs are able to maintain their current strategy to achieve new economic growth via the Belt and Road Initiative. By looking at the possible SOEs' strategic rationales, risks and challenges in BRI, it is predicted to be very difficult for SOEs to achieve long-term profits in BRI.

The last chapter provides a basis to explain the theory behind of SOEs' engagement in BRI and that SOEs' participation in BRI might be still worth the cost for the future of the Chinese economy although evidence also shows that SOEs might not be completely successful. First, the reform of SOEs into a more high-tech intensive model can be a very long term process and the current institutional system cannot "plan" the SOEs to be a more knowledge-intensive industry in a short term to achieve new growth. Second, the government might be reluctant to have a structural change reduce a significant portion of SOEs by encouraging them to layoff redundant workers, as it worries about unemployment and social instability.



The BRI appears to be the only way for SOEs to decrease the drag on domestic growth while trying to increase overseas demand in BRI. This initiative can help China maintain large employment to find new economic growth in overseas while approach a social stability in home.

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