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THE SIDE EFFECTS OF CHINA'S 2009 FISCAL STIMULUS

***Abstract:** The aim of this report is to critically analyse the costs and benefits of China's fiscal stimulus package and recommend long-term policy solutions. China was one of the first countries to emerge from the Global Financial Crisis thanks to its strictly investment focused \$586 billion stimulus package. As a result, local governments have been left with excessive accumulated debt. The report concludes that China needs to abandon its unlimited assistance guarantee that makes local governments and firms prone to moral hazard. Secondly, economic performance incentives for local government officials tend to result in the officials meeting their targets while leaving debt behind and disposing of agricultural land. Third, PPPs could be the solution to the problem of high demand for infrastructure and shortage of funding once efficiency in investment is improved.*

***Keywords:** China, global recession, fiscal stimulus, local government debt, local government fiscal resources, moral hazard, foreign direct investment*

JEL: H 74, O 53, P 35

Introduction

There are diverse views on stabilisation policy among economists. Some believe that the economy is inherently unstable and monetary and fiscal policies should be used to stabilise the economy. [13] On the other side of the spectrum, economists like Milton Friedman believe that economy is naturally stable and bad economic policies are the reason for large fluctuations. [13] Hence, the main question whether to implement a stabilisation policy was vastly discussed during the recent Global Recession.

According to Mankiw [13] fiscal policy is not a very precise tool for stabilising the economy as slow and cumbersome legislative process often results in delays of policy implementation or long inside lag¹. This was the case of the United States during the global recession. Mankiw [13] further believes that the inside lag is shorter in

¹ Inside lag is the time it takes to respond to a shock to the economy with an appropriate policy. Outside lag is the time it takes for the policy response to take an effect on the economy.

countries with parliamentary systems such as the United Kingdom. Although China² does not have a parliamentary system, its political power is by law concentrated in single party and, hence, this allowed China to enact policy changes more promptly than in democracies where time required for approval from the parliament delays implementation of policies. [22] As it will be shown in further sections of this report, China managed to minimise both the inside and outside lags of its policy.

China's export-led growth was affected immediately as the global recession caused many developed countries' import demand to diminish. Sluggish demand from the developed countries meant that China as the third largest importer reduced its demand for raw materials from the developing world and intermediates and capital goods from the developed countries. [6] This only signifies how China is highly integrated into the world economy and any policy measures taken during the recession as well as after the recession will have an impact on the rest of the world.

China took the Keynesian view that macroeconomic equilibrium is determined by the level of aggregate demand. Prior to the financial crisis, China sustained a double digit growth and during the crisis, it used a ¥ 4 trillion (\$ 586 bn) stimulus package consistent with the Keynesian view that managing the aggregate demand through increased government spending and the fiscal multiplier effect should stimulate the economy during downturns. The fiscal stimulus package was mainly investment-focused and perhaps that was one of the reasons China was one of the first countries to emerge from the crisis. Had China spent most of its stimulus on tax cuts and transfers, it is very unlikely that households would have been capable of pulling China out of recession as promptly as it emerged. It is widely known that the Chinese are supersavers. The household saving rate stood at 30 percent of disposable income in 2010. There has been lot of research done as to why the households tend to save so much. China's household saving rate has been growing despite high income growth and (sometimes) low interest rates. [3] Therefore, it is unlikely that any increase in income due to tax cuts would boost consumption sufficiently for China to overcome recession. Instead, local governments were encouraged to boost investment especially in infrastructure and municipal construction. Advanced economies, on the contrary, have mainly implemented consumption focused stimuli and struggled to emerge from the recession.

The objective of this report is to critically analyse the costs and benefits of China's fiscal stimulus package and recommend long-term policy solutions. The report is organized as follows. Section 1 is focused on assessing the costs and benefits of China's 2009 stimulus package based on data analysis. Based on the costs pointed out in Section 1, Section 2 discusses the viability of "do nothing" policy option for China's government. Section 3 is dedicated to discussion of current policy undertaken by Chinese government and conclusions.

² This report considers only Mainland China and excludes Special Administrative Regions of Hong Kong and Macau.

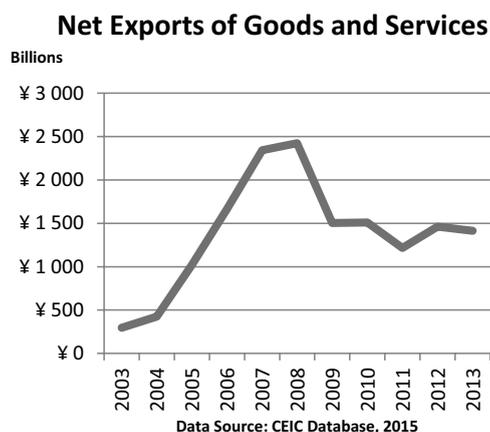
Section 1

[Short-term] Benefits of the stimulus package

1. Net Exports

From Figure 1 it is obvious that the onset of the financial crisis caused an immediate fall in exports to countries where demand was most concentrated, i.e. the US, the EU and Japan (G3). Orders from the EU dropped by almost one quarter in 2009. Exports to US and Japan dropped by 12.5 percent and 16 percent respectively. Exports accounted for 35 percent of China's GDP prior to the recession and plummeted by 10 percent by the end of 2009. In addition, between 2000 and 2007, China's exports experienced an average annual growth of 22 percent. Export growth rapidly slowed down to 9 percent in 2008 and eventually slipped into negative growth of 10 percent in 2009. The sudden decline in export demand quickly spread across the country as China's export-led growth meant that many firms focused on export only. Firms heavily dependent on export fell into financial difficulties, temporarily shut down or went bankrupt [6, 23]. G3 countries which used to account for more than 50 per cent of China's exports, contrary to China, experienced prolonged recession thus China has not managed to restore its exports to pre-recession levels.

Figure 1



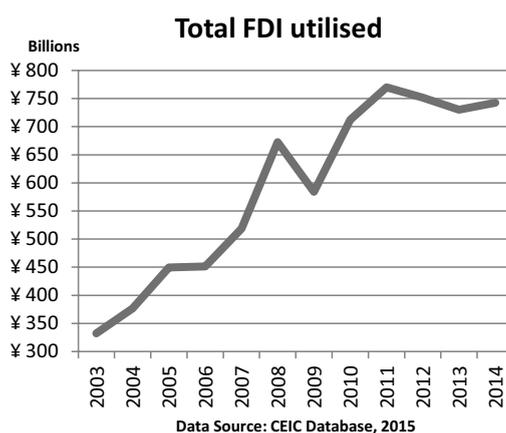
2. FDI

According to the United Nations Conference of Trade and Development [19], last year, China overtook the US as the top destination for FDI since 2003.³ FDI has played an important role in China's export led growth. China managed to expand

³ UNCTAD estimated FDI inflows to China at \$ 128 bn, closely followed by Hong Kong, which received \$ 111 bn of foreign investment. The US attracted \$ 86 bn worth of FDI putting it in third place.

and diversify its export markets via its compulsory and voluntary FDI policies.⁴ [6] Figure 2 shows that during the global financial crisis, FDI briefly dropped by 13 percent between October 2008 and August 2009 before swiftly recovering. Diminishing demand for China's exports affected foreign companies operating in China, which had to postpone investment plans, causing a reduction in FDI. [6] Further, a drop in FDI also had a negative impact on demand for domestic as well as imported equipment.

Figure 2

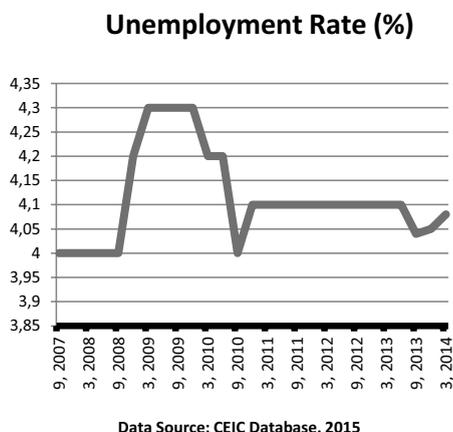


3. Unemployment

Firms facing difficulty continuing their operations due to contracted demand for exports had to lay off workers, which increased unemployment. [4] Figure 3 shows that the unemployment rate increased slightly from 4 percent to 4.3 percent between September 2008 and December 2009. From December 2009 onwards, the unemployment was perhaps being absorbed by the high volume investment in infrastructure and municipal construction and gradually reached pre-recession levels. However, it is highly questionable to what extent official data is published by China's National Bureau of Statistics a true representation of China's unemployment rate. China has an extremely narrow nonsensical official definition of unemployment. Rural residents and rural migrants without an official urban residence are excluded from the calculations. According to Warner [20], as much as 100 million people account for rural migrants and are 'hidden' in the calculations. In addition, unemployment rate calculations exclude men and women over 50 and 45 respectively [10, 20]. It is estimated that true unemployment rate in China is approximately between 10 and 12 per cent.

⁴ Compulsory policies required Foreign Invested Enterprises (FIEs) to export a certain percentage of their products or prohibited the FIEs from selling on the local market altogether. These policies were abandoned since China's accession to the World Trade Organization (WTO) in 2001.

Figure 3

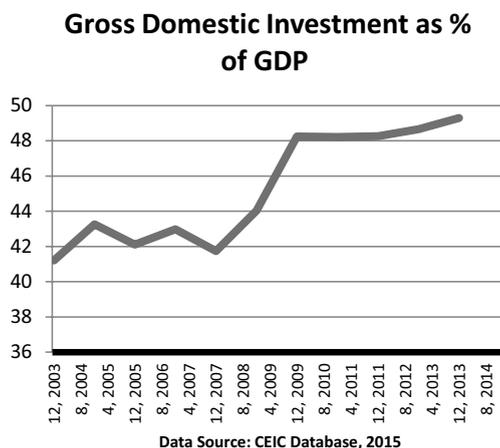


4. Investment

Figure 4 represents investment as a percentage of GDP in China between 2003 and 2013. Investment builds up almost half of China's GDP. It is clear that investment has played a key role in China's GDP in the past decade; however, its significance has strengthened by almost 10 % since the global recession in 2008 as a result of the investment-focused stimulus.

Under pressure to boost the economy, the Chinese officials hurriedly approved many investment projects, which were unprofitable. It was a 'déjà vu' moment for China from 1992, when overinvestment brought excess capacity into the economy and therefore, the overall investment efficiency was deteriorating.

Figure 4



5. Business and Consumer Confidence

Since the onset of the financial crisis, business confidence in China fell by 25 percent when it hit its lowest point in December 2008 (Figure 5). With the implementation of the stimulus package, business confidence quickly recovered to almost pre-recession levels by the end of 2010. Similarly to business confidence, consumers' confidence plummeted since the beginning of the recession but swiftly rebounded in the first quarter of 2009 (Figure 6).

Figure 5

Business Confidence Index

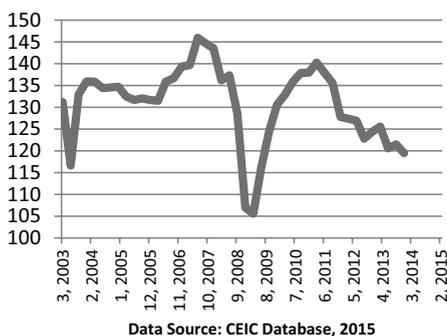
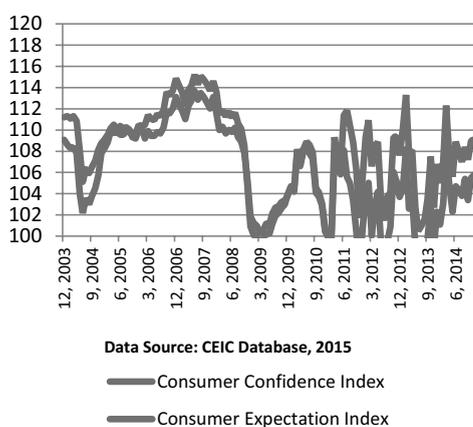


Figure 6

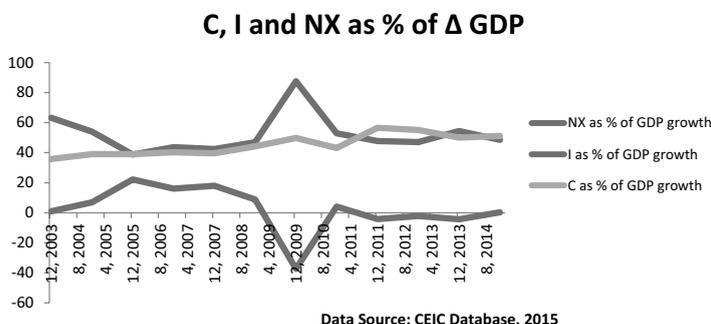
Consumer Confidence Index



6. Growth

Figure 7 shows contributions of consumption, investment and net exports to China's GDP growth between 2003 and 2014. Prior to Global Recession, China relied on export-led growth. It is clear that as the world began falling into financial crisis, the role of net exports in China's economy growth gradually slowed down until its share of GDP growth dropped by 37 percent in December 2009. This negative impact of slowing demand from recession-hit countries on China's growth was almost precisely offset by investment as seen in Figure 7. A sharp increase in investment's contribution to GDP growth can be observed between December 2008 and December 2009, the year when stimulus package was unveiled.

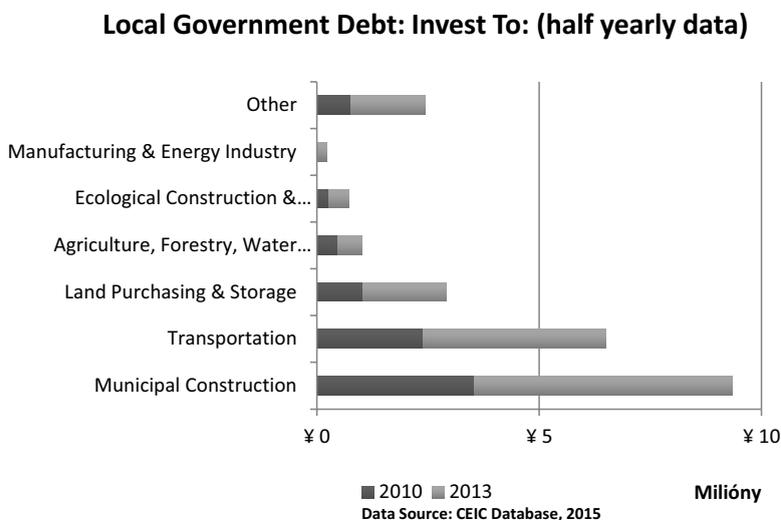
Figure 7



[long-term] Costs of China’s stimulus package

Central government funded only 30 percent of the stimulus package and the rest was funded by local governments’ borrowing. [9] Figure 8 shows that funds borrowed by local governments were used in line with the stimulus objective to invest in affordable housing projects, infrastructure construction in rural areas, post disaster reconstruction, technological reform and building necessary infrastructure. [17]

Figure 8



China operates a highly decentralized fiscal system across its four levels of government. Local governments are generally responsible for the majority of public spending despite receiving only half of the fiscal income and not being able to directly source funding from banks. The central government’s share of national tax revenue is about 53 percent while the local governments are responsible for over 85 percent

of national expenditure. Hence, the shortfall in funding makes local governments at all levels predisposed to run a significant budget deficit. To cover the funding the gap, local governments are forced to borrow funds. However, local governments are barred from issuing bonds as means of long-term financing as well as borrowing from banks. The only way to legally borrow funds is via a request to the Central Government, which is tightly regulated and very hard to obtain. The rationale behind tight regulation of extra funds for local governments lies perhaps behind the negative effects of constant deficit monetization. It is believed that if sustained over time, it is a powerful source of inflation. [2]

Local governments have found their way around the legislation. They would set up companies that channel funds from banks, bond markets or trust companies on their behalf. These are generally referred to as Local Government Financing Vehicles (LGFV) and are usually set up for the sole purpose of infrastructure spending. [24] LGFVs usually borrow against land or property provided by local governments.

Figure 9

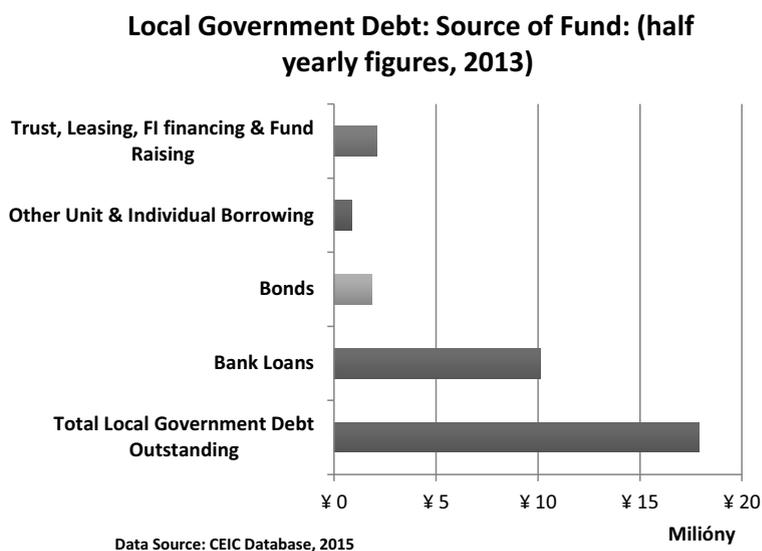


Figure 9 shows the composition of local government debt in 2013. Local governments have been left with excessive accumulated debt as a result of the 2009 stimulus package. The majority of the debt was in the form of bank loans. China's banks have the tendency to make loans that mature in no more than two years, even for long-term infrastructure projects. [14] Hence, governments have to seek finance before their development projects are completed. [14] This is not a sustainable approach to government borrowing. The cost of borrowing from banks is higher than sourcing funds from issuing bonds. Further, the maturity mismatch between short-term bank loans and long-term infrastructure projects amplifies debt risk. The fast

growth of local government debt has raised concerns about the local governments' ability to generate revenue and allocate resources efficiently. Government projects do bring in revenue in the form of road tolls or usage fees for a water treatment facility, but this is not enough to cover cost of debt servicing. [24] It is inevitable that central government matches distribution of tax revenue with spending responsibilities of local governments.

SECTION 2

“Do Nothing” Policy

If China's local government debt grows too rapidly, concerns may arise among buyers of debt securities about the future capacity of the government to raise new financing. [2] Hence, doubts about solvency of the public sector may put an upward pressure on the interest rate at which Chinese government borrows. However, most of China's debt is internal debt held by companies and an increase in interest rate on external debt does not pose a threat to China, yet.

The significance of debt depends on what the borrowed resources are for. [2] According to the ‘golden rule’ of public finance, government should only borrow to finance investment expenditure and not to fund current expenditure. [7] Further, according to Bénassy–Quéré et al. [2], borrowing to fund new infrastructure as in China's case may not deteriorate the long-term position of the government. First, new infrastructure may have a positive effect on debt-GDP ratio; second, infrastructures are public assets and could potentially be sold off in later point in time.

It could be argued that China's current investment in infrastructure and municipal construction is for investment's sake and that the numerous ‘ghost towns’, empty airports and ‘phantom malls’ do not produce any revenue. However, in 1980, more than 80 per cent of China's population lived in rural areas compared to only 47 per cent in 2013. Urbanization is a significant part of China's development. The World Bank estimates that 260 million people have already moved from rural to urban areas and it is expected urban population will have reached 1 billion by 2030. In addition, a study by McKinsey Global Institute predicts China will have 221 cities with population of one million-plus and 23 cities with population of more than 5 million by 2025. [21] Accommodating an average rural-to-urban migration of 15 – 20 million people per year [21] puts a pressure on public funding for provision of healthcare and education. Therefore, there is a time gap between when cities look ready to be inhabited and when they are actually prepared to sustain a full-scale population- the so-called ‘ghost city’ phase. [18] When Deng Xiaoping began realizing his vision of Pudong in the 90s, a decade later Milton Friedman thought that it is : “not a manifestation of the market economy but a statist monument for a dead pharaoh on the level of the pyramids”. [11] Today, its population has grown by almost 200 percent to 5.5 million, and it is home to Shanghai Stock Exchange. At

this pace, China's today's 'empty' cities and underused infrastructure will soon be thriving.

What is the risk then? All local government debt is owed to parties that are controlled by the same entity as local governments- the central government. Essentially, there is no risk because it is all state entities lending to state entities. Currently, investors buy assets based on what the advertised rate of return is and they do not look at it at risk adjusted basis because there is no risk as there has never been a default. [16] As all parties involved are guaranteed a bail out, the issue of moral hazard arises. Local governments are induced to inefficient allocation of labour and capital.

China began its economic reforms in 1978 and has gradually transformed into a more market-oriented economy. Sovereign default would raise questions about credibility and solvency of the Chinese government, which could affect FDI, foreign trade and consequently growth. Although, one could argue that China needs some defaults, instead of government constantly intervening, to establish sounder financial markets so that people pay more attention to risk.

Lastly, leadership in China is not elected by the people therefore the system has some legitimacy issues. The only claim the party has to legitimacy is that under their leadership the system is capable of delivering high standard of living for the people of China. Sovereign default would result in decline in growth, shrinking living standards and that would lead to a political crisis, which the system cannot afford.

SECTION 3

China's current policy

Under the new plan, local governments will be able to swap 1 trillion Yuan (\$ 161 billion) of high-interest debt acquired before June 2013 and maturing in 2015 into low-cost bonds. According to an audit from 2013, local governments are due to repay 1.858 trillion Yuan (\$ 300 billion) this year, thus the debt conversion would cover about 50 % of the current debt and it is estimated that the debt swap will potentially reduce the cost of debt servicing by 40-50 million Yuan a year. The quota was distributed among regions according to their amount of maturing debt. The cost of this saving will be borne by creditors whose high-interest assets will be exchanged with low-interest municipal bonds. It is said that banks will be compensated for the lower returns with the lower default risk that bonds carry. However, as it can be recalled from Section 2, Chinese banks do not face default risk as much as banks in developed countries as they are practically guaranteed a bail out from the central government.

The aim of Chinese officials is to prevent construction projects from staling due to funding shortages. But the debt conversion is merely a change of the form of debt and therefore will increase this year's deficit. It does not solve local governments'

problem of accumulated debt, funding shortages or their inability to issue bonds on their own.

Conclusions

Thanks to its strictly investment-focused fiscal stimulus, China experienced a V-shaped recovery. The swift recovery came at a high cost of long-term local government debt problem. Despite the minimal risk associated with banks and local governments defaulting, China's growing role in the world economy means that the government needs to address the issue of mounting local government debt in order to sustain long-term growth.

However, China needs to address deep-rotted structural problems before it can implement any policy successfully. First, China needs to gradually abandon its unlimited assistance guarantee that makes local governments and firms prone to moral hazard. Local governments are induced to inefficient allocation of labour and capital. Too much money goes to firms earning returns that are less than the cost of capital, which is not a recipe for sustaining economic growth. If they improve the allocation of capital, they will keep the growth up. In the long-run, China will have to open up a lot of sectors to private participation which has not been done.

Second, the current GDP target oriented assessment for local officials leads to excessive investment impulse [8] and, hence, borrowing to fund this investment. Local officials with the best economic performance are more likely to gain a higher position in a different location or a different part of the bureaucracy. [12] According to a research conducted by Wu et al. [22] higher land sales in one year are correlated with higher transport infrastructure investment in following years. Higher levels of transport investment in one year translate in faster economic growth in following years. Further, they believe that faster growth makes land more valuable and increases revenue from land sales. Thus local officials find themselves "locked" in land-investment-growth cycle. Economic performance incentives for local government officials tend to result in the officials meeting their targets while leaving debt behind and disposing of agricultural land.

Third, Public Private Partnerships (PPPs) could be the solution to the problem of high demand for infrastructure and shortage of funding. [5] However, currently many of the government's infrastructure and housing projects are not generating enough revenue to offer attractive terms for PPPs. Once efficiency in capital and labour allocation is improved, infrastructure projects will generate higher rate of return to investment, which in return will make PPPs more appealing.

Fourth, allowing local governments to issue municipal bonds would divert their focus from costly short-term bank loans. Local governments would gain access to long-term finance for long-term projects such as infrastructure.

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