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Policy Brief

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China's Growing Local Government Debt Levels

Summary

Local governments across China have borrowed substantially in recent years to fund public infrastructure improvements and other capital investments. Local indebtedness has increased dramatically since the global financial crisis of 2008, reaching 40 percent of GDP or RMB 24.0 trillion (\$3.8 trillion) in 2014. With an economy growing at its slowest pace since the economic reforms of the 1980s, local debt levels have become a policy concern both within China and internationally. While policymakers have taken steps to mitigate the risks to China's financial and fiscal systems, further measures may be necessary. Local debt, however, could return to more sustainable levels if the pace of infrastructure investment slows or if more stable funding sources are made available to local government.

While China's more affluent eastern provinces have the greatest levels of debt in absolute terms, their burden is likely manageable and small as a share of local GDP compared with the poorer western provinces. While not yet severe, the fiscal outlook will be less benign in the future without significant policy changes by the central government. With a number of policy and regulatory reforms underway, some of the risky and opaque financing channels and operations that facilitated the explosion of local debt after 2008 are intended to be shut down. Moreover, the central government is taking measures to restructure local debt—pointing to the possibility, and perhaps likelihood, of a larger bailout should debt levels become unmanageable.

A structural imbalance between local government spending and access to tax revenues remains a fundamental tension, as the ability to meet debt service obligations is dependent on the power to raise revenues. Under China's fiscal and tax system, local governments receive about 50 percent of taxes collected but are responsible for about 80 percent of expenditures—with a resulting gap that has to be filled from other sources, such as land sales and bank loans. Successful reform will require more stable and transparent financing channels for local governments.

The local government debt problem is set against a backdrop of economic change, as China attempts to turn its government-dominated economic growth model into a market-oriented one. From that perspective, how it manages its local fiscal conditions will be telling about the commitment to and speed of those larger changes.

Introduction

Governments around the world routinely issue debt to finance public infrastructure projects such as the construction or improvement of education, transportation, sanitation and water systems. Unlike the current services (e.g., national security) that governments provide, the benefits from capital expenditures are realized over longer horizons. Debt financing is a means of

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more closely aligning revenue collections with the receipt of services from capital investments.

However, excessive reliance on debt financing can lead to burdensome servicing costs and, in extreme cases, to sovereign defaults. There are limits to every government's capacity to borrow—namely, the resources available now and in the future to meet its obligations. When a national or local economy slows—as is the case in China with an economy that is growing at its slowest pace since the economic reforms of the 1980s—the ability to meet debt obligations and maintain a desired level of services can be challenged.

In China, governments at all levels—central, provincial, prefectural/municipal, county and township/village—rely to a greater or lesser extent on debt financing. However, the central government has political and financial control over the entire public sector. The obligations of lower levels of government resulting from borrowing activity are considered local debt for purposes of this policy brief.

Although little official data has been made public, available information suggests local indebtedness has more than doubled over the past five years.¹ With local debt approaching 40 percent of GDP, officials in China have begun to take steps to mitigate the resulting risks to China's financial and fiscal systems.

The surge in borrowing over the past five years has occurred on top of an already rising base. After increasing steadily for most of the previous decade, albeit at a rate commensurate with national economy growth, local debt nearly doubled from 2008 to 2009 alone due to a fiscal stimulus initiative designed to ameliorate the impact of the financial crisis on that nation's economy. As a result, China now faces local debt burdens significantly higher than existed a decade ago.

This policy brief describes: 1) local debt trends and the reasons for the buildup; 2) local debt distribution and impact across provinces; and 3) the local debt outlook

along with policy actions being taken or proposed to address the buildup and avert defaults.

Local debt trends

Aggregate local debt. Although the topic of growing local debt burdens in China has garnered some attention in recent years, little data has been made public to quantify precisely the magnitude of such borrowing. Official reports by the National Audit Office (NAO) and data from the Ministry of Finance show local debt increasing from RMB 10.7 trillion (\$1.7 trillion) in 2010 to RMB 24.0 trillion (\$3.8 trillion) in 2014.² NAO has also reported debt growth rates in 1997, 1998, 2008, 2009 and 2010, and average growth rates during the 1998-2002 and 2002-2007 periods. Given those reported rates, Figure 1 shows a backwards extrapolation estimating outstanding local debt totals from 1998 to 2007.

The officially reported numbers may understate true magnitudes. Local governments can borrow in a variety of opaque ways, including through a shadow banking system that has expanded significantly in recent years. Unofficial estimates of local debt, along with estimates from other official agencies, suggest significantly higher burdens. For example, the China Banking Regulatory Commission (CBRC), academics and various investment banks have each estimated amounts of outstanding local debt in China exceeding official government data.³

Figure 1: Total Local Debt Outstanding and Growth Rate



Source: NAO and author estimation

As shown in Figure 2, local debt now totals about 40 percent of China's GDP. By comparison, in the U.S. the

¹ According to a report presented by Lou Jiwei, China's Minister of Finance, to the National People's Congress on August 24, 2015. Source (in Chinese): <http://bit.ly/1Ib9JfY>. For English reports on this topic, see: <http://bit.ly/1Ntk618>.

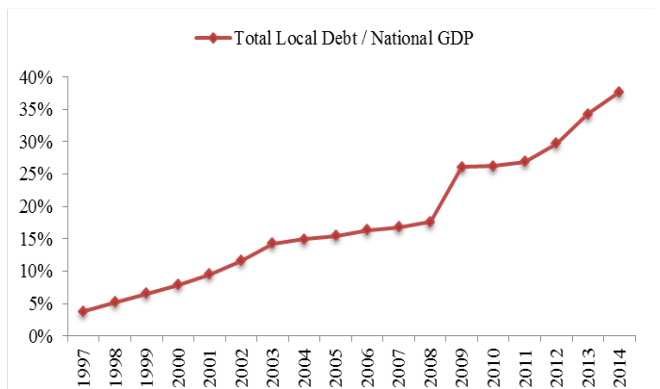
² NAO classifies local government debt in three categories: i) debt with direct government responsibility for repayment; ii) debt backed by the government; and iii) debt with possible governmental rescue

intervention. All categories are included in the aggregate estimates of local debt contained in this policy brief.

³ CBRC chairman, Shang Fulin, said there is RMB 9.59 trillion in bank loans to local government financing vehicles at the end of March 2013—over RMB 2 trillion higher than the data reported by NAO. Source: <http://bloom.bg/1TNSlyN>. Li et al (2012a) estimate the total size of local debt to be RMB 14.8 trillion in 2010.

most indebted state governments have a debt-to-local GDP ranging from about 22 percent (Kentucky) to 27 percent (New York).⁴

Figure 2: Size of Total Local Debt Relative to China GDP



Source: NAO and China National Bureau of Statistics (NBS)

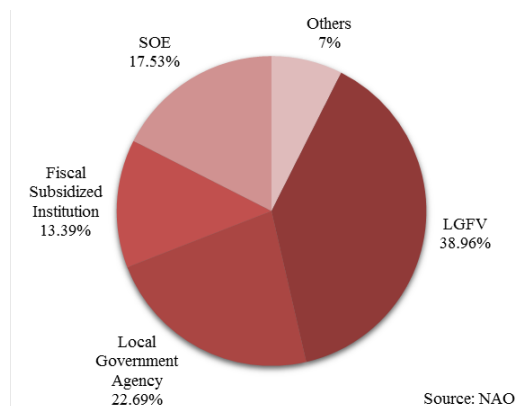
Local debt totals almost doubled between 2008 and 2009 when China undertook a RMB 4 trillion fiscal stimulus plan to counteract the negative impact of the global financial crisis on its economy. That plan emphasized infrastructure investment, large-scale engineering projects and social welfare housing construction. Over 60 percent of funding for those projects came from local governments. At that time, the central government encouraged local governments to establish more local government financing vehicles (LGFVs).

Statistical overview. A 2013 NAO report provides a snapshot of some key features of local debt, including debtor identities, financing channels, funds usage, and debt maturities for all local debt outstanding raised through June of that year.

Figure 3a shows that LGFVs are the largest single borrowing vehicles. Local government agencies often use LGFVs as a tool to finance the gap between desired expenditures and revenues. A sponsoring local government backs the debt issued by LGFVs, either directly or indirectly. Many local government agencies shift land resources to LGFVs to serve as collateral, or pledge future government fiscal revenues when LGFVs borrow from capital markets.

Local government agencies also borrow. However, past Chinese law forbade most local government agencies from directly issuing bonds in the capital market or borrowing from banks. Those eligible to issue bonds would be required to go through a strict approval process administered by the Ministry of Finance for a chance at a small quota to be distributed. Circumventing those restrictions incentivizes local governments to borrow through LGFVs and SOEs.

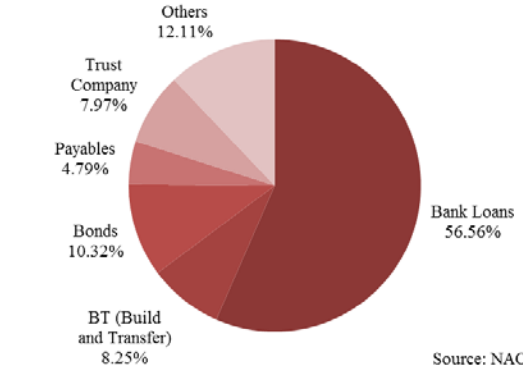
Figure 3a: Debtor Identity



Source: NAO

Figure 3b shows the most important lenders to local governments are commercial banks and government-run financial institutions such as the China Development Bank. Other financing channels include *build and transfer* (BT) financing, bonds, and trust companies.⁵

Figure 3b: Financing Channel



Source: NAO

The actual share of financing coming from the banking system exceeds the reported percentage because banks also establish off-balance-sheet structures to finance

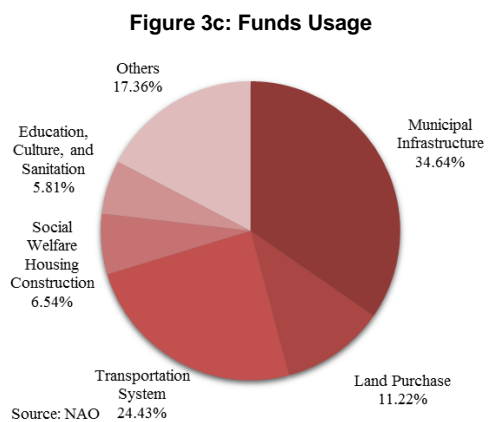
⁴ Source: <http://bit.ly/1PaEiVP>.

⁵ Bonds include those issued by local government agencies and corporate bonds issued by LGFVs and SOEs. The category “Others” includes financing channels such as private institutional and individual

local government projects. For example, banks sell wealth management products to the public and then lend that money to local governments. Banks can also lend to trust companies, which then make loans to local governments and those assets appear as investments in corporate securities rather than as loans on the banks' balance sheets. In recent years, banks have developed such structures and turned to shadow banking to avoid the tightening regulations restricting loans to local governments and other out-of-favor industries. Apparently, the banks believe that local governments will find a way to make good on their obligations despite their very high debt levels and limited revenue sources.

Figure 3c shows the uses of borrowed funds by local governments. As discussed below, infrastructure and housing investments are the most common ways local governments seek to stimulate the economy.

Figure 3d shows the distribution of debt maturity dates. A large amount of debt borrowed during the financial crisis came due between 2013 and 2015. Because of rollovers of old debt as well as issues of new debt, the current situation may be different than this 2013 snapshot.



Capacity for repayment. Ultimately, the ability of local governments to repay indebtedness is dependent on their ability to raise revenues to cover required debt service payments. Under China's fiscal and tax system, fiscal revenues of local governments comprise the following.

- 1) *Budgetary fiscal revenues*—mostly tax collections. While local governments receive about 50 percent of taxes collected, they are responsible for about 80 percent of expenditures—with a resulting fiscal gap that has to be filled from other sources.
- 2) *Central government transfers*—assigned for specific

projects and cannot be used for other purposes.

- 3) *Flows into Government-Managed Funds (GMFs)*—raised from non-recurring local activities such as land sales. Nearly 80 percent of GMF revenues have been raised from local government land sales, an unsustainable situation in the long run. Other revenues come from fees charged by local governments for supporting public services like education and cultural activities, housing for government employees and maintenance of the public transportation system.

Figure 3d: Maturity Date

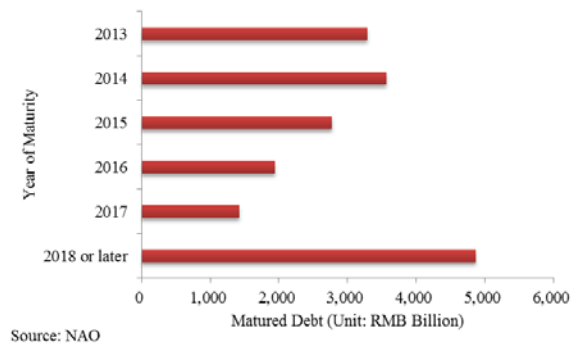
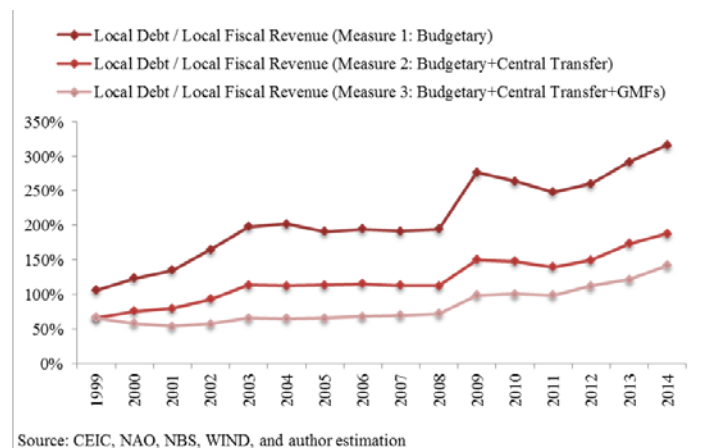


Figure 4 shows the growing ratio of local debt to fiscal revenue over time, measured several different ways.

Figure 4: Size of Local Debt relative to Fiscal Revenue

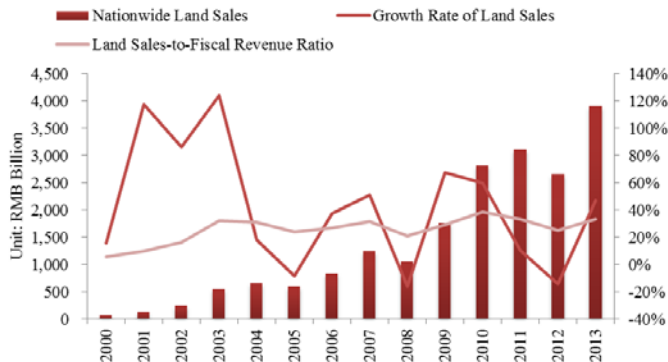


Local governments' heavy reliance on land sales is a major concern for fiscal sustainability. Generally, local governments own large areas of land and can lease it to the private sector; hence the transactions are not a true sale. Land is also used as collateral for bank loans. Those activities have accelerated in recent years with pressure to finance investments and repay debt.

Figure 5 shows the growth rate of land sales was as high as 60 percent in recent years. The exhaustion of land resources and a cooling property market could result in

fiscal distress if alternative revenue streams are not discovered.

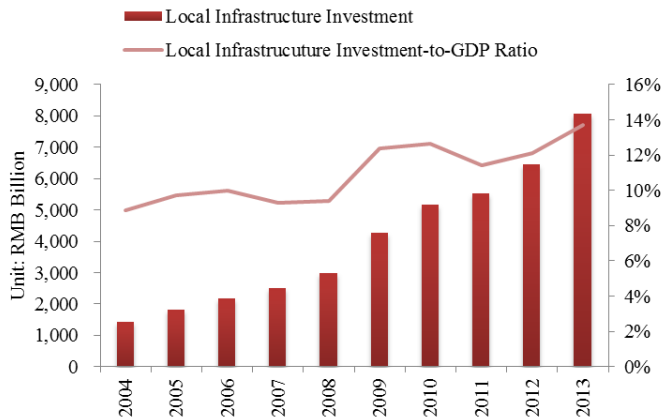
Figure 5: Size and Growth Rate of Land Sales



Source: CEIC, WIND, and author estimation

Behind the buildup. The rise in local government debt can be attributed to a complex combination of political, economic, and financial causes. Figure 6 shows the acceleration in local infrastructure investment.⁶ Between 2004 and 2008 the ratio of local infrastructure investment to GDP was fairly stable but it has since soared. A contributing factor was the RMB 4 trillion fiscal stimulus in 2008 that promoted infrastructure spending.

Figure 6: Size of Local Infrastructure Investment

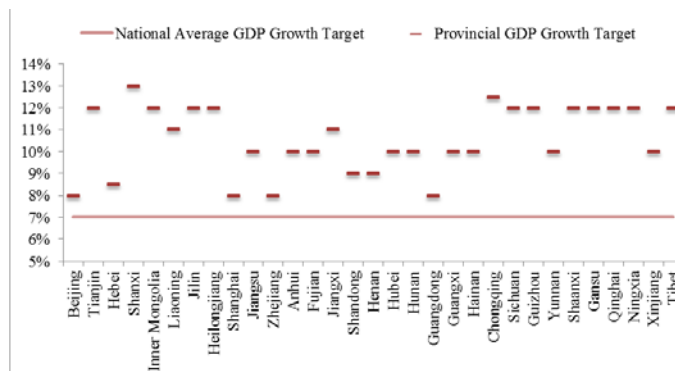


Source: NBS and WIND

Moreover, local government officials compete with each other on economic performance, motivated by concerns over promotions and political pressures from higher levels of government. Pressures to outperform have led to unachievable goals and in some cases to overinvestment. As shown in Figure 7a & 7b, when

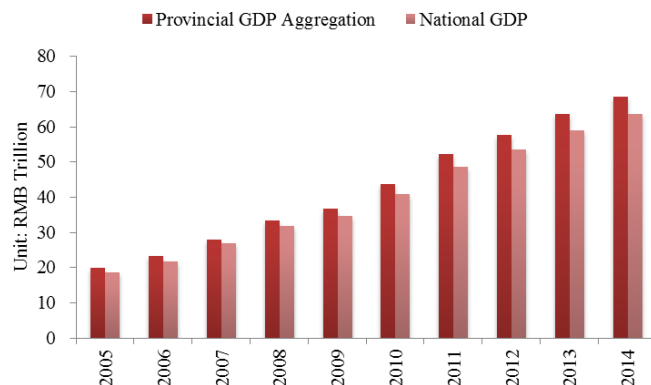
making the twelfth “Five-Year Plan” (2011-2015), the Chinese central government targeted a 7 percent national GDP growth rate. However, all of the provinces set higher GDP growth rate targets, ranging from 8 percent to 13 percent. Those pressures appear to have resulted in inflated provincial statistics. Aggregating provincial GDP in all 31 provinces, the sum exceeds China’s national GDP in each of the past ten years by about 7 percent.

Figure 7a: National and Provincial GDP Growth Targets during 12th “Five-Year Plan”



Source: Li et al (2012)

Figure 7b: Aggregate Provincial GDP Compared with National GDP



Source: NBS

Figure 8 shows a negative correlation between local debt and GDP growth. A similar negative correlation exists between local infrastructure and GDP growth. Those relationships appear more significant after 2008 and suggest local governments increasingly use debt-financed investment as a countercyclical policy tool. Infrastructure investing is one of a limited set of fiscal tools, mostly at the discretion of local governments, which can be used

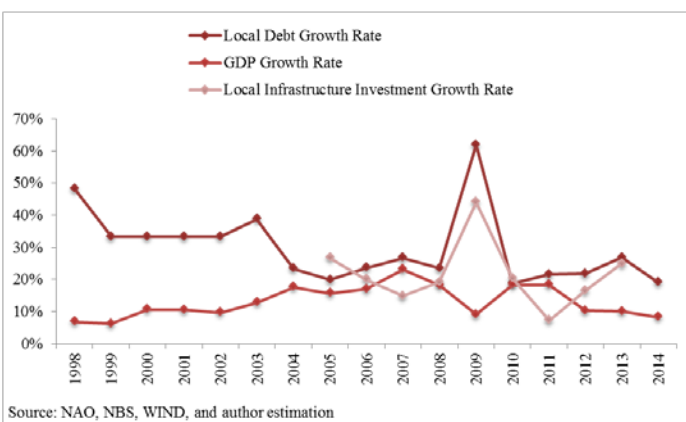
⁶ Infrastructure investment data is from the WIND database (Website: <http://www.wind.com.cn/En/Default.aspx>. Subscription required). Infrastructure investment includes investments under three directories:

production, supply of electricity, gas, and water; transportation, storage, and postal service; water conservancy, environment, and public utility.

for short-term economic stimulus and that may help to explain its popularity with local governments nationwide.

While competition between local governments has helped China achieve economic success and encouraged local innovation over the past several decades, many observers believe that its excesses, including the massive debt buildup, have become a net negative force on the Chinese economy. However, to the extent that China may have underinvested in infrastructure in the past and the pace of new investment will fall as the country fills those gaps, the ratio of investment to GDP, and resulting debt levels, could return to more sustainable levels.

Figure 8: Comparison of Growth Rates of Local Debt, Infrastructure Investment & GDP



Local Debt Distribution across Provinces

Size of local debt. Figure 9 shows the size of local debt by province as of June 2013, reported by NAO, while Figure 10 shows local debt as a share of local GDP.

Figure 9: Size of Local Debt by Province (June 2013)

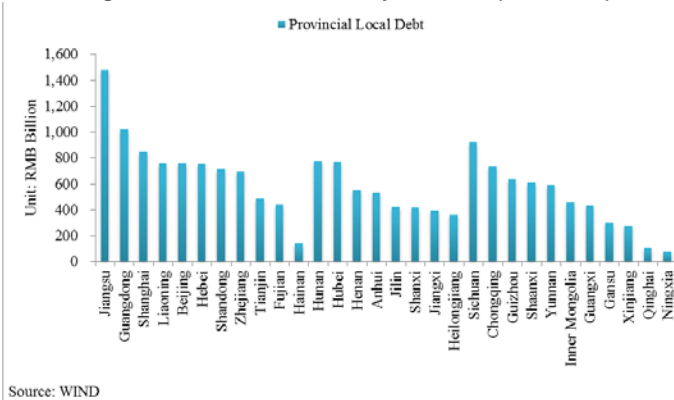
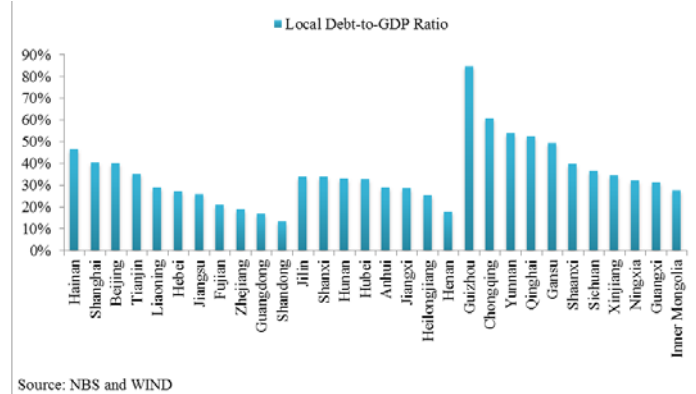


Figure 10: Debt-to-GDP Ratio by Province (June 2013)



Provinces are listed by region—eastern, middle, or western—and within each region the provinces are ordered by local debt size. The more affluent eastern provinces have the most local debt in absolute terms, but the smallest amount as a share of local GDP. The poorer western provinces actually have the highest debt burden as a share of GDP.

Debt repayment ability. The ratio of local debt to fiscal revenues is an indicator of repayment capacity. Revenues are measured as budgetary (Figure 11a) or budgetary plus central government transfers (Figure 11b). The inclusion of central government transfers tends to equalize debt repayment capabilities across provinces. However, provinces have less discretion in spending transfers and those funds are less predictable. Based on budgetary revenue, some western provinces like Guizhou, Gansu, and Qinghai have debt-to-fiscal revenue ratios higher than 500 percent. Land sales revenues are not available at the provincial level for 2013, but they would be unlikely to change the conclusion that the largest stresses are on some of the poorer western provinces.

Figure 11a: Size of Local Debt vs. Provincial Fiscal Revenue (Measure 1. June 2013)

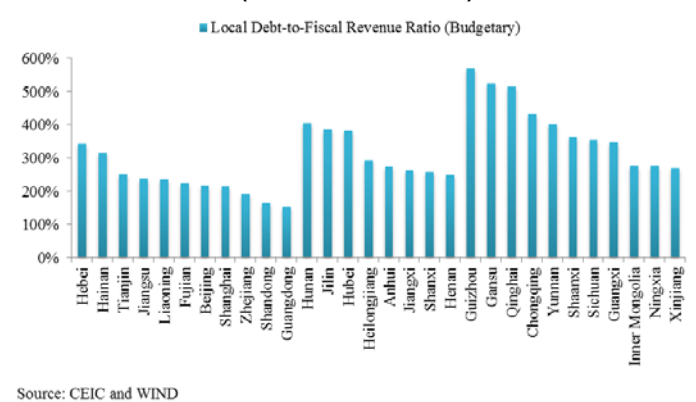
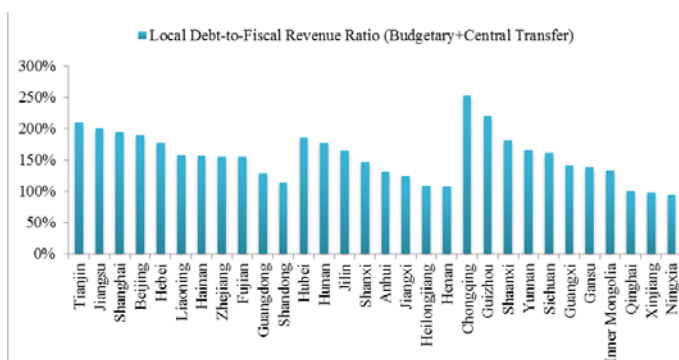


Figure 11b: Size of Local Debt vs. Provincial Fiscal Revenue (Measure 2, June 2013)



Source: CEIC and WIND

Local governments' reliance on land sales to finance debt can also be clearly seen at the provincial level (Figure 12). For the 23 provinces that report data, on average they promise their creditors to repay 40 percent of debt using land sales. Even more noteworthy, some provinces rely on land sales to repay more than 60 percent of local debt.

Figure 12: Local Governments' Reliance on Land Sales (2012)



Source: WIND

The capacity to repay debt can also be assessed by comparing assets with liabilities. To make that comparison, an abbreviated and roughly estimated balance sheet for local governments is shown in Table 2.

There is no official balance sheet for the Chinese government even at the national level, and the resources that will be made available to local provinces are quite uncertain.⁷ Assets include fiscal deposits (current assets deposited in banks), governmental fixed assets (e.g., buildings, cars, office facilities), local SOEs fixed assets (local governments' share of equity in local SOEs), and land, which proxies for total natural resources.

Lu and Sun (2013) estimate that at the current selling speed, local governments will run out of land resources within ten years. Therefore, as an approximation, it is estimated the value of land is ten times the reported land sales in 2012. On the liability side, only local debt is counted, although local governments also have current liabilities such as employee salaries.

The result in Figure 13 shows that assets exceed liabilities in each province. Because assets do not include capitalized tax revenues, the ratios would strengthen further by taking that into account. However, the debt-to-asset ratios are considerably higher in the poorer western regions, in part because of the lower land values in those areas.

Table 2: Aggregate Balance Sheet of Local Governments

Asset	Liability
Current Asset	Debt
<i>Fiscal Deposit</i>	<i>Local Government Debt</i>
Fixed Asset	Others
<i>Governmental Fixed Assets</i>	
<i>Local SOEs Fixed Assets</i>	
<i>Natural Resources (Lands)</i>	Net Position

Outlook and Recent Developments

For many provinces current debt levels are probably manageable, while others may soon be approaching unsustainable levels. Extrapolations of current trends suggest the picture will be less benign in the future without significant policy changes. The Chinese central government has made recent policy changes to begin to address the problem.

Outlook. The ratios of local debt-to-GDP and debt-to-fiscal revenue are extrapolated based on the data and trends above and alternative assumptions about the future. Three scenarios are considered that vary the assumptions about debt, GDP and revenue growth.

In the best scenario, the size of local debt grows relatively slowly, while GDP and fiscal revenue grow more quickly. In the worst scenario, local debt grows quickly while GDP and fiscal revenue growth lag behind. In the moderate

⁷ Some academics have constructed a sovereign balance sheet for

China. See Li et al (2012a, 2012b).

scenario, the growth rates are set to a middle scenario. The assumed parameters are presented in Table 3.⁸

Figure 13: Debt-to-Asset Ratios of Local Governments (2012)



Source: China Accounting Yearbook, WIND, and author estimation

Assumptions:

- Over the past decade, local debt has grown at an average rate exceeding 20 percent. Because the central government is implementing policies to control local debt growth, it seems likely that in the future, even in the worst case, local debt growth will slow to less than that rate.
- The best scenario assumes future local debt growth of 10 percent annually—still higher than anticipated GDP growth except in the most optimistic scenario.
- For GDP and fiscal revenue, although China went through an extended economic boom with double-digit annual growth, future growth will likely be slower. China’s economy is undergoing structural change and real GDP growth has slowed in recent years. Official estimates for real GDP growth in 2015 indicate rates of less than 7 percent.
- Fiscal revenue growth exceeded 20 percent annually from 2004 to 2011, but has since slowed to nearly half that rate. Based on that trend, from the best to worst scenarios, nominal GDP growth rates are set to 11 percent, 9 percent and 7 percent.

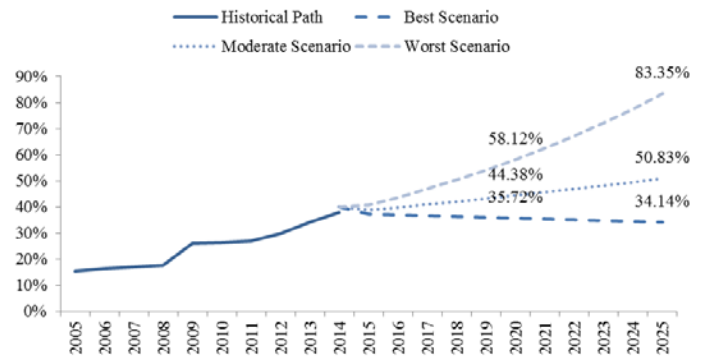
Table 3: Assumptions of Variable Debt Growth Rate

	Best Scenario	12%	Worst Scenario
$\Delta(\text{Local Debt})\%$	10%	12%	15%
$\Delta(\text{GDP})\%$	11%	9%	7%
$\Delta(\text{Fiscal Revenue - Short Run})\%$	13%	11%	9%
$\Delta(\text{Fiscal Revenue - Long Run})\%$	11%	9%	7%

Fiscal revenue growth rates in the short run, from 2015 to 2020, are set at 13 percent, 11 percent, and 9 percent. However, in the long run, the fiscal revenue growth rate should not exceed that of GDP, so it is assumed they drop down correspondingly to 11 percent, 9 percent, and 7 percent from 2021 to 2025.

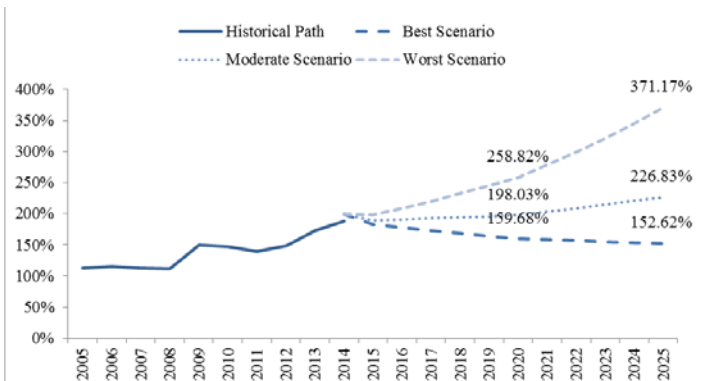
Figures 14 and 15 show the range of projections from 2015 to 2025. While the worst-case scenario is unlikely to be realized if China successfully carries out planned policy reforms, it does underscore the need for changes.

Figure 14: Projection of Local Debt-to-GDP Ratio



Source: NAO, NBS, and author estimation

Figure 15: Projection of Local Debt-to-Fiscal Revenue Ratio



Source: CEIC, NAO, NBS, and author estimation

Recent policy developments. The central government has recognized the local debt problem and has instituted a number of policies to address it. Notably, on October 2, 2014, the China State Council issued Rule No. 43, a document laying out new guidelines for the supervision of local debt. That is seen as a meaningful blueprint for reform. The principles are to create a standard procedure for local governments to raise debt, to clarify the

⁸ These are nominal growth rates. Fiscal revenue is based on measure 2.

responsibilities of debtors and creditors, to incorporate local debt into the overall management of fiscal budgets and to put local debt growth on a sustainable path that avoids systemic risk. Specifically, Rule No. 43 calls for:

- *Strictly supervising the financing channels of local governments.* With the approval of the State Council, qualified provincial governments will be allowed to issue bonds to finance their investment projects. Prefectural and lower levels, if in need of financing, can ask provincial governments to issue bonds on their behalf but they cannot issue bonds independently.
- *Shutting down non-standardized financing channels.* Local governments are no longer allowed to borrow from firms. A supplementary document from the Ministry of Finance stipulates that beginning in 2016, LGFVs are forbidden to issue bonds and LGFVs will be shut down gradually.
- *Local governments should issue general-purpose bonds to finance social welfare projects that generate little revenue, to be repaid from budgetary fiscal revenue.* For projects that generate adequate cash flows, like some municipal infrastructure projects, local governments are to issue specific-purpose bonds and repay with GMFs revenue or profits from the projects. Introducing private capital into the financing of profitable projects through public-private partnerships is also encouraged.
- *Local governments cannot provide guarantees for firms, private institutions, or persons without legal authorization.* Except for guaranties of foreign (transferred) loans permitted by the Guarantee Law of the People's Republic of China enacted in 1995, other forms of guaranties will no longer be allowed.
- *A major overhaul of the infrastructure for local debt.* That includes the local government bond market and credit rating system, policy measures to cope with local government default, the local fiscal transparency regime, and stricter supervision of local government officials.

Besides Rule No. 43 targeting local debt reform, the Budget Law of the People's Republic of China was amended and enacted on January 1, 2015. The newly amended law authorizes provincial governments to issue bonds in the capital market. The issuing size of bonds must be permitted by the National People's Congress of China and be included in local budgets. That is considered a significant legal step to open a more standardized and transparent financing channel for local governments.

Under a stricter regulatory regime, some of the risky and opaque financing channels facilitating the explosion of debt after 2008 will be shut down. So it appears likely certain quasi-fiscal operations will become a legacy of the past. However, such debt market reforms do not address the underlying pressures exacerbating the debt buildup.

The structural imbalance between local government spending and access to tax revenues remains a fundamental tension. The ability of local governments to issue debt (and to sell land) has played an important role in the development of the Chinese economy in the last decade. A successful reform will require more stable and transparent financing channels for local governments. Suppressing debt issuance without supplying an alternative funding source or transferring more government functions to the private sector could have adverse consequences for economic growth.

Furthermore, even though current law allows local government bonds to be issued, there is not a liquid market for such Chinese debt. The issuing mechanism, the determination of coupon rates and the size of issues are under strict control of the central government, which means this is not a flexible and market-oriented financing channel for local governments.

Another concern is the systemic risk introduced by high local debt levels in the near term. Although reform is under way, it will not be achieved overnight. China's banking regulator has expressed worry that local debt is contributing to a higher non-performing loan ratio in the commercial banking system (the official non-performing loan ratio at the end of 2015Q1 stood at 1.4 percent).

The central government is taking measures to restructure local debt this year. Under the guarantee of the Ministry of Finance, two debt-swap deals were launched, each valued at RMB 1 trillion, to help local governments replace their short-term, high interest rate bonds with long-term, low interest rate bonds. A third such guaranteed debt-swap is also under consideration. Besides easing the stress of local governments, such measures serve to improve bank asset quality. They also point to the possibility, and perhaps the likelihood, of a larger central government bailout should debt levels become unmanageable for some provincial governments.

The local government debt problem is set against a backdrop of economic change, as China attempts to turn its government-dominated economic growth model into a market-oriented one. From that perspective, how it manages its local fiscal conditions will be telling about the commitment to and speed of those larger changes.

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