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Rethinking China's Local Government Debt in the Frame of Modern Money Theory

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ABSTRACT

Local government debt in China is increasing and presents a great threat to China's financial stability. In China's fiscal system, the central government often prioritizes reducing its fiscal deficit and can determine to a great extent the distribution of revenue and expenditure between itself and local governments. There is therefore a tendency for the fiscal burden to be shifted from the central government to the local governments. Resolving China's local government debt problem requires not only strengthening regulation, but also abandoning the central government's fiscal balance target, because this target may make regulation hard to sustain in times of economic downturn. This paper discusses central-local fiscal relations in the framework of Modern Money Theory, suggesting that, because a government with currency sovereignty can always afford any spending denominated in its own currency, China's central government should bear a greater fiscal burden.

KEYWORDS: Local Government Debt; China; Modern Money Theory; Fiscal Systems

JEL CLASSIFICATIONS: G18; H74; H77; O53

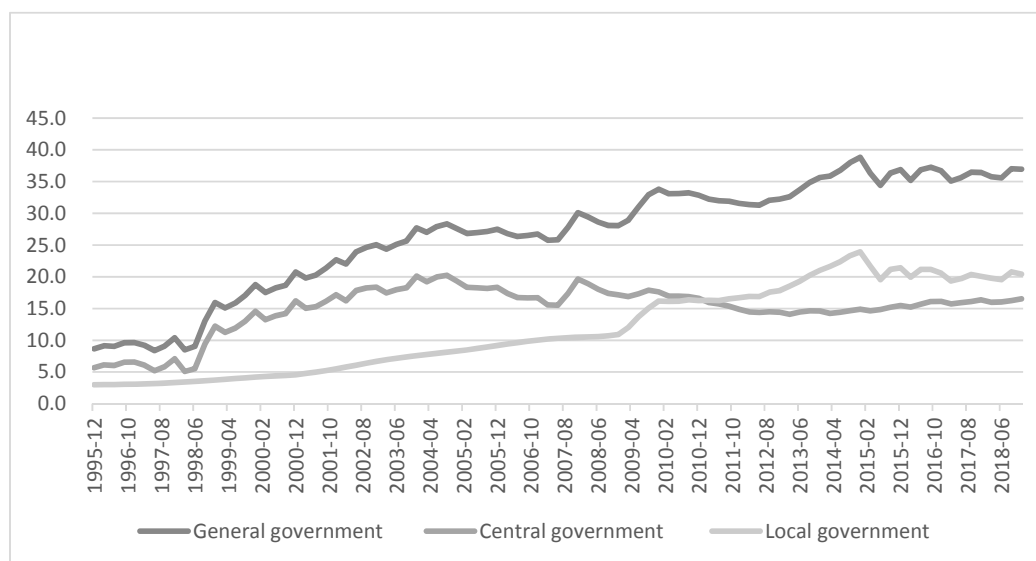
1. INTRODUCTION

Since the global financial crisis in 2008, the macro leverage ratios (debt/GDP) of all sectors in China have been increasing rapidly. Whether China will experience a Minsky moment has been a topic of concern for many researchers (for example, Wray [2018] and Girón [2018]). Although in some respects China's financial instability problem is similar to that of Western countries on some issues, it also has Chinese institutional characteristics. One typical example is China's local government debt.

Local government debt is a great threat to China's financial stability. At a press conference in 2017, a leader of the Office of the Central Leading Group for Financial and Economic Affairs pointed out that the local government debt problem was one of the gray rhinos in the Chinese economy (Chen 2017).¹ In its 2018 China Financial Stability Report, The People's Bank of China states that although the regulation of local debt was successful to some extent in the past few years, the implicit debt of local governments should attract regulators' attention (People's Bank of China 2018). Because of the large infrastructure spending needs, the slowing of China's growth rate, and the uncertainty of policy changes, Moody's (2018) is pessimistic about the future credit situation of Chinese local governments. According to estimates from the Center for National Balance Sheet, China's general government macro leverage ratio (central and local government debt/GDP) was about 37 percent in 2017, but if the local governments' implicit debt is included, this ratio might exceed 90 percent (Zhang 2018).

¹ The term "gray rhinos" refers to threats that are highly probable but do not attract enough attention.

Figure 1. Macro Leverage Ratio (Debt/Nominal GDP) in China's Government Sector



Source: Center for National Balance Sheets

There are many similarities between local governments in China and private enterprises on the issue of debt. Both of their financing structures have a tendency to move from hedge, to speculative, and finally to Ponzi financing. Their institutional environment is dynamic and both make financial innovations to circumvent regulation. The difference between the two is that while the private sector's borrowing is driven by profit motives, the local government debt is to achieve specific policy goals; while the private debts are related to the capitalist mode of production, local government debt is related to the fiscal system, especially to the fiscal relation between the central government and the local governments.

This paper argues that the central government in China should play a more dominant role in fiscal policy in order to solve the local government debt problem. In China's institutional context, fiscal expenditure is highly concentrated in the local governments. Local government debt finances local governments' expenditure so that they can achieve their GDP growth target. While the central government is strengthening its regulation of local government debt, it should also bear more of the fiscal burden caused by its anticyclical fiscal policy. If the central government doesn't abandon its fiscal balance target, economic downturns may force it to loosen its restrictions on local government debt when

implementing fiscal policy. The reason why the central government should bear more fiscal burden is that the fiscal activities of the central government and those of local governments are essentially different. According to Modern Money Theory (MMT), a central government with currency sovereignty can always afford any spending denominated in its own currency, but local governments cannot and therefore face the possibility of bankruptcy. The importance of MMT is that it provides a new theoretical framework for rethinking central-local fiscal relationships and solving the local government debt problem in China.

In the following section, we will give a brief introduction to the emergence and development of implicit local government debt in China. In the second section, we will analyze the institutional reasons behind China's local government debt problem. In the third section, we will analyze the fiscal relationship between the central government and local governments in the frame of MMT. In the fourth section, we will give policy recommendations.

2. DYNAMIC CHANGES IN CHINA'S LOCAL GOVERNMENT DEBT

Financial innovation happens not only in private finance, but also in public finance. The emergence and development of China's local government debt is such an example. For understanding the local government debt problem in China, implicit debt—which is illegal and in the gray area of supervision—is more important than explicit debt, which is legal and under supervision.² Implicit debt has grown rapidly. According to a survey by the People's Bank of China (2018), at the end of 2017, the implicit debt of one anonymous provincial government was 80 percent higher than its explicit debt. Of the government debt resulting from bank borrowing between 2015 and 2017, implicit debt accounted for more than 55 percent.

² In this paper, we define explicit debt as the debt that is legal and under regulation, while implicit debt is the debt that is illegal and may not be under regulation. At present, the explicit debt of China's local governments includes only local government bonds. The implicit debt, on the other hand, is very diverse. One example is the debt from local government financial vehicles (LGFVs).

Implicit debts are in a dynamic process of financial innovation. The forms of the implicit debt are diverse, which makes it easy to conceal and difficult to regulate. In this process, the relationship between China's central government and local governments is similar to the relationship between financial regulators and financial institutions. As a regulator, the central government tries to supervise and regulate the local governments' borrowing by formulating new rules. In order to make political achievements, the local governments (with the cooperation of financial institutions) evade supervision and finance themselves by inventing new forms of implicit debt. Therefore, the implicit debt changes periodically: in the short term after the introduction of new regulation, the old financing channels are restricted and the growth of local government debt slows down; but in the long run, as new instruments are invented, the implicit debt will revive in new forms.

The dynamic changes in implicit debt can be traced back to the Budget Law enacted in 1994. According to Article 28 of the Budget Law, "local budgets at various levels shall be compiled according to the principles of keeping expenditure within the limits of revenue and maintaining a balance between revenue and expenditure, and shall not contain deficits. Except for where provided by law or State Council regulation, local governments shall not issue local government bonds." In addition, the Guarantee Law in 1995 and the Lending General Provisions law in 1996 stipulate that the government cannot act as a guarantor or a borrower of loans. Therefore, the local governments should maintain a balanced budget and keep their debt at zero. However, as time went by, the local governments and financial institutions created many ways to bypass these restrictions, the most important of which is to establish local government financial vehicles (LGFVs).

The LGFVs are companies established and controlled by the local governments. The local governments transfer assets such as land or shares of public facilities to the LGFVs so as to give them enough assets and revenue streams to meet the conditions of borrowing from financial institutions. In addition, local governments may provide credit enhancements for the LGFVs by their promise to provide fiscal subsidies. The LGFVs get financed through

bank loans, bond issuance, and the shadow banking system, and the funds obtained are used by local governments for public infrastructure investment and other purposes. Like what happened in many debt crises, there are some cases of fraud. For example, the local governments may cite nonexistent projects to obtain loans or use the same land as collateral for different loans.

In 2008, in response to the global financial crisis, the central government launched a four trillion renminbi (RMB) yuan economic stimulus plan, where about 70 percent of the funds needed to be provided by the local governments. Due to the limited fiscal revenue of the local governments, this plan greatly stimulated the development of the LGFVs. China's National Audit Office conducted two audits of local government debt in 2011 and 2013. The result shows that in 2011, the total debt of the LGFVs were 3,137.53 billion RMB yuan and, by 2013, this number had grown to 4,075.55 billion RMB yuan—accounting for 37 percent of all local government debt (National Audit Office of the People's Republic of China 2011, 2013).

In addition to the LGFVs, there exists or existed some other channels for the local governments to obtain financing. For example, they may use local public institutions or local state-owned enterprises to get loans from banks. Ong (2006) provides a case study of how local governments used informal local financial institutions (i.e., rural cooperative foundations and rural credit cooperatives) to obtain financing in the 1990s. Since these local financial institutions were mainly regulated and controlled by the local governments, the local governments could easily obtain loans from them. This phenomenon gradually diminished as the central government regained control over these local financial institutions.

The rapid growth of the LGFVs' debt after 2008 attracted the attention of the central government, which began to supervise them. The State Council's Document No. 43 in 2014 required that the local governments should stop using LGFVs to obtain financing and noted that LGFVs would be gradually shut down (State Council of the People's Republic of China

2014). The new Budget Law, revised in 2014, allows the local governments to issue local government bonds within the ceiling set by the central government. As for the existing implicit debt, the central government decided to replace it with local government bonds within a few years.

Due to these new regulations, the growth of LGFVs was curbed. However, because the local government bonds were limited and only provincial governments could issue bonds, some local governments switched to other financing channels. While some of these financing channels had existed before, some emerged with the changes in the system. For example, in order to relieve the fiscal burden on the local governments, the central government began to support and promote public-private partnerships (PPP) after 2014. Standard PPP projects do not increase the implicit debt of the local governments. However, in practice, some PPP projects were distorted: some local governments promised to gradually purchase partners' shares at a fixed price in the future; some promised to guarantee the lowest return; and some provided guarantees for the financing of PPP projects by providing fiscal commitment letters. These practices increased the implicit debt. In addition, the local governments also used government investment funds, purchase of public services from the private sector, and lease contracts to get financed. Although in March 2019 the Ministry of Finance issued new regulations on PPP, it is full of uncertainty whether the implicit debt will stop increasing and whether there will be new forms of implicit debt.

The dynamic changes in implicit debt increase the central government's difficulty in regulating local government debt and limiting local government spending. Local governments' behavior changes as new regulations change the original institutional framework, with innovations in fiscal activities rendering the new regulations ineffective. This is similar to what happens in private financial activities. However, while financial innovation in the private sector is motivated by profit, what is the motivation of China's local governments to innovate and increase the implicit debt? We will answer this question in the next section.

3. PROMOTION TOURNAMENT AND CHINA'S FISCAL SYSTEM

Promotion Tournament of Local Officials

Local GDP growth is one of the most important goals of the local governments' fiscal activities. Li'an Zhou (2007) pointed out that the institutional basis of this behavior is the promotion tournament, in which the yardstick of local government officials' political achievement is the local GDP growth rate.³ In China's political system, the appointment of lower-level government officials is determined by the higher-level government. In order to get promoted, the local government officials need to win in the promotion tournament against other officials at the same level. The advantage of using the local GDP growth rate in this tournament is that it is measurable and objective. In addition, since 1978, local governments have more control over local affairs, which makes it possible for local governments to influence local economic growth. Therefore, the promotion motivation drives local government officials to use various resources available to them, including increasing local fiscal expenditures to achieve higher growth. The competition between the local officials is fierce. A loss in one round of the tournament means that officials need to wait for the end of a term (five years) to have another chance to get promoted, and it is difficult for the local officials to find other jobs with comparable wages.

The promotion tournament not only drives the local governments to increase fiscal expenditures to boost local economic growth, but also provides them with incentives for making institutional innovations. In many areas where there are no clear rules, local governments often take risks by experimenting with new policies. It is a common phenomenon that if the experiment is successful, that particular local official will increase the local GDP growth rate and their own political achievement, and the new policy will be recognized afterward by the central government as a formal institution; if the experiment

³ The promotion tournament is a concept originating from "rank-order tournaments" in Lazear and Rosen (1981), which means "compensation schemes which pay according to an individual's ordinal rank in an organization rather than his output level." Chinese scholars use "promotion tournament" to explain the behavior of China's local officials in the competition for promotion, because the incentive mechanism in the "promotion tournament" is similar to that of the rank-order tournaments.

fails, the new policy will be stopped by the central government. In the past, punishment for the experiment's failure was rare and the central government actually acquiesced to the local governments' experimenting. This is a typical path for China's marketization. Similar institutional innovations also occur as local governments' create new forms of implicit debt. The local government that is the first to invent and use new financing instruments can increase its fiscal expenditures to boost local GDP growth and therefore gain an advantage in the promotion tournament. Competition between local governments drives everyone in the tournament to imitate the innovators and use the new financing instruments. This makes the competitive advantage brought about by the innovation disappear. As most of the local governments adopt new financing tools to increase fiscal expenditures, implicit debt increases.

Fiscal Balance and the Downward Shift of Fiscal Burdens

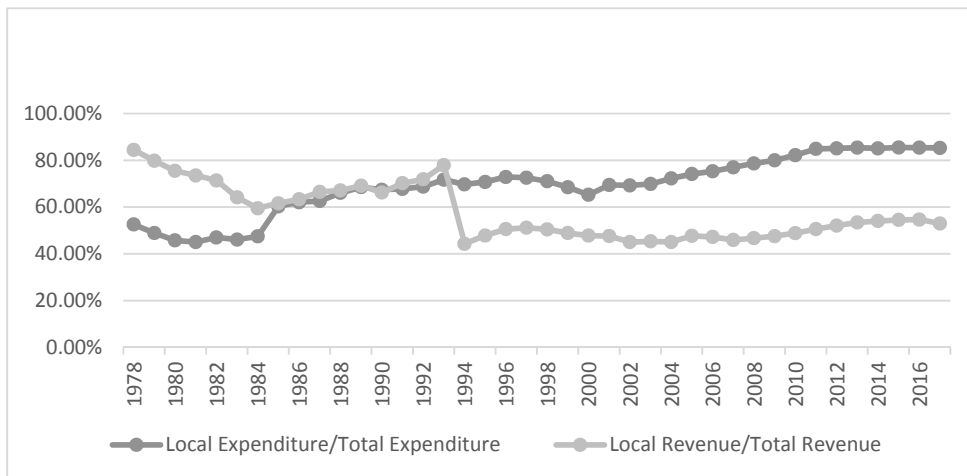
Another reason for China's local government debt problem is that higher-level governments' fiscal balance goals lead to a shift in their fiscal burden to lower-level governments.⁴ In China's current fiscal system, the higher-level governments can largely determine the distribution of fiscal revenue and expenditure between themselves and lower-level governments. Because higher-level governments would like to reduce their fiscal deficit, there is a tendency for higher-level governments to retain more revenue, leaving lower-level governments with more fiscal expenditure responsibilities. To be specific, the downward shift in the fiscal burden is related to the following institutional arrangements.

First, "China's fiscal system shows the characteristics of relatively centralized revenue and significantly decentralized expenditure" (Wang 2018, 334). In other words, fiscal revenues (excluding intergovernmental transfers) are concentrated in the central government, while

⁴ In fact, this is not a phenomenon unique to China. Similar phenomena exist in the adjustment of central-local fiscal relations in many countries. For example, in the 1980s in the United States, Ronald Reagan reduced the system of revenue sharing that had been instituted in 1972 under Richard Nixon in an attempt to shift the financing of social program expenditures to local government budgets. Meanwhile, Reagan also reduced federal aid to the state governments. In 1986, general revenue sharing was abolished by Reagan in order to alleviate the large federal deficits. These policy changes caused fiscal difficulties in the state governments. See Zimmerman (1991).

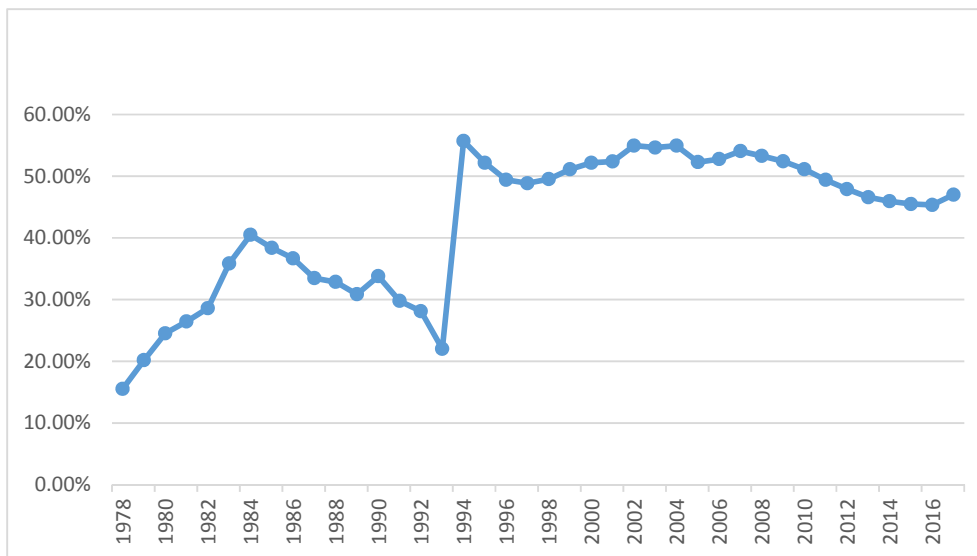
fiscal expenditures are concentrated in local governments. This central-local fiscal relation is the result of China's reform of its fiscal system beginning in 1978. Before 1978, in the planned economy, China's fiscal revenue and expenditure were highly centralized and carried out in accordance with the economic plan. After 1978, one important aspect of the reform was to give the local governments more fiscal autonomy, which was referred to as "serving meals to different diners from different pots" (分灶吃饭). A fiscal responsibility system was implemented, in which most of the tax revenue was held by the local governments. The central government negotiated with local governments about the revenue transfer ratio and obtained fiscal revenue from local governments according to this ratio. Many taxation and expenditure responsibilities were transferred to local governments, thus fostering their enthusiasm for promoting local economic growth. However, the reform also led to fiscal difficulties for the central government. The proportion of central fiscal revenue to total fiscal revenue declined and it was believed that it constrained the central government's ability to carry out fiscal policy (Lou 2019). There were even two cases in which the central government had to borrow money from local governments and did not pay it back, pushing the central government to reform and establish a tax-sharing system in which the tax revenue was distributed between the central government and local governments according to categories of taxes. After the reform, the central-local fiscal relation that featured centralized revenue and decentralized expenditure came into being.

Figure 2. Centralized Revenue and Decentralized Expenditure



Source: CEInet Industry Database

Figure 3. Ratio of Central Government's Revenue to Total Government Revenue



Source: CEInet Industry Database

Second, the gap between local government revenue and expenditure needs to be filled by a fiscal transfer from the central government, and the fiscal transfer is determined largely by the negotiations between the central and local governments. Because there are no formal and stable rules for the intergovernmental transfer, and in general the central government is in an advantageous position in the negotiations, the central government can greatly affect the amount of the intergovernmental transfer. Additionally, the same problem exists between

local governments of different levels.⁵ Since higher-level governments often give priority to fiscal balances at their level, fiscal revenue tends to be shifted upward level by level.

Third, a mismatch exists between fiscal expenditure responsibility and fiscal expenditure decisionmaking power in the fiscal system. It is not a rare phenomenon that the central government “orders dishes” and local governments “pay the bills.” In other words, the central government may order local governments to complete some tasks, but not provide corresponding financial support. The same problem also exists between the local governments of different levels.

Therefore, China’s fiscal system allows the higher-level governments to determine to a large extent the distribution of fiscal revenue and expenditure between them and the lower-level governments. Because higher-level governments often give priority to decreasing their fiscal deficit, it is not difficult to understand why China’s local government debt is mainly found in the low-level local governments. According to the survey by the People’s Bank of China (2018), in one province in China, county governments account for 45 percent of the total amount of implicit debt, city governments account for 40 percent, and provincial governments only accounts for 15 percent.

The Central Government’s Economic Growth Target and Its Restrictions on Local Government Debt

In short, due to the promotion tournament for local officials and the characteristics of the fiscal system, local government fiscal expenditure plays a major role in expansionary fiscal policy, which leads to the growth of the local government debt. When the economic situation is not good, local governments will increase their fiscal expenditures in order to achieve their economic growth goals. In China’s fiscal system, government expenditure is highly

⁵ In the present tax-sharing system, many low-level local governments do not have enough local taxes for their expenditure. One reason is that China’s government has five levels (central, province, city, county, and town), which makes it hard to design a tax-sharing system where each level of government is matched with certain categories of tax. As a result, for example, county governments greatly rely on fiscal transfers from city governments. Because there are no rules, city governments can largely determine the fiscal transfer.

decentralized and the financial needs of lower-level governments are difficult to meet through taxation and intergovernmental transfer. This growth in local government debt caused the central government to set up restrictions by setting a ceiling for local government bonds in each province and strengthening the regulations on implicit debt.

One difficulty in regulating local government debt is that the central government hopes to achieve three goals at the same time: economic growth, stabilized central government debt, and stabilized local government debt. On the one hand, the government targets economic growth. In times of economic downturn, the government will increase fiscal expenditures, but this may result in an increase in debt. On the other hand, the government targets a stable debt level. However, in times of economic downturn, this target will limit the government's use of fiscal policy. Therefore, the government has to weigh the tradeoffs between these goals, which make the restrictions on local government debt difficult to sustain. If the economy is in a recession, the central government may loosen the restrictions on local government debt in order to stimulate the economy and avoid a sharp rise in central government debt. The central government may raise the ceiling on local government bonds or loosen the regulation of local governments' implicit debt. For example, at the end of 2018, the central government raised the ceiling on local government bonds in advance (which is normally adjusted in March every year) and therefore allowed local governments to issue 139 million RMB yuan in new bonds. This action was taken as an important part of fiscal policy that was implemented in response to the economic downturn. By the end of March 2019, 85 percent of the newly increased quota (139 million RMB yuan) had been used up. In another example, after the regulation of the LGFVs in 2014, some local government projects could not secure enough funds and had to be stopped. However, the macroeconomic situation in 2015 was not very optimistic. In order to maintain steady economic growth, the central government loosened regulations to some extent and allowed the LGFVs' existing projects to continue to obtain loans from banks; it also allowed some LGFVs to participate in PPP projects, which led, to some extent, to the growth of implicit debt in the form of distorted PPP projects as we mentioned in the last section.

Therefore, solving the problem of local government debt requires stronger supervision, but strengthening supervision cannot solve all the problems. The framework of MMT is important because it provides a solution to the conflict between economic growth targets and fiscal balance targets. In order to avoid the revival of local government debt, the central government needs to abandon its fiscal balance target and bear more of the burden in fiscal policy. In the next section, we will discuss the central-local fiscal relationship through the lens of MMT.

4. CENTRAL-LOCAL FISCAL RELATION IN THE FRAME OF MMT

Taxation Doesn't Finance the Central Government, but Finances Local Governments

For a country issuing its own money, sovereign currency is the debt of the central government. (We assume that the central bank is a part of the central government.) The central government cannot be financed through taxation, because taxation is a receipt of its own debt. This is different from how a company gets financed. When the company receives a loan, the company's assets (bank deposits) and liabilities (bank loans) will increase. The company can then use its assets to make payment. But a similar process does not happen on the balance sheet of the central government when it receives its taxes. The taxes decrease its liability without increasing its assets and there are no newly created assets with which the central government can make payments. The central government is always spending by crediting bank accounts.

In the financial market, the central government's fiscal activities have effects on reserves in the private sector (Bell and Wray 2002; Tymoigne 2014). Its expenditure creates reserves and its taxation destroys reserves. The fiscal effects on reserves are important for monetary policy operations. Treasury bonds cannot finance the central government under the same logic that taxation cannot finance the central government. The purpose of issuing Treasury bonds is to achieve monetary policy targets. The bond issuance is receiving back reserves,

which is similar to the central bank's selling of Treasury bonds through open market operations.

As for local governments, taxation and other fiscal revenues finance their expenditures, because the sovereign currency is the central government's debt and local governments cannot issue this kind of debt (Wray 2015, 141). On the local governments' balance sheet, taxation increases their assets and spending reduces these assets. In addition, the local governments' fiscal activities may also have effects on reserves in the private sector, which depends on whether the local governments hold accounts at the central bank. For example, in China, local governments receive revenue and make payments through their accounts at the central bank. When local governments in China make payments, the reserve balance in their accounts at the central bank decrease and the reserve balance in commercial banks' accounts increase. In such cases, the local governments' fiscal activities also have effects on reserves.⁶

The Fiscal Policy Space of a Central Government is Different from that of Local Governments

For a central government with full monetary sovereignty, it can always afford any expenditures denominated in its currency (Sardoni and Wray 2007). The central government's leverage ratio, therefore, does not reflect the probability of default. A central government's fiscal policy space is affected by whether it has currency sovereignty. If the

⁶ If we separate the central bank from the central government, it will make things a little complicated, but the conclusion will remain the same as when we assume that the central bank is part of the central government. In 2001, China established a Treasury Single Account system, in which both the central government and local governments can receive revenue and make payments through their accounts at the central bank. In such cases, both the central government's and the local governments' fiscal activities have effects on reserves. Meanwhile, the People's Bank of China established a monetary policy framework that targets interest rates. The fiscal effects on reserves cause the changes in the market rates. In order to stabilize interest rates (for example, the Shanghai Interbank Offered Rate), the People's Bank of China uses its monetary policy tools (for example, open market operations) to neutralize the fiscal effects on reserves. Since commercial banks can always use central government bonds to obtain reserves from the central bank, it is hard for the banks to refuse the central government bonds. With the cooperation of the central bank, central government bond auctions are easily successful. Therefore it makes no difference whether or not the central government can sell bonds to the central bank directly in the primary market. However, the People's Bank of China only accepts highly rated local government bonds and the central government sets a ceiling on local government bonds, therefore the local governments' ability to spend by crediting bank accounts is constrained.

central government chooses some form of fixed exchange rate and thus gives up part or all of its currency sovereignty in order to maintain the promise of a fixed exchange rate, the central government will have to sacrifice part of its fiscal policy space. On the contrary, the policy space with floating exchange rates is the widest and capital controls can expand the fiscal policy space.

The fiscal policy space of local governments is limited by their fiscal revenues. Local governments need to first obtain sovereign currency or bank deposits through taxation, intergovernmental transfers, or debt issuance before they make expenditures. If the local governments cannot secure enough revenues, they may face bankruptcy (Wray 2015, 178). When local governments' financing structure is dominated by Ponzi financing, large-scale local government debt defaults and even crises may occur.

Therefore, it is incorrect to calculate the debt ratio or leverage ratio by adding up the central government's debt and local governments' debt so as to measure the default risk of the total government debt. In order to judge whether the amount of government debt is in a reasonable range, a common practice is to estimate a threshold value for the government leverage ratio. Whether the government leverage ratio exceeds the threshold value is considered as the criterion for whether default risk for the government debt is high or not. However, this approach is problematic. On the one hand, the central government's default risk depends on whether it has currency sovereignty. For a central government with currency sovereignty, its default risk will not increase as its debt increases. On the other hand, for countries with currency sovereignty, local governments may still default. Simply adding local government debt to central government debt not only ignores whether the central government has currency sovereignty, but also ignores the difference between the local government debt and the central government debt.

It is important to note that this does not mean that all the expenditures should be made by the central government. Whether or not local governments should be responsible for certain fiscal expenditures depends on whether this can better achieve policy goals. For some types of fiscal expenditures, local governments may know the local conditions better and be able to manage projects more efficiently.

The Distribution of Fiscal Revenues Is Not a Zero-Sum Game between the Central Government and Local Governments

Fiscal revenues are distributed between the central government and the local governments. A common impression is that because fiscal revenues determine a government's fiscal policy space, the central government and local governments are in a competitive relationship when fiscal revenues are distributed: the expansion of one's policy space means the reduction of the other's policy space. However, only half of the impression is correct. The distribution of fiscal revenues does not affect the policy space of the central government, but only affects the policy space of the local governments. In other words, for a country with currency sovereignty, the central government has no reason to complain that it is unable to make expenditures because local governments retain too much revenue. The central government also has no reason to transfer local governments' revenue to the central government because the central government has no money to spend. In such cases, meeting the central government's financial need is not the goal that fiscal revenue distribution can or should achieve.

As for the local governments, because they need to obtain fiscal revenues to finance expenditures, the distribution of fiscal revenues becomes a constraint on their expenditures. In China's fiscal system, the central government can influence the fiscal revenue of the local governments and thus influence their policy space. However, this is not enough to completely limit their expenditure, because the local governments can finance themselves by issuing debt. To make the constraint effective, it is necessary to limit the amount of local government debt and punish the relevant officials for a local government's bankruptcy.

The Fiscal Burden Generated by Functional Finance Should Be Mainly Borne by the Central Government

Functional finance requires appropriate arrangements for the fiscal relationship between the central government and local governments. According to Abba Lerner's (1943) explanation of functional finance, "[t]he central idea is that government fiscal policy, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, shall all be undertaken with an eye only to the results of these actions on the economy and not to any established traditional doctrine about what is sound or unsound."

The government should therefore abandon its target of fiscal balance. If there is insufficient aggregate demand and involuntary unemployment, the government should use its fiscal policy to increase employment. Functional finance is feasible for a government with currency sovereignty, but we need to take the central-local fiscal relationship into account.

Assuming that the government is going to increase its expenditures, there are three possible ways to divide expenditure responsibility: the central government increases its expenditure; local governments increase their expenditures and the central government provides fiscal subsidies to the local governments; or local governments increase their expenditures and the central government does not provide subsidies. In the first two cases, the possibility of government default will not rise; in the third case, if the local governments' revenues remain unchanged, local government debt will increase and the possibility of default will rise.

Therefore, the fiscal burden generated by functional finance should be mainly borne by the central government. For some countercyclical fiscal expenditures, the central government needs to bear most of the responsibilities or provide fiscal subsidies for the local governments. The local governments' expenditure responsibilities related to functional finance should be compatible with their fiscal revenues.

5. RETHINKING CHINA'S LOCAL GOVERNMENT DEBT

Because of the promotion tournament of local officials, local governments increase fiscal expenditure to achieve GDP growth. Because of the downward shift of the fiscal burden in the system, local governments need to issue debt to finance their expenditures. Because of the central government's fiscal balance target, the central government relies on the local governments' expenditure and debt to implement expansionary fiscal policies. Because of the conflict between the central government's economic growth target and their fiscal balance target, the restriction on local government debt is hard to sustain. Resolving China's local government debt problem requires not only strengthening regulations, but, more importantly, achieving compatibility between economic growth targets and fiscal sustainability.

There are two possible ways to solve the problem of target conflict. One is to pray that the market can achieve full employment spontaneously, so that no fiscal policy is needed. Historical experience shows that this is an illusion. A large-scale trade surplus can increase domestic employment, but with the transformation of China's economy and the escalation of trade frictions, the role of trade surplus may be reduced in the future. Another possible approach is to abandon one of the goals. The best option is to abandon the central government's fiscal balance target. This is because, according to MMT, for a country with currency sovereignty, the central government can always afford any expenditure denominated in its currency without the risk of default.

In order to solve the problem of local government debt in China, the central government needs to play a more important role in fiscal policy. The fiscal burden generated by anticyclical fiscal policy should be mainly borne by the central government. In times of economic downturn, the central government should increase spending on a larger scale or provide more fiscal transfers for the local governments, rather than loosen the restrictions on local government debt so as to increase local government spending. The reason behind this is

not that the central government has a large sum of fiscal revenue, assets, and deposit balances at its disposal. It is because the fiscal activities of the central government are essentially different from that of local governments. The central government doesn't need to be financed through taxation. Because it finances its spending by creating money, a central government with a sovereign currency always has enough policy space to achieve functional finance.

However, this does not mean that China's reform of its tax-sharing system is wrong. As we mentioned above, an important reason for the reform in 1994 was that the proportion of the central government's fiscal revenue to total fiscal revenue declined and it constrained the central government's fiscal policy space. At that time, the central government's fiscal policy space was indeed limited because China implemented a managed floating exchange rate system. The insufficient foreign exchange reserves made it necessary for the government to control the total deficit size to avoid fluctuations in exchange rates. However, the exchange rate system has changed since then. China's huge foreign exchange reserves enable the central bank to stabilize exchange rates. With the continuous reform of the RMB exchange rate regime, China has been gradually moving toward a clean floating regime. In recent years, the People's Bank of China gradually reduced its intervention in exchange rates. In addition, China has maintained some capital control policies. Therefore, the central government has sufficient policy space to achieve functional finance.

At the same time, other reforms are also necessary. The Ministry of Finance should cooperate with financial regulators to establish a dynamic regulation system for local government debt. New forms of implicit debt need to be incorporated into the regulation, and accountability mechanisms for local government debt need to be improved. The GDP growth rate as the yardstick for the promotion tournament of local officials needs to be replaced by a more comprehensive index, which should include not only the GDP growth rate but also indicators measuring environmental protection, education, housing, and so on (Li and Liang 2016). Budget management and intergovernmental fiscal transfers require

well-established rules that make local governments' fiscal revenue match their expenditure responsibilities.

Finally, abandoning the central government's fiscal balance goal does not mean that the central government should spend as much as possible, nor does it mean that the central government should bear all the fiscal expenditure responsibilities. The government should consider the costs and benefits of a project and decide whether it can be done more efficiently by the private sector; the distribution of expenditure responsibilities between the central government and the local governments should be based on the efficiency of administrative management.

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