

MONEY MATTERS LOCAL GOVERNMENT FINANCE IN THE PEOPLE'S REPUBLIC OF CHINA



ASIAN DEVELOPMENT BANK

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Foreword

Public finance systems in the People's Republic of China (PRC) have evolved substantially over the last three decades. The evolution is continuing, with wide-ranging reforms in budget and debt management, the tax system, and intergovernmental fiscal relations called for at the Third Plenum of the 18th Central Committee of the Communist Party of China in November 2013. The reforms provide a holistic response to rising local government debt and will reinforce the capacity of the PRC to deliver efficient and equitable public services.

The Asian Development Bank (ADB) has a long-standing engagement in the strengthening of the PRC's public finance systems. By supporting the creation of knowledge and the sharing of good practices, and building capacity, ADB is helping promote improved public finance policies and management practices.

This publication explains why money matters to the PRC local governments. Drawing on recent public finance policy advice and analysis provided by ADB, it offers observations and suggestions on the practical actions that can be taken to pursue the fiscal agenda of the Third Plenum. Many of these actions will extend into the period of the 13th Five-Year Plan, 2016–2020 of the PRC, and the publication is offered as an input to the preparation of the new plan.

The contribution of leading Chinese and international scholars and our partners in government agencies to this publication is gratefully acknowledged.

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Ayumi Konishi Director General East Asia Department October 2014

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In addition, this publication presents analysis prepared by the staff of ADB's East Asia Department and key messages from a Public Finance Roundtable at ADB's PRC Resident Mission in December 2013. Yolanda Fernandez Lommen, Hiroko Uchimura-Shiroishi, and Craig Sugden of the East Asia Department did the analysis under the guidance of Ying Qian and with research support from Julie Chua. Niny Khor and Giacomo Giannetto contributed material on the property tax and local government financing. Special thanks go as well to Tariq Niazi, Norio Usui, Jurgen Conrad, Steven Lewis-Workman, Yi Jiang, and Robin Boumphrey for their valuable comments.

Abbreviations

ABS	_	asset-backed security
ADB	_	Asian Development Bank
CIT	_	corporate income tax
CNY	_	yuan
DSA	-	debt sustainability analysis
EIT	-	enterprise income tax
FCS	-	fiscal responsibility system
FRS	-	fiscal contracting system
GDP	-	gross domestic product
IMF	-	International Monetary Fund
LGIV	-	local government investment vehicle
MOF	-	Ministry of Finance
MTEF	-	medium-term expenditure framework
NAO	-	National Audit Office
OECD	-	Organisation for Economic Co-operation and Development
PIT	-	personal income tax
PPP	-	public-private partnership
PRC	-	People's Republic of China
SAT	-	State Administration of Taxation
SOE	-	state-owned enterprise
TSA	-	treasury single account
US	-	United States
VAT	-	value-added tax

A. Public Finance Reform Agenda

The public finance system in the People's Republic of China (PRC) has undergone substantial evolution over the last 3 decades. Major reforms in 1994 arrested a weakening revenue performance and underpinned revisions in intergovernmental fiscal relations and increases in government expenditure in priority areas. More recent initiatives have included refinements in corporate and personal income taxes, and major changes in the value-added tax (VAT).

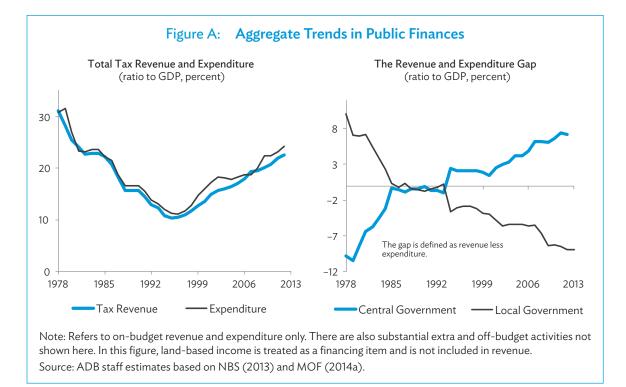
The tax reforms of 1994 shifted revenue collection from a largely negotiated basis to a more formalized tax system, and split the tax base into central, shared, and local taxes. Revenue from the shared taxes—e.g., VAT, corporate and personal income taxes—was redistributed among local governments. Municipal and other local governments were limited to controlling minor taxes with narrow bases. The net effect was the shifting of revenue-raising powers from local governments to the central government. Local governments receive around half of total tax revenues.

However, local governments are assigned responsibility for the delivery of most public services and account for around 85% of public spending. Although the central government provides large transfers to local governments, they still face sizable funding difficulties. Substantial differences have also emerged in expenditure across and within provinces on a per capita basis, resulting in disparities in access to basic public services.

The reforms of 1994 turned around a poor revenue performance. A new phase of reforms is now required to turn around the funding challenges faced by local governments (Figure A).

Local governments have used a range of tools to meet their funding obligations. Debt has accumulated rapidly, as a result. In 2006 local government direct debt was about 16.5% of gross domestic product (GDP) but by mid-2013 it had increased to 18.6% of GDP. In addition, local governments had guarantees and contingent liabilities equivalent to 12.0% of GDP in mid-2013 (NAO 2013). The extent of this gap is now seen as a major issue.

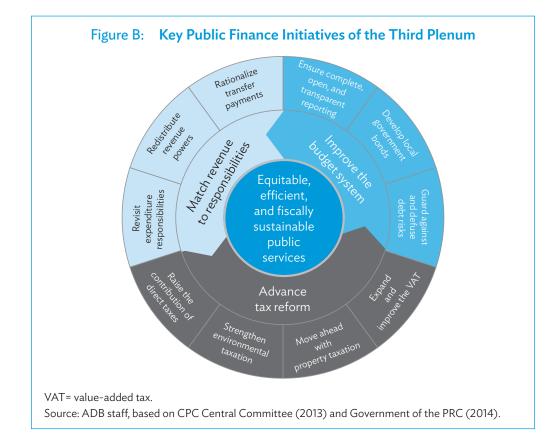
The 1994 Budget Law prevented local governments from direct borrowing without State Council approval. Local governments have consequently turned to alternative sources of financing. Local government investment vehicles (LGIVs) have been a preferred source. Many of these vehicles lack adequate governance and transparency arrangements, and the central government has recently acted to curb their use. Financing from land transactions has also been important. But limits on the supply of higher-quality land, uncertainty about the future of land prices, and distortions in the urbanization process resulting from this



form of financing suggest that local governments should develop other ways of securing budget financing.

These developments in the face of rising demand for municipal services place considerable fiscal pressure on local governments. The central government has recognized that, without public finance reform, local governments may be unable to meet their obligations to provide for social and economic needs and protect the environment.

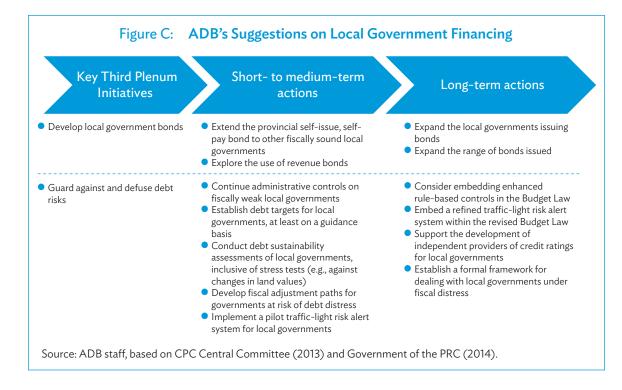
The Third Plenum of the 18th Central Committee of the Communist Party of China in November 2013 issued the "Decisions on Important Issues Concerning Comprehensive and Far Reaching Reform." These decisions set out the next phase of public finance reform (CPC Central Committee 2013). They noted the persistent incompatibilities with a modern system, and called for reform of the budget and tax systems, and of intergovernmental fiscal relations. The key reforms are summarized in Figure B. A timetable has been set for the completion of the priority reforms by 2016, and the introduction of the basics of a modern fiscal system that is compatible with modern approaches to good governance by 2020 (MOF 2014). Implementation has already begun through revisions in the Budget Law to allow local government borrowing and consolidate government budgets and improve their transparency, and through the approval of 'self-issue, self-pay' local government bonds.



B. Standardizing Local Government Financing

While the rapid rise in public debt has raised concerns, the PRC's overall government debt situation is currently manageable. National debt and debt servicing ratios remain moderate by international standards, very little debt is held externally, and reported arrears are low. Nonetheless, the debt situation requires ongoing attention. One reason is that some fiscally weaker local governments are vulnerable. A second, more important reason is that, without corrective action, there is a risk that the overall government debt position could ultimately become unsustainable.

Managing the situation requires providing local governments more flexibility to borrow, thus bringing borrowing into the open and helping standardize and modernize practices (Figure C). This should foster the use of prudent financing instruments that can raise debt for longer terms and at lower cost. Stricter controls will be possible as hidden practices and circumvented formal rules are replaced by open and transparent practices undertaken within a responsible fiscal framework. Local governments will be increasingly exposed to market discipline, and fiscal risks will be reduced.



Matching improvements in the local government debt management framework will be required. Notions of a hard budget constraint, and the credibility of commitments to good fiscal management need, to be entrenched.

Regulatory, reporting, and monitoring systems will need to be strengthened and curb informal and illegal practices. There is considerable experience from other countries and from within the PRC that can be drawn on. Fiscal rules and targets, debt sustainability analyses (DSAs), credit ratings, early-warning systems, insolvency mechanisms, and sanctions are some of the tools that can be used.

As a precursor to such reform, an assessment of fiscal risks arising from the current debt stock will have to be made. This may need to be followed up with carefully assembled programs to restructure and rationalize existing debt for those local governments facing a high risk of fiscal stress.

Addressing the local debt issue will also require a more structured approach to the supply side of borrowing. Lacking mature access to the capital markets, local governments obtain much of their debt in the form of bank loans. This borrowing is short-term and relatively costly, and can be progressively replaced. The PRC has made an important start by allowing selected municipalities to issue their own bonds independently, following earlier issuances backed by the central government. Extending this pilot scheme to additional fiscally sound local governments, and using more sophisticated structures and possibly revenue bonds, will provide local governments with more conventional financing mechanisms and help them manage their debt in an orderly, fiscally sustainable manner. For the newer financial

instruments to be most effective, the needs of financial markets will require attention. At a minimum, active credit ratings will be required for local governments that wish to borrow. Without such improvements, the efficient long-term management of liabilities will be difficult to achieve.

Public-private partnerships (PPPs) can also provide part of the solution. They bring the private sector into the delivery of public services. While PPPs are primarily a management reform rather than a financing reform, they do share responsibility for financing with the private sector. PPPs can provide a platform for new, sustainable ways of financing. And they do so while lowering the cost of delivery of public services and raising their timeliness and quality.

C. Improving the Budget System

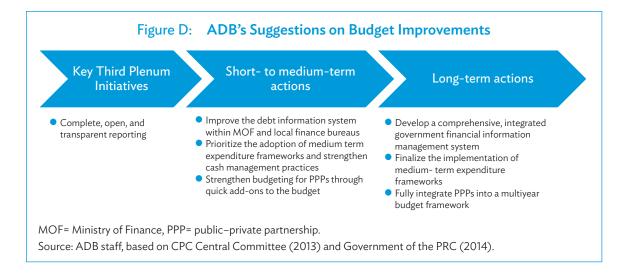
Reforms targeting better local government debt management can be complemented by improvements in the budget system and practices (Figure D). Important initiatives already under way include the strengthening of information management systems, the adoption of medium-term expenditure frameworks and performance budgeting, and the tightening of cash management via the development of the treasury single account. These initiatives will enhance transparency and efficiency in the use of public funds, and working in background will help guard against a future build-up in fiscal pressures at the local government level.

Budgeting for PPPs is a new area for the PRC. Interest in PPPs is on the rise, and activity could quickly return to the internationally high levels seen in the PRC in the 1990s. PPPs have special needs that require a tailored response. Most notably, the long-term commitments they involve do not fit the annual, cash-based budget used in the PRC. Ways are needed to bring PPPs within the budget system so they do not become a new, hidden source of local government financing.

For PPPs, the priorities are to make sure that budget commitments to PPPs are understood, tracked, and met when they fall due, and to have firewalls in place that enable governments to avoid projects that may become a burden. Quick fixes are available in the form of simple add-ons to the budget system, such as the annual release of a consolidated statement of approved PPPs and their budget obligations. Simple adaption of the project approval systems for PPPs can also be made. More permanent solutions can be provided via the recognition of fiscal issues in laws and regulations.

D. Advancing Tax Reform

The Third Plenum clarified that: (i) coverage of the VAT, the PRC's main source of tax revenue, is to be expanded; and (ii) implementation of the property tax is to be accelerated. Such changes would make these two taxes the backbone of the PRC's indirect tax system (Figure E).



Key Third Plenum Initiatives	Short- to medium-term actions	Long-term actions
Extend and improve the VAT	 Continue the replacement of the business tax by the VAT Provide a full VAT refund to exporters and prepare to bring financial services into the VAT net 	 Complete the replacement of the business tax by a VAT levied at a uniform rate Consolidate tax administration within a strengthened SAT
Move ahead with property taxation	 Expand the pilot property tax projects in Shanghai and Chongqing to cover all properties at higher rates, and extend the pilot projects to other municipalities Strengthen valuation systems 	 Complete the rollout of the property tax to all local governments, learning from the pilot projects Provide targeted social welfare support for lower income tax payers
9 Strengthen environmental taxation	 Adopt the "polluter-pays" principles Levy the consumption tax on more environmentally harmful goods Set a higher vehicle purchase tax rate for large vehicles Conduct a comprehensive assessment of energy subsidies 	 Phase out harmful energy subsidies Continue to expand the consumption tax on environmentally harmful goods Convert sewerage charges to an environmental tax Consider the phased introduction of emission taxes, such as a carbon tax
Gradually raise the share of direct taxation in total revenue	 Equalize the PIT tax rate on asset income with that on labor income Replace preferential tax rates in the EIT and adjust the withholding tax rate Improve the integration of tax administration within SAT 	 Adjust PIT tax brackets and rates and tax all nonwage income Strengthen the EIT and PIT links Phase out all tax preferences in the EIT Manage any adverse equity impact

Source: ADB staff, based on CPC Central Committee (2013) and Government of the PRC (2014).

A number of improvements can be made in the VAT as it is expanded. A key issue is the treatment of the financial sector. To avoid disadvantaging the PRC's financial industries, it will be necessary to bring all financial services that have fees attached within the VAT net. The multiple rates now used to promote selected industries should be replaced by a single VAT rate (with priority industries supported by other means), and a full VAT refund should be provided to exporters. Such design changes would help maintain the economy's competitiveness.

Pilot property tax programs under way in Shanghai and Chongqing provide a starting point for a gradual expansion of the property tax. The lessons from these pilot programs will help as the property tax is extended to other local governments. In doing so, it will be important to establish as wide a tax base as possible with minimal exemptions. Residential property needs to be brought into the tax net, special consideration needs to be paid to the impact on low-income households, and government agencies and the private sector need to be prepared for the introduction of this tax.

The Third Plenum also clarified the intention to implement environmental taxes. This is an important initiative toward ensuring environmentally sustainable growth. In the PRC, energy is heavily subsidized: there are in effect negative environmental taxes. A priority is to phase out energy subsidies by establishing prices that reflect the full costs of use, including environmental degradation. This would be best undertaken following a comprehensive assessment of the regime for taxation and pricing of fuels.

A pragmatic step that can be implemented quickly and at low cost is to expand the existing consumption tax to serve as an environmental tax. Goods associated with environmental damage in production or consumption can be taxed according to their environmental impact. This would implement the "polluter-pays" principle and thereby discourage environmental damage, besides incidentally providing a much-needed revenue source. Such a tax could provide valuable experience in environmental taxation, and become a precursor to an emissions tax, such as a carbon tax, which might be adopted in the future.

The tax system will also benefit from efforts to raise the share of revenue generated by direct taxation. Among other benefits, the progressivity of the tax system in the PRC will increase. The main direct taxes, the corporate and personal income taxes, are relatively well advanced in their design. Nonetheless, some design improvements could be made (e.g., taxing income from assets at the same rate as labor income), and, more importantly, administration could be strengthened.

An expanded consumption tax would also help improve the progressivity of the tax system by raising taxes paid on luxury goods. The current tax is applied on a narrow base and at a low rate.

Maximizing the effectiveness of tax administration and minimizing its cost are overarching objectives of tax policy. For the PRC, centralized administration would facilitate information sharing and the adoption of modern administration techniques. Centralized administration is particularly important for the VAT, as the information generated by a complete VAT chain can improve the effectiveness of other taxes, such as income taxes. Reliance on an

expanded State Administration of Taxation (SAT), which ultimately incorporates the local tax administrations, would help minimize tax evasion and avoidance and the burden of tax compliance. This does not, however, mean that all tax revenue would flow to the central government.

E. Matching Revenue Powers with Spending Responsibilities

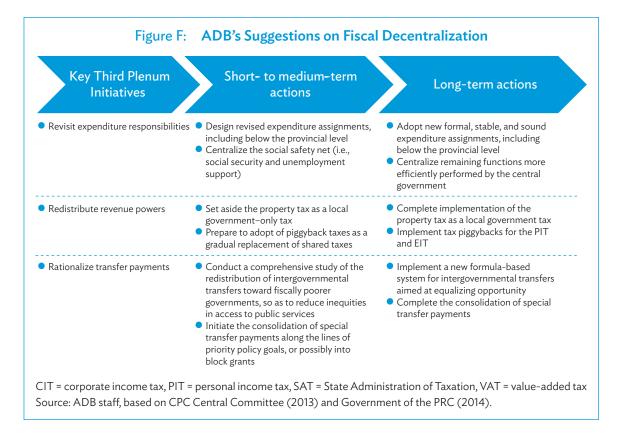
The division of fiscal powers among various levels of government is determined in various laws, regulations, and guidelines, and understanding these responsibilities can be a major challenge. A much-needed starting point for the strengthening of intergovernmental fiscal relations is the establishment of formal, stable, and sound expenditure assignments. These are required to clarify the responsibilities of all levels of government, remove inefficiency in government expenditure, and enhance the accountability of local governments.

A second required step is to increase the fiscal autonomy of local governments by matching revenue sources with expenditure responsibilities. The recent increase in local government debt has raised the imperative to provide local governments with better instruments to collect own-source revenue. In this regard, an own-source revenue refers to revenue that local governments can independently adjust in order to meet additional calls on their resources, such as rising liabilities. For example, an own-source tax would be designed to allow local governments to adjust tax rates.

To achieve revenue autonomy, the joint use of some major taxes can be encouraged. A long-term option is to consider "piggyback" taxation. A piggyback tax is different from what is currently termed a shared tax. Under a shared tax, revenue is shared between different levels of government, but lower-level governments have no control over the tax rate. The result is that a shared tax is not a genuine ownsource revenue, and acts more like a transfer. A piggyback tax would allow lower-level governments to set a tax rate in addition to a centrally set rate, within legislated minimums and maximums. It thereby gives them the power to control the revenue they receive. A piggyback tax would remain centrally administered by the SAT to maximize its efficiency and minimize its cost. Piggyback taxation is most commonly applied to corporate and personal income tax.

The revenue autonomy of local governments could also be improved if some taxes were to be set aside for local governments. The property tax is the best candidate for a local government-specific tax. In addition, revenues from government levies and charges on such things as pollution and congestion could be allocated to local governments.

A further important step is a reform of the intergovernmental transfer system to provide local governments with the resources they need to meet their expenditure obligations and to address disparities in revenue-raising capacity across the country and within provinces. Reforming intergovernmental transfers would require a large shift in resources to the fiscally poor provinces through the redesign of the transfers from the central government. Because provinces have discretion in setting transfers for lower-levels of government, these reforms will require clear frameworks for transfer systems at the subprovincial level.



Any such reform of intergovernmental transfers provides an opportunity to revise the myriad special transfers that have developed over time. These can be converted into a smaller set of block transfers that would be conditional on use against clear policy goals. If block transfers prove too difficult to implement, a short-term alternative would be to consolidate existing transfers along the lines of priority policy goals.

F. Taking Action

The suggested reforms would represent a major shift in revenue and expenditure across local governments. A gradual, sequenced approach is therefore suggested. Short-term actions can target quick wins, or provide stepping-stones to the completion of larger and more complex longer-term actions.

These actions build on the recognition that local government debt is a major issue that requires a broadbased response. If the response were, for example, limited to efforts to monitor and regulate the issuance of new debt, it would leave the underlying causes untouched. A broad-based response requires better debt management, adjustments in the revenue system, and changes in the system for allocating revenue among different levels of government.

Expecting local governments to accept more fiscal responsibility because of concern about the magnitude of local government debt may appear counterintuitive when concerns in rising local government debts have spurred the reforms. But the absence of the financing instruments and revenue autonomy commonly available to local governments in other countries has been one of the underlying causes of the debt problem. The situation was compounded by the absence of hard budget constraints and an expectation that the central government would ultimately assume responsibility for local government finances.

The cushion provided by the central government needs to be removed for local governments to accept accountability for their actions and to make the transition to the use of modernized financing instruments. Such reforms must go hand in hand with a tightening of the checks and balances on local governments to avoid misuse of the new flexibility.

It is important to recognize that some local governments are better positioned to make the transition to a modernized public finance system than others. Those that are well positioned can be provided access to better, more flexible mechanisms for financing their activities, such as by extending the pilot of local government bonds. Those local governments whose fiscal position is weak probably need to be subject to tighter fiscal controls and may need to be put under fiscal adjustment paths. At the same time, the fiscally weaker provinces probably need extra financial support for service delivery.

The practice in public finance reform in the PRC has been, as in many other policy areas, to start with the conduct of a pilot project. Pilot projects in the opening of local government bond markets, and property tax and VAT reform, are advanced. The reform of the fiscal decentralization system required to better match spending powers with expenditure responsibilities is relatively less advanced. More attention may have to be paid to improving fiscal decentralization so that it does not become a binding constraint preventing reforms in debt, budget, and revenue management from feeding through to better service delivery.

The 12th Five-Year Plan, 2011–2015, of the People's Republic of China (PRC) sets out the next phase of public finance reform in the country (Government of the PRC 2011). Fiscal policy is to be better coordinated with monetary, investment, industrial, and land policy. An improved public fiscal system is to help gradually narrow the gap in living standards between urban and rural areas and between regions. And opportunity is to be distributed more equitably by revising the structure of government expenditure, notably by raising the proportion allocated to public services and social security. The plan also provides for the alignment of the financial resources of governments with their respective authorities and improvements in financial administration.

The importance of public finance reform was reinforced at the Third Plenum of the 18th Central Committee of the Communist Party of China in November 2013. In calling for a deepening of fiscal structural reform, the Decisions on Important Issues Concerning Comprehensive and Far-reaching Reform explained that:

Finance is the basis and an important pillar for governing the nation. A scientific fiscal structure is an institutional guarantee for optimizing resource allocation, safeguarding market unity, stimulating social fairness and realizing a long period of peace and order for the country. We must perfect legislation, clarify duties and responsibilities, reform the tax system, stabilize tax burdens, make budgets transparent, raise efficiency, establish modern financial administration systems and give rein to the vigor of both the centre and the localities. (CPC Central Committee 2013)

The Third Plenum identified three major parts of the modern fiscal system required by the PRC: a budget system, a taxation system, and a system of fiscal decentralization. It was noted that incompatibilities with a modern system remain, and the Decisions called for ongoing reform.

The reform agenda was elaborated in the Report on the Work of the Government delivered at the Second Session of the 12th National People's Congress in March 2014:

We will give high priority to reforming the fiscal and tax systems.

We will institute a comprehensive, well-regulated, open and transparent budget system. We will work hard to incorporate all government revenue into the budget, and bring all revenue and expenditures under budgetary management. Governments at all levels should release their budgets and final accounts to the public, and budgets released by government bodies should progressively include details down to basic regular and project expenditures. In particular, all public spending on official overseas visits, official vehicles, and official hospitality should be made public. We will ensure transparency of public finance and make it easy for people to understand and oversee it.

We will increase the proportion of general transfer payments, and cut the number of special transfer payments by one third this year and continue to cut them in coming years.

We will advance the reform of the tax system by taking the following steps: Extend trials for replacing business tax with value-added tax (VAT) to the railway transport, postal and telecommunications services industries, abolish fees and replace them with taxes, reform the excise tax and resource tax, and move ahead with legislation on a property tax and environmental protection tax. We will grant additional tax breaks to micro businesses with low profits and reduce the burden on businesses.

We will work faster on ways to adjust the power and spending responsibilities between central and local governments, and progressively adjust distribution of revenue between them while keeping the current division of financial resources between them basically stable.

We will establish a standard financing mechanism for local governments to issue bonds and place local government debt under budgetary management. We will implement a comprehensive government financial reporting system and guard against and defuse debt risks. (Government of the PRC 2014)

A timetable has been set: priority reform tasks are to be completed by 2016, and the basics of a modern fiscal system that is compatible with modern approaches to good governance should be in place by 2020 (MOF 2014). Implementation has already begun through revisions in the Budget Law to allow local government borrowing and consolidate government budgets and improve their transparency, and through the extension of a pilot bond program to 10 local governments.

Such reforms will improve the effectiveness and efficiency of government and help secure fiscal sustainability. The biggest gains will be in the operations of local government, which are obligated to provide most public services and which account for around 85% of public spending. Local government debt levels have risen quickly since 2008 and will ultimately become unsustainable in the absence of corrective fiscal measures. Public finance reform is required so that local governments can find new sources of revenue and budgeting finance to replace unsustainable sources, such as the leasing of land and the use of local government investment vehicles (LGIVs). Reform is needed to prepare local governments for the large budget demands they must confront.

The reforms announced at the Third Plenum can improve the quality of expenditure of local governments and the transparency of their operations. Such broad-ranging public finance initiatives can help make rapid urbanization fiscally feasible, and underpin the pursuit of other development goals. Notably, if the reforms are well implemented they can help maintain the economy's international competitiveness, and by imposing taxes for environmental damage they can boost efforts to reduce air pollution and other forms of environmental degradation in the PRC.

This publication draws on recent technical assistance from the Asian Development Bank (ADB), special reports commissioned on priority issues, and the work of ADB staff.¹ Observations and suggestions are offered on the practical actions that can be taken immediately to implement the public finance initiatives of the Third Plenum.

The next section addresses the actions that can be taken to improve the management of local government debt, the most immediate fiscal problem facing the PRC. The emphasis is on the adoption of sustainable financing instruments and a modernized fiscal framework for their prudent use. The role of public-private partnerships (PPPs) in sharing financing responsibilities with the private sector is also introduced.

Complementary improvements in the budget system are then explored. The strengthening of debt and budget reporting and cash management, and the potential of medium-term fiscal frameworks and performance budgeting, are explored. Ways of ensuring effective budgeting of PPPs and preventing them from becoming a new form of fiscal risk are discussed.

The subsequent section addresses initiatives required to achieve a more equitable and standardized taxation system. The focus is on the value-added tax (VAT), the property tax, and environmental taxation. The section also addresses improvements in direct taxation.

The system of intergovernmental transfers is then examined with an emphasis on ensuring that central and local governments' revenue powers are commensurate with their expenditure responsibilities. This section addresses how revenue and expenditure can be rebalanced to distribute opportunity more equitably and narrow gaps in living standards across the PRC.

A concluding section draws together the main suggestions of the paper. A time-bound action plan that shows the concrete actions that can be taken to put fiscal policy reform in place is presented. Appendixes introduce the reports supported by ADB that were used in preparing this publication, and describe the PRC's current public finance system and its origins.

¹ The technical assistance on which this publication is based is summarized in Appendix 1, and references are presented in the relevant sections. Readers wishing to obtain technical assistance reports can find these at adb.org or contact the Public Management, Financial Sector, and Regional Cooperation Division of the East Asia Department, or the department's PRC Resident Mission.

Standardizing Local Government Financing

A. Introduction

Sustainable financing instruments within a stronger fiscal framework are needed Correcting the local government debt problem requires a new approach to local government financing. New, sustainable financing instruments are needed, together with a modernized fiscal framework to make sure that the new instruments are used prudently.²

The experience of other countries indicates that the priorities for the PRC are to establish the following:

- local government bonds as the standard means of financing local budget deficits; and
- a policy or legal framework that requires local governments to declare all debt publicly, follow due process in evaluating the affordability of debt, use due diligence in deciding on the type of debt and how to raise it, and have a framework of accountability for managing debt and fiscal risks. Fiscal rules and targets, mechanisms for monitoring the fiscal health of local governments such as earlywarning systems, and formal mechanisms for dealing with local governments facing fiscal distress may have to be established for this purpose.

The reform agenda is well under way

The PRC has taken important steps to improve the monitoring of local government debt and to improve the transparency and comprehensiveness of local budgets. Audits of government debt by the National Audit Office (NAO) are good examples of the efforts that have been made. Administrative measures have been taken to promote the collection and use of statistics on local government debt, and regulations covering the oversight and governance of LGIVs have been tightened. The central government also moved proactively to facilitate local government access to credit by acting as an issuing agent for such debt, in 2011 allowed fiscally stronger jurisdictions to self-issue bonds backed by the central government, and in May 2014 allowed 10 local governments to self-issue, self-pay bonds on the basis of market principles. A revised Budget Law was adopted in August 2014, after four readings and around 10 years of preparation, and in September 2014 the central government signaled the extension of the self-issue, self-pay local government bond.

In addition to wide-ranging measures for improving the oversight and transparency of the government budget, the revised Budget Law allows provinces, autonomous regions, and municipalities to issue bonds independently within a quota approved by the State Council and the National People's Congress. The bond issuer would have to prove it has a stable source of income so it can repay the debt, and the finance raised could be used only for

² See ADB (2012g; 2013a and 2013b; and 2014b, 2014e, and 2014f), and Liu and Qiao (2013) for further discussion of local government financing

investment purposes. Such legislative reform will help normalize local government financing by allowing bonds issued in an open, transparent, and fiscally prudent manner to become a standard means of financing local budget deficits.

While such instruments are not a certain solution, they offer a way of lowering the cost of financing and making it more predictable and transparent. PPPs also offer a viable alternative now being pursued by the government, to share responsibility for providing public services with the private sector.

B. State of Play

1. Institutional Setting

The PRC's public finance system underwent major reform in 1994.³ Revenue collection was shifted from a negotiated basis to a formal tax system, which was separated into central, shared, and local taxes. Revenue from the shared taxes—e.g., VAT, corporate and personal income taxes—was redistributed among local governments. Municipal and other local governments were limited to controlling lesser taxes with narrow bases. The net effect was the shifting of revenue-raising powers from local governments to the central government. The 1994 reforms averted a looming fiscal crisis by successfully arresting a weakening revenue performance (Figure 2.1). They also underpinned revisions in intergovernmental fiscal relations and increases in government expenditure in priority areas.

The PRC's local governments, notably provincial prefecture and municipal governments, have retained their dominant role in service delivery and local economic development. With local governments accounting for around 85% of public spending, the PRC is now one of the most fiscally decentralized countries. The PRC's development success is thus critically linked to the capabilities, incentives, and accountability of local governments.

The PRC's rapid urbanization has resulted in rising demand for urban services, and strong pressure on urban local governments to respond by expanding economic and social infrastructure. A similar response from rural local governments would lessen the widening gap in living standards, and allow the local governments to share in the fruits of growth and prosperity by integrating with the broader national economy. Some local governments have sought to outdo other local jurisdictions in improving economic outcomes for their residents.

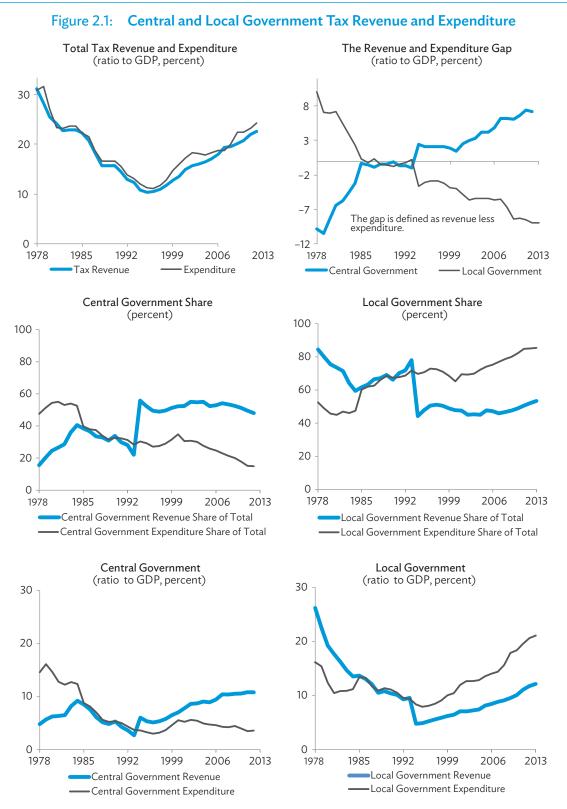
The expenditure of local government far exceeds their tax revenues. Around half of the tax revenue is collected by the central government, leaving local governments with around 50% of tax revenue to deliver 85% of government expenditure. The revenue shortfall for local governments has expanded substantially since 1994. A new phase of reforms is now needed to deal with the funding challenges for local governments.

Transfers from the central government have only partially filled the gap between local government expenditure and revenue. To fully meet their expenditure responsibilities, local

Fiscal success rests on the performance of local governments

Local governments spend much more than they raise from taxes

³ The PRC's public finance system and its origins are summarized in Appendix 2.



Note: Refers to on-budget revenue and expenditure only. There are also substantial extra and off-budget activities not shown in the figure. In this figure, land-based income is treated as a financing item and is not included in revenue. Source: ADB staff estimates based on NBC (2013) and MOF (2014a).

governments have therefore found it necessary to also borrow. However, the Budget Law (1994) does not allow them to do so (although the State Council can approve exemptions).

In principle, borrowing for sound public investment is justified on the grounds that investment is long lived and provides benefits for future generations, and borrowing shares the costs with future beneficiaries. But tight constraints on direct capital market access by local governments, coupled with a framework of accountability that places a premium on local economic development, have hindered the orderly management of local government finances and debt.

Pressures to expand public services and local economies have pushed local governments to pursue innovative means of financing, including a diverse range of LGIVs and other off-budget activities. Some off-budget activities are commercial in nature, reflecting the role of the state as a key driver of economic activity, through state-owned enterprises (SOEs) and other vehicles, and the considerable discretion that local governments have regarding the activities they can undertake.

The economic stimulus package prepared in response to the global economic and financial crisis made it increasingly imperative that local governments spend. Local governments were expected to accelerate their investment in infrastructure while state-owned banks were called on to finance them, typically through indirect means such as LGIVs. One result was a rapid rise in debt and maturity mismatches, with investment in long-lived assets financed with short-term bank loans. Infrastructure assets, which often had weak short-term prospects for revenue generation, were poorly suited to meeting short-term debt servicing obligations. This added to pressures for local governments to pursue land transactions as a source of revenue, efforts that were undermined by declining supplies of the highest-quality land and uncertainty concerning future land prices.

Concerns about the quality of the underlying assets funded with local government debt point to weaknesses in expenditure management. Even though recent audits of public debt have helped explain the situation, shortcomings in transparency that highlight the need for improved budget reporting have become apparent.

The PRC's recent experience highlights a number of institutional factors that have dulled the incentives for good fiscal management by local governments:

- Local governments have become reliant on higher-level governments to provide additional resources, as the expenditure responsibilities of local governments exceed their own-source revenue. This sharing of funding arrangements can encourage local governments to spend.
- The fiscally strong central government in effect underwrites local government liabilities. This creates a tendency to incur more liabilities than would be the case if local governments were solely responsible for their liabilities and could become insolvent if they managed their debt poorly.
- Poorly run local governments can take advantage of incomplete information about the magnitude and riskiness of local government liabilities to incur too much lowquality debt.

Fiscal restrictions have encouraged too many offbudget activities

Local government debt has risen too quickly

The accountability of local governments to taxpayers is muted. Contributing factors include the direct appointment of officials by higher authorities, and the presence in cities of a large "floating" population of migrants that is only loosely part of the local population (because of the *hukou* household registration system). In contrast, in many other countries, public finance systems benefit from citizen awareness and oversight that comes from paying taxes to fund local government. Local communities are incentivized with taxes to press for good fiscal management.

Public finances need to be modernized

The public finance system must be modernized so that such institutional factors can be corrected and the fiscal demands facing local governments can be met in a sustainable manner. The priority is to improve debt management, such as through the replacement of fiscally unsustainable financing instruments, and the strengthening of checks and balances that can correct adverse incentives at the local government level. As debt is a result of a gap between expenditure and revenue, efforts to modernize debt management need to be linked to more effective management of both expenditure and revenue.

Local government public financing—encompassing budgeting, debt management, taxation, and intergovernmental relations—needs to be recognized as an important driver of local government performance and accountability. A good local public finance management system is one where local governments conduct their fiscal operations with due regard for fiscal risks, allocate resources according to people's preferences, deliver services in the most cost-effective manner, allow fair access to services by the poor and the needy, and are accountable to local residents and higher-order governments for any management failures.

2. Existing Government Debt

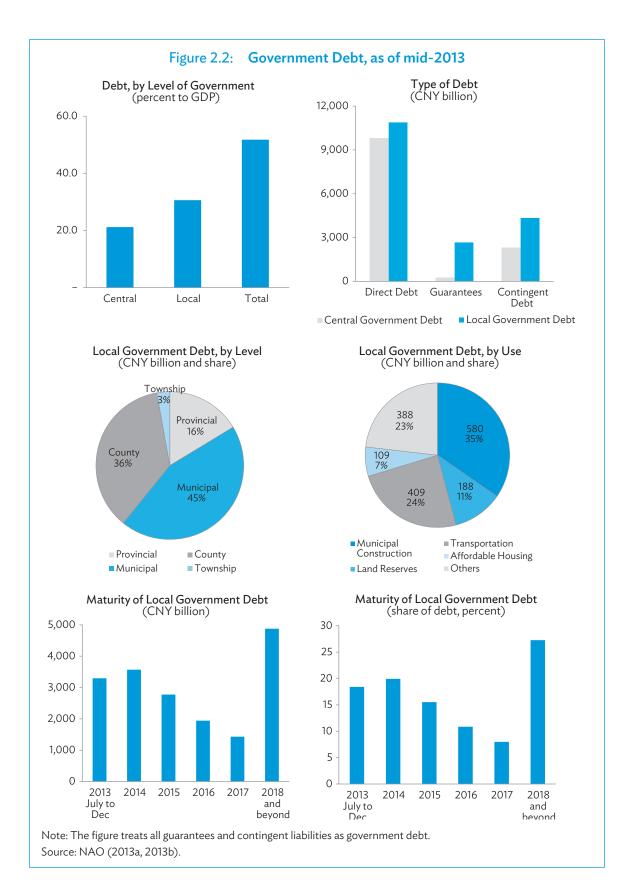
The latest audit of government debt released by the NAO reported CNY30.27 trillion in total public debt inclusive of guarantees and contingent liabilities as of June 2013 (NAO 2013a, 2013b).⁴ This was equivalent to 51.8% of gross domestic product (GDP), which is moderate by international standards and well below that seen in most member countries of the Organisation for Economic Co-operation and Development (OECD).⁵

Most government debt is owed by local governments

Of the total government debt inclusive of guarantees and contingent liabilities, CNY12.38 trillion, or 21.2% of GDP, has been incurred by the central government (Figure 2.2). Local governments have incurred CNY17.9 trillion, or 30.6% of GDP. The previous audit was conducted at the end of 2010. From end-2010 to mid-2013, local government debt inclusive

⁴ While the 2013 audit covered a much broader range of liabilities than earlier assessments, it excluded contingent liabilities related to the pension system, and a large part of government contingent liabilities in the financial sector and state-owned enterprises. This paper includes all guarantees and contingent liabilities identified by the NAO as government debt on the simplifying assumption that the guarantees and contingent liabilities relate to activities of the general government sector (e.g., infrastructure development). Some of the guarantees and contingent liabilities may relate to commercial activities and should not be included within the debt of the general government sector. But this commercial portion cannot be identified because of data limitations

⁵ For example, the ratio of total debt to GDP inclusive of guarantees and contingency liabilities of 53% is below the 60% threshold set by the IMF's debt sustainability analysis for market-access economies (IMF 2013c; Zhang and Barnett 2014). Excluding guarantees and contingent liabilities gives a ratio of direct debt to GDP of 37%.



9

of guarantees and contingent liabilities rose from CNY10.7 trillion to reach CNY17.9 trillion, an increase of 66.9%. By mid-2013, central government debt inclusive of guarantees and contingent liabilities had reached CNY12.4 trillion.

Of the local government debt, 60.8% is direct debt and 39.2% constitutes guarantees and contingent liabilities. This compares with the 20.8% of central government debt incurred as guarantees and contingent liabilities, largely through the former Ministry of Railways.

Across all levels of local government, 39.9% of the debt inclusive of guarantees and contingent liabilities has been incurred by the LGIVs, 22.7% by government-related work units, and 13.4% by SOEs. Around one-third of local government debt is attributed to urban construction, and 24.4% to transportation infrastructure. Local government debt is typically short-term: around half needs to be repaid by the end of 2016.⁶

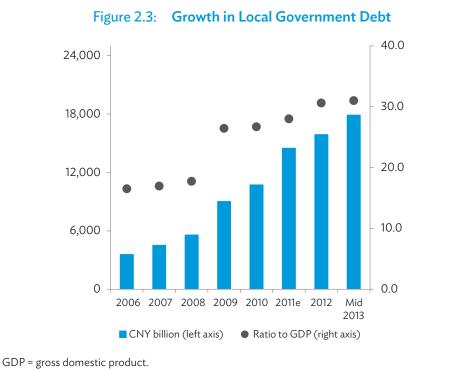
Local government debt has expanded rapidly

In 2006, local government direct debt was equivalent to 3.5% of GDP, but by mid-2013 it had reached 18.6% of GDP. While local governments had few guarantees and contingent liabilities in 2006, they had accumulated guarantees and contingent liabilities equivalent to 12.0% of GDP by mid-2013 (Figure 2.3). The rapid growth in debt, the short-term maturity of the debt, and the quality of the underlying assets quickly emerged as a concern to both the government and markets.

Notably, the Financial Monitoring Report released by the International Monetary Fund (IMF) in April 2013 concluded that local infrastructure project financing could become the PRC's major financial risk. The report pointed to the reliance of around 80% of local governments on land-based revenue as a means of repaying debt, and the difficultly of assessing the potential impact of local government debt due to the blurred relationship between local governments and their financing vehicles. The IMF highlighted the fiscal risk that will be borne if current practices continue in the face of the PRC's rapid urbanization progress and the rising demand for expenditure (IMF 2013a). The 2014 Article IV Staff Report listed local government finances as one of four key, and interlinked, areas of rising vulnerability (IMF 2014).

In April 2013, Fitch Ratings reduced the PRC's long-term local currency credit rating to A+ from AA- with a stable outlook, citing financial risks from rapid credit expansion alongside the rise of shadow banking activity and the risk of excessive local government borrowing (Fitch, 2014). This was the first downgrade in the PRC's sovereign credit rating by a major international credit rating agency since 1999. While Moody's Investors Service affirmed the PRC's government's bond rating of Aa3 in April 2013, it reduced the outlook to stable from positive. Moody's pointed to slower-than-expected progress in reducing the risk of local debt and addressing credit expansion problems (Moody's Investors Service 2013). These ratings have remained unchanged.

⁶ The latest audit did not provide estimates by local government, so the situation of individual local governments was not explained. But some provincial and municipal governments, including Guangdong, Guangxi, Ningxia Hui autonomous region, Beijing, Jilin, and Zhejiang, started to release their own results in January 2014



Note: There are no official data for 2011, the figure shows estimates for 2011. The figure shows the total of direct debt and contingent liabilities.

Source: NAO (2011, 2013b) and HSBC Global Research (2014).

3. Outlook for Government Debt

The PRC's overall government debt situation is currently manageable. The national debt and debt servicing ratios remain moderate by international standards, very little debt is held externally, and reported arrears are low, at around 1% of total debt. The Minister of Finance has reported that the size of local government debts has not increased notably over 2014 and the risks are under control. Nonetheless, the debt situation requires ongoing attention.⁷

One reason is that some fiscally weaker local governments are already vulnerable. The national audit had highlighted that some local governments had already incurred a high level of debt. While the overall ratio of direct local government debt to gross regional product was 37%, as of the end of 2012 it was above 100% for 99 municipalities, 195 counties, and 3,465 townships. Of these, 2 provinces, 31 municipalities, and 148 townships were relying on new loans to repay at least 20% of the principal of old loans (NAO 2013a, 2013b). A follow-up

Some local governments are more exposed than others

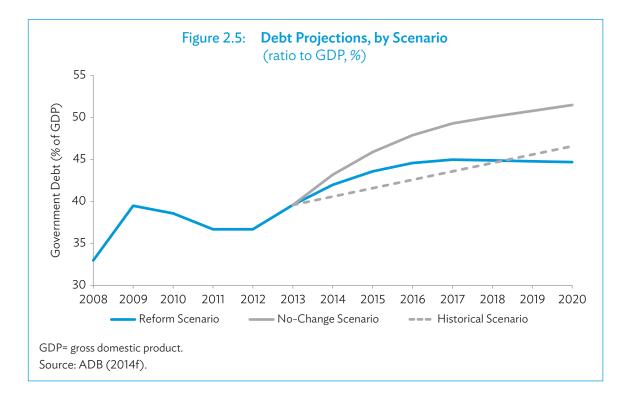
⁷ See MOF (2014b). The IMF's 2014 Article IV Staff Report notes that "Compared to other countries, the People's Republic of China's fiscal debt—regardless of how measured—does not appear particularly large. The deficit, however, stands out somewhat more, especially the augmented net borrowing measure. Moreover, some local governments likely face more significant challenges with a combination of large off-budget borrowing and a limited revenue base." (IMF 2014, 9)



audit of a sample of local governments found that as of March 2014, nine provinces audited had small debt arrears even though they had borrowed CNY57.9 billion over the preceding 9 months to repay debts (People Daily Online, 2014). The IMF has estimated the ratio of total debt inclusive of contingent liabilities to GDP as ranging from around 15% to 80%, with the ratio above 50% in Chongqing, Gansu, and Guizhou (IMF 2014, 27).

A second, more important reason for continued attention to local government debt is the risk that the debt position may ultimately become unsustainable without corrective action. Figure 2.5 presents the outlook for the direct debt of all levels of government under three scenarios: no change, historical, and reform. Direct debt excludes guarantees and other contingent liabilities.⁸ Under the no-change scenario, the fiscal expansion and economic conditions seen over 2012 and 2013 are assumed to continue. The projection is for an ever-increasing ratio of debt to GDP that would ultimately impose fiscal stress. The historical scenario assumes a continuation of the fiscal and economic conditions seen from 2009 to 2013. Under this scenario, the ratio of direct debt to GDP would also continue to rise, albeit at a much lower rate than under the no-change scenario.

⁸ Contingent liabilities are excluded from the scenario analysis, given gaps in the data. Their exclusion does not affect the broad conclusions reached.



Under the reform scenario, the direct debt ratio stabilizes quickly and fiscal sustainability is assured. The key assumption of this scenario is that borrowing declines to almost half its 2013 level by 2018 (as a ratio to GDP). Reducing borrowing positions the economy to withstand fiscal or economic shocks. For example, even if 25% of contingent liabilities were recognized in 2014, the debt-to-GDP ratio would still stabilize and the direct debt position would still be sustainable under the reform scenario. The reform scenario is the most likely.

Controlling government borrowing is a priority

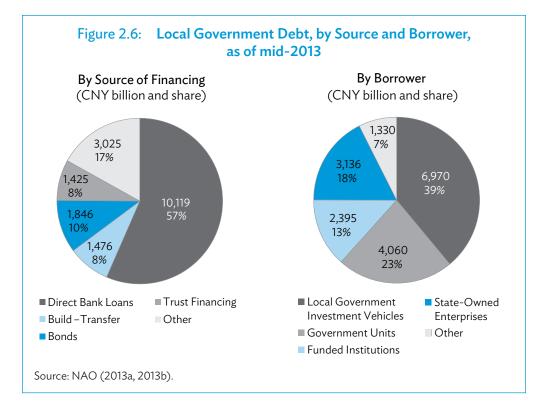
The key message from these three scenarios is the importance of acting early to adjust fiscal policy and management and to control the level of government borrowing.

C. Established Financing Instruments

1. Introduction

Local government debt has grown rapidly since 2008 despite strict restrictions on the borrowing behavior of local governments. Article 28 of the 1994 Budget Law stipulated that local budgets must be in balance and local governments must not borrow from banks or issue bonds unless otherwise prescribed by law or authorized by the State Council.

A range of financing instruments was developed to overcome constraints on direct borrowing from capital markets in the 1994 Budget Law. The key instruments were central government on-lending, land transactions, the LGIVs, and build-transfer projects. Most financing has ultimately been provided indirectly by banks (Figure 2.6).

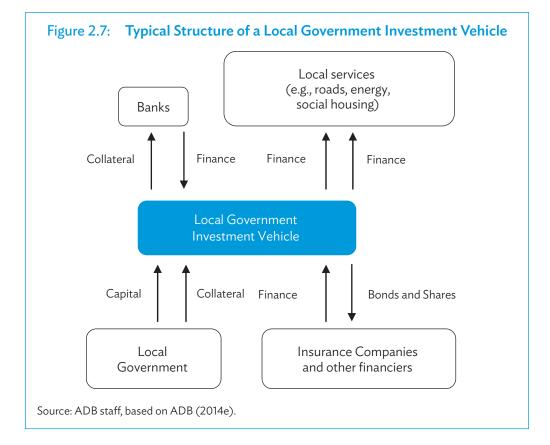


2. Local Government Investment Vehicles

The LGIVs were another innovative response by local governments to the restrictions on budget financing In the 1990s, local governments began to establish autonomous investment corporations, construction investment corporations, and utility investment corporations to borrow from various sources to finance local investment projects. They are referred to by different names, including LGIVs, urban development investment corporations, local government financing vehicles, local investment corporations, and local government financing platforms. The first and one of the most prominent of these was the Shanghai Urban Investment Corporation established in July 1992. Local governments in the coastal regions followed, and LGIVs then emerged all over the country. As of mid-2013, the LGIVs were responsible for 39% of local government debt.

LGIVs are commonly set up as subsidiaries of local governments. A typical structure is illustrated in Figure 2.7. They may be related to specific projects (such as developing an industrial zone or building a road), or may be general purpose and cover a number of infrastructure-related activities. Because they are separate legal entities, LGIVs are not subject to the restrictions of the 1994 Budget Law on local government borrowings from banks and bond issues. However, any bonds they issue are interpreted as corporate issues, which require State Council approval.

The growth of LGIVs was supported by a 2004 State Council decision granting access to a wider set of financing channels and instruments. The number of LGIVs as of the end of 2010



was estimated at 6,576—165 at the provincial level, 1,648 at the municipal level, and 4,763 at the county level (Liu and Qiao 2013).

The issuance of bonds by the LGIVs received support under the economic stimulus program initiated in 2008. However, individual LGIVs are typically limited to one or two issues each year. It is estimated that local bond issuances by LGIVs rose from \$10 billion in 2002 to about \$60 billion in 2009.

Banks have provided around 70% of all borrowing by LGIVs, although the share of trust funds is increasing. Bank borrowing by the LGIVs tends to be from local banks rather than from national banks. LGIV bank borrowing is collateralized, often with land endowed by the local government. The debt is often short-term.

Since LGIVs are wholly owned by the local government, which in turn is under the authority of the central government, they are regarded as implicitly government guaranteed. The role of the State Council in approving bonds reinforces the perception that the central government will assume ultimate responsibility in the event of a default. For those LGIVs that lack transparency, accountability, and professional management, it is highly unlikely that bond investors would accept their bonds on any other basis. The implicit government guarantee of bond issues has contributed to a low cost of debt.

LGIVs have mainly relied on bank loans

LGIVs vary in structure and quality, but their operations and financing are generally opaque and formal accountability is often weak. Management competence may also be low, and LGIVs may be subject to interventions from local (and central) governments. Generally weak credit analysis skills in banks, insurance and trust companies, and other financiers has had the undesirable effect of dulling the imperative for LGIVs to perform well.

LGIVs have a number of shortcomings These factors mean that financing through LGIVs can result in: (i) a lack of transparency in budget financing; (ii) fragmentation of local budgets, because the LGIVs allow substantial off-budget activities; (iii) dependence on unstable sources of local financing and the financial sector; and (iv) macroeconomic risks from the accumulation of low-quality, and hidden, debt.

The short-term debt of the LGIVs is at odds with the long-term assets they finance In assessing the desirability of using LGIVs, the nature of the assets financed needs to be kept in mind. Most of the financing has gone to public infrastructure projects such as roads, railways, and industrial park construction. Only some of these investments generate enough revenue to fully meet debt costs, and those that do, generate revenue over the long-term whereas the debt that needs be serviced is often short-term. Some of the recent surge in LGIV financing has been in social services—e.g., education, social welfare, low-income housing—which offer little in the way of revenue needed to service debt.

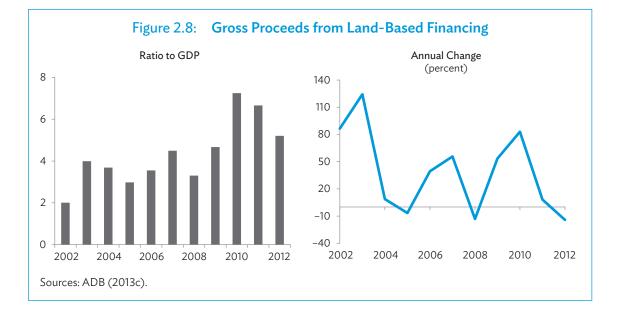
In 2010 the central government recognized the potential shortcoming of LGIVs, and issued restraining notices on their use. In December 2012, these measures were strengthened by the "Notice to Stop Local Government Behavior of Illegal Financing." This was more specific than earlier notices on inappropriate practices and raised the prospect that officials would be held accountable for breaches. A March 2013 directive from the China Banking Regulatory Commission further restricted the use of special financial products such as derivatives, and shadow banking such as off-balance-sheet lending. These measures were intended to curb the role of LGIVs as financing instruments for local governments. Given the continuing financing obligations of local governments, such restrictions can be sustained only if new, alternative financing mechanisms are put in place.⁹

3. Land-Based Financing

In the PRC, ownership of all land rests with the government. Municipalities own substantial undeveloped land that is commonly under agricultural use but can (within limits) be re designated and made available for residential or commercial use and then leased. Local governments have used their control over land to develop it into one of their most important extra-budgetary financing sources. Land use rights have been leased for 40 years for commercial land development and 70 years for residential land development. Additional fees have also been levied on more intensive uses of land (e.g., for high-rise commercial and residential buildings). These funds are secured up front as a single charge when leasing rights are granted.

Rising land prices have helped turn land leases into a buoyant source of funds, which reached as much as two-thirds of local government expenditure in 2010 (Figure 2.8). A recent study

⁹ See ADB (2013a, 2013b, 2013d) and ADB (2014a, 2014b) for further discussion of LGIVs.



by ADB shows that the estimated gross financing from land transactions was equivalent to about 7% of GDP in 2011 and 5% in 2012 (ADB 2013c), and the IMF has estimated gross proceeds at 7% of GDP in 2013 (IMF 2014, 26). Though these transactions also incur costs that reduce the net proceeds to less than half of gross proceeds, land transactions are a sizable source of nondebt budget financing. Had land transaction not been undertaken, the level of local government debt levels would be even higher than reported by the NAO.

Local governments are now exposed to the volatility in real estate markets. Gross revenue from land transactions rose by more than 50% annually from 2007 to 2010. But gross revenue from land transactions rose by only 8% in 2011, and then declined in 2012. Any weakening in the rate at which real estate prices rise in the future will erode the financing available from land transactions. Moreover, while rural land can be converted to create more urban land, the rate at which land has been leased has been high and the stock of valuable land has declined. This places limits on the financing potential of land transactions.¹⁰

Local governments face large and steadily rising demands for public services, and ideally would develop sources of financing and revenue with matching characteristics. It is important to move away from volatile land financing. Replacing land financing is also important in reducing distortions in the urbanization process. These have arisen from the need to continually prepare and release new land so as to generate finance, rather than ensuring the orderly and intensive development of urban spaces that have already been released.

4. Build-Transfer Projects

Build-transfer projects are essentially conventional investment projects but with deferred payment. They typically involve payment at the end of construction and progress payments

Land-based financing lacks transparency and may be fiscally unsustainable

As of mid-2013, 8% of local government

debt was held in the form of build-

transfer projects

¹⁰ See ADB (2013a, 2014b) for further discussion of land-based financing.

for a short period (e.g., 3–4 years) following the completion of construction. In this way the contractor becomes a source of short-term finance.

But the contractor is not responsible for operations or maintenance, other than the usual obligations within a defect liability period, and typically there is no penalty if the asset deteriorates between the time it is accepted by the local government and payment is due. While build-transfer projects can provide a pragmatic solution to a financing problem, in the PRC they have resulted in situations where payments are made for assets that are already of unacceptable standard. Moreover, the resulting debt is not transparent and sidesteps healthy checks and balances on local government borrowing.

5. Central Government-Assisted Bonds

The central government has provided financing to local governments in several ways. For example, the Road Act of 1998 allowed local governments to borrow for roads and transportation infrastructure with the backing of the central government. From 1998 to 2004, the central government mitigated the impact of the Asian financial crisis by issuing around CNY2.7 trillion in treasury bonds and on-lending the receipts to local governments for financing capital projects (ADB 2013a).

Bonds have been issued by the central government on behalf of local governments In 2009, PRC developed a new instrument for local government financing as part of a stimulus package prepared in response to the global economic and financial crisis. The Ministry of Finance (MOF) issued bonds on behalf of provincial governments and then allocated the proceeds from these bonds on the basis of infrastructure deficiencies, the fiscal capacity of each jurisdiction, revenue-to-debt ratios, the estimated growth of own-source revenues, and the availability of matching funds for debt servicing. This was an important step in establishing a framework for local government debt management. It helped provinces lower their cost of financing by drawing on the higher credit rating of the central government while developing local capacity to evaluate debt affordability and manage debt on a sustainable basis.

While the lower cost of finance was helpful, it was achieved only by reinforcing the role of central government as a guarantor of local debt. From 2009 to 2011, bonds worth CNY200 billion were issued annually. The amount was increased to CNY250 billion in 2012, and CNY350 billion in 2013. The bonds issued were deemed to be provincial debt and provincial budgets provided for debt servicing. In addition, the central government provided for the intercept of central transfers to provinces in the event that a province was unable to service the debt. The approach mimics one used in Canada where provincial finance corporations pool local debt and issue bonds using the higher credit rating of the province.

Some local governments began to self-issue bonds in 2011 In 2011, under the "Pilot Measures for Local Self-issued Bonds," MOF allowed the Shanghai, Zhejiang, Guangdong, and Shenzhen local governments (provincial level) to issue bonds within a quota set by the State Council (CNY7.1 billion, CNY8.9 billion, CNY6.9 billion, and CNY2.2 billion, respectively). While these bonds remained under the overall control of the central government, the local governments chose the bond underwriters and let the market set the interest rate. Shandong provinces were added to the scheme in 2013 (ADB 2013b).

Debt servicing for these bonds is undertaken by MOF, which charges the issuing city through the intercept of central transfers.

In November 2011, Shanghai became the first to self-issue bonds. Interest rates of 3.01% to 3.10% for 3-year coupon and 3.24% to 3.30% for 5-year coupon compared favorably with the rates on the bonds issued by MOF on behalf of local governments and Treasury bonds. The cost was below market expectations, and the issue was three times oversubscribed. This experience, and that of the other pilot local governments, confirmed the popularity of local government bonds among investors.

The distinguishing feature of the self-issued bond pilot was that it was serviced from the general budget resources of the local government, even though it was ultimately backed by the central government. This effort to shift risk onto local governments was an important step forward. The next important step was taken in 2014.

6. Local Government Self–Issued, Self-Pay Bonds

A pilot local government bond program was approved in 2014 to allow 10 of the fiscally stronger local governments the right to issue bonds themselves and to bear all debt servicing obligations without recourse to MOF; the self-issue, self-pay bond. The local governments included in the pilot program were Beijing, Guangdong, Jiangsu, Jiangxi, Ningxia, Qingdao, Shandong, Shanghai, Shenzhen, and Zhejiang.

The pilot program involved enhanced information disclosure by local governments of their fiscal and economic position and the rating of the creditworthiness of the 10 local governments by independent credit rating agencies. This aimed to expose local governments to market rules when financing their budgets. The bonds were to be issued at market interest rates for a term of 5, 7, or 10 years. The National People's Congress approved the issue of CNY400 billion in bonds in 2014, and the carry forward of the quota to 2015 if necessary (MOF, 2014d).

Guangdong was the first of the pilot local governments to issue bonds, raising a total of CNY14.8 billion in June 2014. The yields ranged from 3.84% to 4.05%, which was reported as below market expectations and below the cost of financing through LGIVs. The province received a high credit rating of AAA- from a domestic credit rating agency (Xinhua, 2013b, 2013c). Subsequent issues were also around the 4% level.

In September 2014, the central government signaled the extension of the self-issue, self-pay local government bond beyond the 10 provinces. This extension is to be linked to a range of other measures to provide checks and balances on local government debt.¹¹

¹¹ State Council (2014).

D. Deepening the Local Government Bond Market

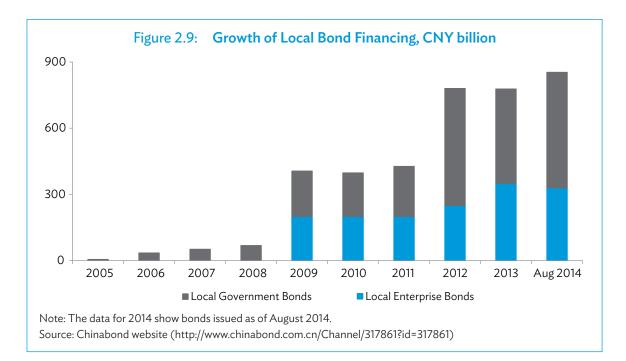
In the Report on the Work of the Government delivered at the Second Session of the 12th National People's Congress in March 2014, Premier Li Keqiang explained that:

We will establish a standard financing mechanism for local governments to issue bonds and place local government debt under budgetary management. We will guard against and defuse debt risks. (Government of the PRC, 2014)

The local government bond market is growing The PRC has already taken the initial steps to develop the local government bond markets, and activity has expanded substantially since 2005 (Figure 2.9). A well-developed local government bond market offers several advantages that will be of long-term benefit to both local governments and the private sector. These benefits include: (i) helping to deepen capital markets; (ii) making government fiscal operations transparent; and (iii) allowing central budget resources to be redirected from local governments that can sustain good access to capital markets to local governments that are not ready.

Amendments to the Budget Law are a major step forward

The amendments to Article 28 of the Budget Law approved in September 2014 allow selected local governments to use bonds as a standard financing method, within limits. This will help regularize their borrowing, and lessen incentives to find indirect ways of financing investment and be discouraged from using transparent financing instruments. While fiscally poorer local governments may not yet be ready to issue bonds, and instead may remain reliant on taxes and grants for some time, fiscally stronger provinces are ready for better access to bond finance, and indeed a wider array of financing instruments.



The revisions in the 1994 Budget Law to allow the issuance of bonds require matching regulatory, reporting, and monitoring frameworks to control and explain the financing practices of local governments. The experience of other countries provides useful lessons for effectively building those frameworks for responsible borrowing practices by local governments. The PRC has also generated its own lessons from the experience with the LGIVs and recent measures to control them. Provided these domestic and overseas lessons are used and practices are tailored to local circumstances, the PRC can move to a new phase of local government financing with confidence.

An institutional barrier that needs to be addressed is an overreliance of local governments and capital markets on the guarantee, whether explicit or implicit, of the central government. This has meant that:

- The credit analysis skills needed for local government financing remain relatively underdeveloped. Where a debt carries a guarantee from a credible source such as the PRC central government, lenders have less incentive to spend effort analyzing the credit quality of the borrower. The PRC's banks and other lenders generally do not undertake the standard of due diligence seen in mature markets or require the quality of collateral demanded elsewhere. Since the collateral value is often unclear and there is little risk that the collateral will ever be called, there has been little need to undertake thorough analysis.
- The essential ingredients of a credit analysis of local governments, notably transparency and governance standards, are not well developed. In part this is because the PRC's public finance systems are still modernizing, and in part because investors are not much interested in these features because of the solid loan guarantees.

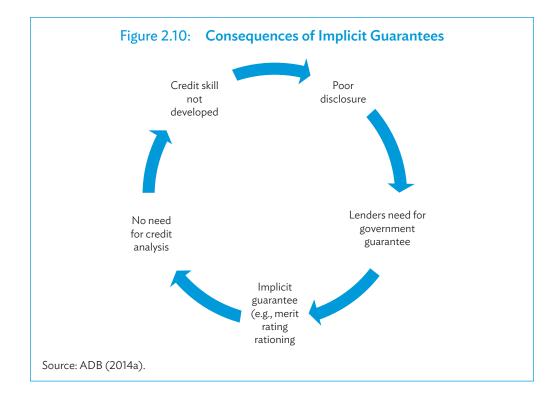
The result of an overreliance on central government guarantees is a cycle that is difficult to break away from, as illustrated in Figure 2.10. Hard budget constraints need to replace implicit guarantees and make local governments accountable for servicing their own debt and correcting any fiscal problems that may arise.

The PRC has so far emphasized bonds backed by the general budget with short- to medium-term maturities, but alternative approaches warrant consideration. OECD countries, in contrast, rely on a wide variety of instruments. For instance, local governments use notes for borrowing of less than a year while issuing long-term bonds for borrowing of 10–30 years' duration. In the OECD countries, local governments issue both bonds that are backed by the general budget and bonds backed by the public investment project that is to be financed (see Box 2.1).¹² There is considerable experience in issuing debt through competitive sales, but bonds are also issued through negotiated sales or private placement.

OECD countries also try to lower the cost of bond finance by pooling bond issues. Examples include municipal finance corporations in Canada, Germany's promotional banks, Japan's Finance Organization for Municipalities, and the US. Some countries offer preferential tax

Strengthened regulatory, reporting, and monitoring frameworks are needed

¹² Such bonds have different names in different countries. In the US, for example, a bond backed by the budget is called a general obligation bond and a bond backed by the cash stream of an investment is called a revenue bond. In some countries the revenue bond is known as an infrastructure bond.



treatment in some instances, for example, to encourage investment in long-term revenue bonds, and credit enhancements such as the higher government-level guarantees offered in Canada.¹³

Market discipline can play a key role in strengthening debt management

The pilot local government bond program approved in 2014 aimed at strengthening the role of the market in local government financing. In a market-based system, of which the US and France are probably the best examples, there is minimal central control of local government issuances. In the US local governments can issue as much as they wish at whatever rates they can obtain in the capital market. However, if a local government is unable to honor its debts, there is no possibility of a federal government bailout. Instead, there is a procedure under which the officers of the local government and its elected council are replaced by federal officials who implement a process of cutting expenditure and raising taxes to enable the debt to be repaid and to put the local government on a sustainable path.

The US market-based system works for two main reasons: (i) US local governments have considerable autonomy in spending and taxation decisions, and (ii) the "no bailout" rule is well understood and has been in place for a long time. These features are missing in most other countries, either because local governments have little autonomy, as in a unitary state, or because there has been a history of bailouts and they have become the expectation. In such a situation, borrowing by local governments is, to a greater or lesser extent, controlled by the central government. The controls most often take the form of financial ratios measuring affordability, which must be met before a local government can undertake new

¹³ In Canada, provincial finance corporations pool local debt (e.g., debt of municipalities) and issue local bonds using the higher credit rating of the province.

Box 2.1: Revenue Bonds versus Budget-Backed Bonds

The revenue bond is another option for local governments in the People's Republic of China (PRC) that has been used by the central government (e.g., for the Three Gorges project). A revenue bond is a project-specific securitized borrowing issued in the capital market to finance a particular project. It uses the revenue from the project as collateral. Revenue can be from charges on users, or grants from higher levels of government or a stream of tax revenue committed to servicing the bond. The funds raised are ring-fenced for the project, and the bond is repaid by the project.

The project revenue stream is segregated as collateral, without any claim to the underlying asset, which remains in government ownership. For the revenue bond to work, the local government must have the legal capacity to isolate funds from a specific source without transferring ownership of the asset. Internationally, the revenue bond is used for both economic infrastructure such as roads or dams, and for social infrastructure such as schools and hospitals.

A revenue bond typically has a higher cost yield (interest rate) than a local government bond backed by the governments. A revenue bond results in project risk being retained by the project. Investors need an additional return to bear that risk, and this leads to higher financing costs.

In contrast to a revenue bond, the local government bond issued under the PRC's pilot bond program relies on the creditworthiness of the local government issuing the bond. The standard local government bond is repaid from general budget resources and carries an explicit government guarantee. Financing a project from a bond backed by the budget would lower the cash cost of financing. Such financing passes project risks onto the budget, in effect placing project risk on the taxpayer rather than private investors. The budget bears a potential liability, being the obligation to service the project debt if the project is unable to do so. In truth, the project does not have a lower cost of finance when financed by a bond backed by the budget. It is just that the cost of the potential liability is not noticed.

The main argument presented in support of the bond backed by the budget is that it allows government to "pool" risks over a larger number of projects and "spread" risks over all taxpayers. Well-developed private capital markets will, however, also provide opportunities for risks to be pooled and spread efficiently. While the PRC does not yet have the efficiency in its capital markets for this argument to apply fully, markets are evolving in this direction.

Revenue bonds can help achieve the transparency in budgeting called for by the Decisions at the Third Plenum. Revenue bonds are one way to bring debt financing into the open and make clear the full cost of an investment and its financing. A project's revenues, costs, profits, and other features must be declared to investors in a logical and transparent manner. This is in contrast to the bond backed by the budget, which does not involve disclosure of the specific uses of finance.

For the revenue bonds to be effective, it needs to be made clear that the bonds will not be backed by the budget. This requires removal of the implicit government guarantees attached to government lending in the PRC. This is a healthy development, as implicit guarantees undermine the development of capital markets and hinder good budgeting.

Projects need to be able to meet all their costs and debt obligations, to take pressure off the budget and free up budget resources for other uses. Revenue bonds are also helpful in encouraging efforts to raise user revenue, which provides further support for government budgets.

Box 1 continued

Project finance by a revenue bond is subject to review by potential investors. The exposure of bondholders to project risk provides an incentive for good due diligence of the investment. They will invest only if the project meets their expectations in relation to returns and risk, is legally sound, etc. In the process, market discipline, which spurs governments to improve project preparation, is introduced. Market discipline also helps in the selection of projects based on merit rather than other considerations. In this way revenue bonds provide a mechanism whereby markets can improve the allocation of resources, a central theme of the Decisions.

Source: ADB staff, based on Chan et al. (2009).

bond issuances (or other borrowing). There is usually some central controlling body, which monitors the ratios and has the power to prohibit bond issues.

A mix of administrative and rule-based controls is still needed in the PRC While market discipline is building in the PRC, it will be necessary to foster the development of the local government bond market by applying a mix of administrative and rule-based controls. The initial emphasis is likely to be on administrative controls, particularly in fiscally weaker local governments. But administrative controls could be gradually phased out over the medium-term and replaced by an increased reliance on rule-based controls.

Administrative controls include central government approval of individual bond issues and annual borrowing limits. This approach includes not only the ex-ante authorization of the proposed borrowing, but also the ex-post monitoring of the subnational government's use of funds. Countries applying this approach include Bolivia, India, Indonesia, Japan, the Republic of Korea, and the United Kingdom.

Rule-based controls can provide local governments with more flexibility while still sending clear signals to the market that local governments face hard budget constraints. They include legislated fiscal rules in the form of budget balance requirements, debt limits, and tax and expenditure restrictions, referendum requirements for new taxes and expenditure, and penalties for noncompliance. Examples include the "golden rules" such as no operating deficits and borrowing only for long-lived assets. Fiscal rules are applied in Brazil, Mexico, and most European Union countries. Various US states have also imposed fiscal rules on themselves as well as on lower-levels of government to supplement the market-discipline approach.

Fiscal rules have the advantage of being clear, transparent, easily understood, and relatively easy to monitor, helping to avoid protracted bargaining between the central and local governments. They may be more effective in addressing long-term sustainability and intergenerational equity, if relatively accurate fiscal indicators are available. The effectiveness of fiscal rules depends on their specificity, comprehensiveness, and enforcement. Poorly designed rules can be counterproductive, and may encourage circumvention.

The experience of both unitary and federal states is relevant to the PRC While the PRC is a unitary country where the central government assumes ultimate responsibility for fiscal matters, lower-level governments play an important role and cooperation and coordination is encouraged. The experience of federal countries, where responsibility for public finances is shared by all levels of government, thus has some relevance to the PRC.

In federal OECD countries, the federal government typically uses its spending power and moral suasion through joint meetings to induce a coordinated approach. In mature federations, fiscal policy coordination is commonly exercised through executive (e.g., forums of officials) and legislative federalism (requirements for legislatures of various orders to ratify intergovernmental agreements), and formal and informal fiscal rules. In Australia, for example, a cooperative approach is followed under which the Commonwealth Loan Council provides a network for the exchange of information about the borrowing requirements and activities of all levels of government.

Brazil's Fiscal Responsibility Law takes an innovative approach. It shows how fiscal rules linked to close coordination between the different levels of government can be used to enhance the fiscal discipline of local governments (see Box 2.2). Such a combination of cooperation and rules could be an attractive solution for the PRC.¹⁴

Brazil's use of rules and cooperation provides valuable insights

Box 2.2: Brazil's Approach to Local Government Borrowing

The Brazilian Fiscal Responsibility Law prescribes a broad set of measures to control local government borrowing. The National Treasury Office of the Finance Department of Brazil, which is responsible for managing all public debt, has established a department for state and municipal management to undertake day-to-day management and supervision of local government bonds. The Banco Central do Brasil is the overall regulator and guarantees the enforcement of the Brazilian Fiscal Responsibility Law. The Comissão de Valores Mobiliários formulates market-oriented rules and regulations and takes charge of supervision over the market and its players for the trading of local government bonds.

Every state or large city has the power to issue bonds but such issues are subject to the approval of the central government and the Senado Federal. Approval is based on an assessment of the feasibility and necessity of local government financing and current financial conditions of the local government concerned in order to accurately understand its capacity to service the debt.

Rigid criteria are imposed on bond issuance. They consist of the following: (i) local governments' borrowing must be less than or equal to the size of their capital budgets; (ii) new issuance may not exceed 18% of the net recurrent revenue and the debt-servicing costs may not exceed 13% of the net recurrent revenue; (iii) the total debt of a state government must be less than 200% of its net recurrent revenue while that of a municipal government must be less than 120% of its net recurrent revenue; (iv) any government that has defaulted is not allowed to borrow money; (v) the outstanding guarantees provided by the government must be less than 25% of its net recurrent revenue; (vi) short-term borrowing in advance may not exceed 8% of its net recurrent revenue; and (vii) new borrowing is not allowed within 8 months of a state or municipal government election.

Flexibility is provided in the use of funds raised by the bond issuance but the funds are used mainly for the construction of public infrastructure. Investors in local government bonds comprise of federal financial institutions, informal financial institutions of various kinds, nonfinancial institutions, individuals, and foreign investors.

Source: ADB (2013b).

¹⁴ Further country examples of approaches to administrative and rule-based controls are provided in ADB (2012g, 2014f).

E. Management Tools

1. Debt Sustainability Analysis

Consensus on what constitutes a sustainable debt position is required The introduction of a new approach to local government financing will rely on a shared understanding of the underlying fiscal framework. Local governments will, for example, be reluctant to rein in expenditure or increase taxes in order to meet fiscal targets that they fail to understand or accept. Concepts of fiscal sustainability and fiscal distress will be central to the discussion. While these concepts are somewhat subjective, a consensus on what they mean is essential for prudent debt management.

DSAs are used widely internationally

DSAs can identify where fiscal adjustment programs may be needed The fiscal sustainability of local government debt is commonly assessed through the conduct of debt sustainability assessments (DSAs). In broad terms, such an assessment would prepare and then analyze projections similar to those presented in Figure 2.5. The IMF and the World Bank, for example, assess debt sustainability in member countries using projections of key ratios from an economic model. For lower-income economies, their approach emphasizes thresholds established from empirical research. The assessment is less mechanical and more subjective for middle-income countries like the PRC.¹⁵ US state governments issue guidelines for local government debt affordability using a wide range of criteria. The ratios used by a sample of US states are shown in Table 2.1.

The 2013 national audit of government debt in the PRC estimated debt ratios and compared these with benchmarks (NAO 2013a, 2013b). DSAs could expand on this approach. Local government-level data from the audit could be analyzed to determine the debt and

Indicator	Alaska	California	Florida	Louisiana	Maine	Maryland	North Carolina	Oregon	Vermont	Virginia	Washington	West Virgina
Ratio of direct debt to assessed value of taxable property												•
Direct debt per capita		•	•		•			•	•	•	•	•
Ratio of direct debt to personal income		•	•		•	•	•	•	•	•		•
Ratio of government debt to the market value of taxable property					•							
Ratio of debt service to general fund and special revenues	•	•	•	•	•	•	•	•	•	•	•	•
Ratio of budget revenues to general revenues			•									
Share of net debt paid in 10 years					•		•					
New debt authorization not greater than redemptions						•						
Estimated market capacity		•										
Source: ADB (2013a)												

Table 2.1: Debt Sustainability Indicators in the US States

Source: ADB (2013a).

See http://www.imf.org/external/np/exr/facts/jdsf.htm and http://www.imf.org/external/pubs/ft/dsa/ mac.htm. The IMF's latest DSA for the PRC are provided in IMF (2014). associated risks. Stress tests that look at fiscal sustainability under different scenarios would help identify potential sources of fiscal distress. For example, given the reliance of local governments on property as a source of financing and collateral, stress tests could usefully examine the potential impact on the fiscal position of local governments of less buoyant property prices. Such DSAs could pinpoint local governments that may need adjustment programs to rationalize their debt and restructure their public finances.

2. Credit Ratings

A market perspective on the fiscal sustainability of local governments is provided by credit ratings of agencies such as Standard and Poor's, Moody's, and Fitch. The PRC already has three such agencies, two of these in partnership with Moody's and Fitch. Their approach is broadly similar and emphasizes the assessment of key fiscal ratios undertaken by a DSA.

International experience shows that credit ratings are well regarded by the market and influence the cost of capital. But they are not without controversy. The main points of contention are the criteria used by the credit rating agencies and the governance environment of these agencies. The criteria are subjective and backward looking, where a more objective and forward-looking approach to assessing creditworthiness might be more meaningful.

For the PRC, one option would be to provide start-up funding for an independent, not-forprofit agency to prepare credit ratings. Ensuring the independence of the rating agency from any bond issuers is particularly important, as incentives are created for over optimism when one agency undertakes both functions. Some form of registration and certification of credit rating agencies engaged in rating local governments may also be required. While the existing agencies have received regulatory backing, clear guidelines or a code that determines which credit rating agencies qualify to operate, and provide transparency and accountability requirements, may be desirable. An international example is provided by the Credit Rating Agency Reform Act adopted by the US in 2006.¹⁶

3. Early-Warning Systems

Fiscal stress does not arise overnight, and warning signs can normally be observed before a crisis occurs. Common causes of fiscal crises include rapid increases in expenditure relative to revenue, prolonged budget deficits, and large investments in nonincome-earning assets (assets that do not earn income). By closely monitoring fiscal conditions, the local governments approaching financial trouble can be identified, and actions can be taken to avoid fiscal crisis. An early-warning system is a practical tool for identifying and managing governments at risk of fiscal distress. The core of such a system is a set of indicators similar to those used in a DSA to prepare a credit rating. Breaches of threshold values of these indicators serve as warning signals that trigger the implementation of adjustment plans to correct the causes of debt distress.

An early-warning system for local government debt may, for example, involve the following steps: (i) assessing the magnitude of risks on the basis of qualitative and quantitative

Credit ratings provide a market view on fiscal sustainability

The credit rating industry may need to be strengthened

An earlywarning system helps identify and manage governments at risk of fiscal distress

¹⁶ See ADB (2013a, 2013b, 2014b) for further discussion of local government debt management.

analysis, (ii) summarizing and reporting the results to the risk monitoring system, (iii) issuing warnings to the relevant governmental agencies when required, and (iv) recommending measures for the prudent management of risk. There are many international examples of early-warning systems.¹⁷

Early-warning systems have been pursued in the PRC

The PRC's experiments with early-warning systems have not been as effective as planned. The first province to establish an early-warning system for local government debt was Zhejiang, a high-income province. In 2005, the provincial government issued the "Notice on Strengthening Subnational Governments' Debt Management." This required all municipalities and counties to use the ratios of debt to GDP, debt to revenue, and debt service to operating revenue as their main risk indicators. Upper limits were set at 10%, 100%, and 15%, respectively. Any city, county, or district government that exceeded these limits was required to lower debt by reducing expenditure or increasing revenue.

Zhejiang's early warning system was not effective

The debt-to-GDP ratio of the Zhejiang provincial government reached 20% (against an upper limit of 10%). By the end of 2009, most of the city and county governments had surpassed this ratio. Among the 69 city and county governments, 29 exceeded all three warning thresholds, 6 surpassed two, and 6 exceeded one (ADB 2013a). This experience illustrates a limitation of any system: it is ineffectual unless there is a political will to follow up and enforce the system.

Other practical limitations of early-warning systems are: (i) indicators must necessarily be simple and are constrained by data availability, such that their relevance and the rigor of the system can be compromised; and (ii) they require identification of all fiscal risks, and are of little use when off-budget fiscal activities and contingent liabilities are relatively large.

Despite these limitations and earlier experience, an early-warning system would help increase attention to fiscal sustainability and improve debt management. Drawing on the international experience, a workable "traffic light" system for PRC could follow three steps:

- Step 1: Prepare a debt risk monitoring plan for each layer of local government that includes early-warning indicators, their specific thresholds, the agency and officials accountable for meeting the thresholds, and sanction mechanisms.
- Step 2: Establish a debt management office in the finance bureau of each local government. This office would monitor the fiscal position of lower-level governments within its responsibility, and compare the indicators against threshold levels. When a local government breaches a threshold, its fiscal position is placed under watch. The audit office of each government would report against the debt indicators. All warning signals would be made public in a timely manner.
- Step 3: Any local government under watch would prepare actions to improve debt management and set a time-bound adjustment path for complying with the thresholds. Once it succeeds, the warning signal would be removed.

Illustrative indicators and threshold levels are shown in Table 2.2. Such indicators and thresholds warrant more detailed assessment to ensure a robust system.

¹⁷ See ADB (2012g, 2014f) for further discussion of the international experience.

Risk Indicator	Safe (Green Light)	Warning (Red Light)
Debt burden (ratio of debt to GDP)	less than 25%	greater than 25%
Ratio of debt to on-budget revenue	less than 150%	greater than 150%
Debt service ratio (debt service costs to operating revenue)	less than 25%	greater than 25%
Debt dependency ratio (debt servicing costs to current expenditure)	less than 40%	greater than 40%
Share of debt that is short-term	less than 40%	greater than 40%
Ratio of budget revenue to the total of on-budget and off-budget revenue and land-based financing	less than 80%	greater than 80%

Table 2.2: Sample Indicators for an Early-Warning System in the PRC

GDP = gross domestic product. Source: ADB (2014f, 2012g).

4. Ex-Post Insolvency Mechanisms

The PRC is yet to adopt formal mechanisms for dealing with local governments in severe fiscal stress. Some countries have adopted insolvency mechanisms aimed at protecting the general public from the serious adverse consequences of default by a local government, while at the same time ensuring that moral hazard associated with bailouts is avoided. The PRC does not have any formal legal mechanisms for such eventualities, other than through administrative action on a case-by-case basis. A case-by-case approach is helpful, but it does not overcome the moral hazard arising from the prospect of a central bailout.

An argument often advanced against insolvency mechanisms in a unitary state is that local governments are simply agents of the central government and must therefore be bailed out by the center in the event of a local default. Most OECD unitary countries, however, do not accept this argument and treat local governments as public corporate entities subject to legal consequences of default.

Because the PRC is a unitary fiscal system, capital markets are likely to assume that there will be a higher-level government bailout in the event of local default. Appropriate bankruptcy legislation could potentially help remove this assumption and clarify that local governments will be fully responsible for their debt. Such legislation could be embedded in existing budgetary legislation (e.g., an amended Budget Act). It would reduce moral hazard associated with such financing, as well as give assurance that the delivery of essential public services will not be affected in the event of local default. The adoption of such legislation as a longer-term goal would clarify policy.

5. Sanctions

In many developing countries, especially in Latin America, punitive actions are imposed for noncompliance with fiscal obligations. One of the most noteworthy is Brazil's 2000 Fiscal Responsibility Law, which provides for monetary sanctions and prison terms of up to 4

years for officials if fiscal rules on debt and deficits, and ceilings on wage expenditure, are breached. Ecuador imposes personal sanctions as well as suspension of central transfers. Argentina and Mexico provide for intercept of central fiscal transfers and denial of or limits on new guarantees and loans in the event of debt service default by a local government. Colombia imposes personal sanctions, prohibits new debt, and imposes workouts to achieve compliance. Peru suspends central transfers. In contrast, within the OECD, sanctions for breaches of fiscal controls are normally treated on a case-by-case basis.

F. Public-Private Partnerships

The "Decisions on Important Issues Concerning Comprehensive and Far-reaching Reform" of the Third Plenum emphasized that the market would play a decisive role in the next stage of the PRC's development. The Decisions reinforce the government's earlier support for the entry of private capital into public service delivery. In addition, the release of "Several Opinions of State Council on Encouraging and Guiding Healthy Development of Private Investment" In 2010 was intended to promote private investment in infrastructure, municipal services, education, and public rental housing. These strategic directions underpin renewed interest in PPPs, which was followed up by the "Notice on Issues Related to the Promotion of PPPs" released by MOF in September 2014.¹⁸

A public-private partnership is a management tool rather than a financing tool A conventional public investment project delivers an asset, such as a water treatment plant or a power station. A PPP, on the other hand, delivers the service provided by an asset, such as clean water or power. It is output rather than input based. PPPs are a public sector management initiative designed to improve the efficiency and effectiveness of public services and ensure the delivery of more and better services to more people.

A recent survey of OECD members, Brazil and South Africa, found that PPPs typically outperform public investment projects delivered in a conventional manner; they are normally faster, have lower construction and operating costs, and provide a higher-quality project (Burger and Hawkesworth 2013). An earlier report from the European Investment Bank identified similar benefits in Europe while highlighting the fact that PPPs allow projects to proceed, against the alternative of having no project because of budget constraints (EIB 2004). PPPs can provide these benefits because they redesign how services are delivered. Notably, they activate competitive pressures, employ performance-based agreements, adopt a life-cycle approach to asset management, manage risk more transparently and systematically, and mobilize additional resources from the private sector.

PPPs transfer key functions in service delivery from the public partner to the private partner, and the functions transferred determine the type of PPP (see Table 2.3). Financing is one of the functions that can be transferred to the private sector. While private financing is only a means to an end for PPPs, governments are often attracted to PPPs because of their potential to provide access to additional financing and ease budget constraints.

¹⁸ See MOF (2014c) and Wang (2014).

		Function	inction							
Finance	Design	Construction	Operation and Maintenance	Typical International Examples						
Public	Public	Public	Private	Management contractTransfer-operate-transfer (TOT)						
Publicª	Private	Private	Private	 Design-build-lease (DBL) Build-transfer-lease (BTL) Build-transfer-operate (BTO) Lease/Affermage (existing infrastructure) 						
Private	Private	Private	Private	 Build-operate-transfer (BOT) Build-own-operate-transfer (BOOT) Design-build-finance-operate (DBFO) Build-own-operate (BOO) Concession for an infrastructure network 						

Table 2.3: Main Types of Public-Private Partnerships

^a The private partner will normally make a payment to the public partner to secure a lease- or transfer-type PPP. The payment allows the public partner to recover at least some of its investment (e.g., to repay the debt it incurred), effectively transferring some if not all of the financing function to the private partner. Source: ADB staff.

The PRC has put in place more than 1,000 PPPs since the early 1990s with an investment in excess of CNY900 billion. The PPPs were initially concentrated in transport, communications, and energy, then expanded into water and wastewater treatment, and more recently into the delivery of social services.¹⁹ PPP activity in the PRC eased over the 2000s and now accounts for less than 1% of public investment. In countries that are active users of PPPs, they account for between 10% and 15% of public investment (Burger and Hawkesworth 2013). This comparison suggests that the PRC's local governments have considerable room to reduce their need for debt by transferring more financing responsibilities to the private sector.

One of the advantages a PPP offers to local government is the sharing of risk. A conventional public investment project pays for inputs used to create an asset, such as civil works and equipment, and delivered by either a government agency or a private contractor. All operation risk remains with the government, while the conventional public investment approach transfers only some construction risk to a private contractor (e.g., the potential for cost overruns). A PPP can allow a government to transfer most construction risks, as well as operations and financing risks. The principle is that risk should be allocated to the partner best able to manage it. While transferring risk comes at a price, if done well it can help protect budgets.

A further advantage of PPPs is that they provide a platform for innovation in financing. An example is the asset-backed security (ABS). The agreement between a local government and the private service provider under a PPP, and the accompanying cash flow, is an asset

¹⁹ Data showing that PPPs involve a private partner indicate that state-owned enterprises or their subsidiaries that remain majority owned by government entities are not considered private partners (World Bank 2013).

A public-private partnership provides a platform for innovation in financing that the private partner can use as collateral for issuing a bond. The contractual nature of the underlying cash flows, which can be from users or can take the form of payments from the local government, makes the ABS possible. The ABS is normally arranged by a securities company.

The PRC began using securitization in 2005 as a way to resolve bad loans accumulated by banks, and to finance infrastructure. The global economic and financial crisis reduced global interest in securitization, and this decline was also apparent in the PRC. Interest has since been rekindled through the issuance in May 2012 of the "Notice on Matters Concerning Further Expansion of Credit Asset Securitizations Pilot Program." While its use is in the early stages, ABS, when combined with a PPP, is well suited to the private financing of public services.

Public-private partnerships can attract institutional investors As in many other countries, PPPs in the PRC rely on bank financing. The term of bank financing is typically shorter than that of a PPP and interest rates are variable. Refinancing risk and interest rate risk arise as a result. The international trend is to prepare a PPP program so it attracts financing from institutional investors, such as pension funds and insurance companies, which have a long-term investment profile and can offer finance at a fixed, and potentially lower, cost. Measures that reduce risks, such as partial credit guarantees, may be required, and "greenfield" projects may have to be financed by banks and then refinanced by other investors as "brownfield" projects when they start operating. The PPP provides a platform for such new modes of financing.²⁰

G. A Way Forward

Local government debt has risen rapidly, and the fiscal risks are poorly understood

Local government borrowing needs to be brought into the open Much of the debt incurred by local governments in the PRC has been incurred through indirect means that lack transparency and accountability, such as the LGIVs. Local governments need to keep raising finance in order to supply the services required by a rapidly growing economy and a rapidly urbanizing population. Unless financing mechanisms improve, there will be incentives to find indirect means of financing.

The revised Budget Law will help keep the situation manageable. The amended law will assist in bring borrowing into the open and in standardizing and modernizing practices, thus promoting the use of prudent financing instruments that can raise debt for longer terms and at lower cost. Stricter controls will be possible as hidden practices and circumvented formal rules are replaced by open and transparent practices undertaken within a responsible fiscal framework. Local governments will be increasingly exposed to market discipline and fiscal risks will be reduced.

As local government borrowing is formalized, matching improvements will be required in the management framework for local government debt. The concept of a hard budget constraint and the credibility of commitments to good fiscal management will need to be entrenched.

Regulatory, reporting, and monitoring systems will have to be strengthened in order to curb informal and illegal practices. Local governments can draw on the considerable experience of

²⁰ See ADB (2008, 2012h, 2014c, and 2014g) for further discussion of PPPs

other countries and the PRC itself. Fiscal rules and targets, DSAs, credit ratings, early-warning systems, insolvency mechanisms, and sanctions are some of the tools that can be used.

As a precursor to reform, an assessment of fiscal risks arising from the current debt stock will have to be made. This may need to be followed up with carefully assembled programs to restructure and rationalize existing debt for those local governments facing a high risk of fiscal stress.

Addressing the local debt issue will also require a more structured approach to the supply side of borrowing. Lacking mature access to the capital markets, local governments mostly obtain loans from banks. This borrowing is short-term and relatively costly, and can be progressively replaced. The PRC has made an important start by introducing a pilot scheme that allows selected municipalities to issue their own bonds, building on earlier issuances backed by the central government. Extending this pilot scheme to other fiscally sound local governments, and using more sophisticated structures and possibly revenue bonds, will provide local governments with more conventional financing mechanisms and help them manage their debt in an orderly, fiscally sustainable manner. For the newer financial instruments to be most effective, the needs of financial markets will require attention. At a minimum, active credit ratings will be required for local governments that wish to borrow. Without such improvements, the efficient long-term management of liabilities will be difficult to achieve.

PPPs can provide an alternative solution. They involve the private sector in public service delivery, lower the cost of delivery, and improve its timeliness and quality.

Good borrowing practices must be encouraged

A. Introduction

Standardization of local government financing is an important element of the budget improvements called for by the Third Plenum. Public debt has been incurred because expenditure exceeds revenue. Reducing the growth in debt therefore requires a holistic approach that strengthens the ability of governments to manage expenditure and revenue.

Substantial progress has been made since the late 1990s in improving budgeting, notably in enhancing transparency. Key initiatives have included the Departmental Budget Reform, the Treasury Management Reform, the Government Procurement Reform, the alignment of the budget classification structure with the IMF's Government Financial Statistics Manual 2001 standards, and the establishment of a nested system of treasury single accounts (TSAs) to track cash flows.

Key challenges remaining include:

- The budget compilation does not cover all revenues and expenditure; a considerable amount remains off-budget,
- The budget is for the next fiscal year only and lacks a medium- to longer-term perspective.
- In effect, the budget is compiled in around 3 months—too short a period to allow the preparation of a comprehensive and detailed budget. As a result, budget planning is less accurate and post-budget adjustments have to be made more frequently.
- Budget compilation is still incremental, so that appropriations are based on the past and not on future needs.
- Budget execution has deficiencies such as poor management of cash flows and liabilities, misappropriation of funds, accumulation of arrears, revenue retention, and misstatement of expenditures.

Relatively simple, low-risk initiatives can now be pursued to steadily correct these weaknesses. Some can be implemented quickly, while other initiatives will require more preparation and are better suited to the longer term. Initiatives most relevant to improving the management of local government debt are discussed below.

B. Information Management Systems

The Report on the Work of the Government delivered at the Second Session of the 12th National People's Congress in March 2014 reemphasized the government's commitment to improve financial reporting by the government (Government of the PRC 2014). Such financial information is recognized as an essential input to the government's efforts to guard against and defuse debt risks within local governments.

Recent estimates suggest that about 9.5% of local government expenditure remains off-budget. Partially or fully excluded expenditure includes tax expenditure (i.e., revenues forgone to provide special tax incentives), subsidies to or dividends from local public enterprises, earmarked funds, external assistance, contingent liabilities, and off-budget expenditure by special funds and public service units. The result is that budgets provide only a partial view of local government operations. Such segmented budgets not only limit the usefulness of local government budgets as a tool for managing fiscal risk but also hinder efforts to safeguard integrity, achieve allocative and technical efficiency, and build confidence and trust in government.

Information shortages with respect to government debt have also been evident. Until the NAO released its Special Audit Report in June 2011, very little up-to-date information about local debt was available. Comprehensive data became available only in December 2013. MOF had started to collect statistics on local government bonds in 2010, and in September 2012 issued the circular "Promotion of the Use of the Local Government Debt Management System." This circular promoted the use of the debt statistics on both direct and indirect debt by a wide range of public agencies.

Recognizing the usefulness of a comprehensive budget, in 2012 MOF issued instructions to local governments to have comprehensive budgets in place by 2015. The September 2014 amendments to the Budget Law back up these instructions.

The revised law consolidates the government budget, which will now have four parts: the general budget, the budget for government-managed funds, the budget for state-owned assets, and the budget for social insurance funds. Previously the budget consisted only of the general budget, which encompassed tax revenue and spending on public services and government operations. The budget for government-managed funds (including revenue from land transactions) and the budget for state-owned assets (covering SOEs) were outside the supervision of the legislatures. Budgets and final accounts will now need to be reported within 20 days of their adoption by the legislature. More information about local government debts, purchases, budgets, and audits will thus be available to the public. (Xinhua, 2014)

To further improve the monitoring of inflows and expenses, a decision must be made on whether lowerlevel administrations (e.g., municipalities) would use the financial information system of the provincial governments or operate their own system. A common chart of accounts, ideally consistent with the IMF's Government Financial Management Standard 2001, could help in tracking transactions consistently and systematically across the country.

Substantial funds remain off-budget

There is a shortage of information about local government debt Improved information technology platforms are also required for accurate and timely reporting. Such administrative improvements need to be planned and implemented carefully if higher-order aims are to be achieved.

Ideally, comprehensive updates of local government finances would be available regularly, within an integrated government financial management information system. Such a system should have the following features:

- **Completeness.** The information system must be based on budget reports, actual revenue and expenditure information and policies, and debt contracts. Besides direct liabilities, contingent liabilities should be disclosed if the full range of risks is to be determined.
- **Transparency.** In addition to reporting to the central government and its agencies, local governments need to disclose more information publicly. While confidentiality may be required in some matters, lack of transparency contributes to uncertainty and increases the cost of raising capital.
- **Timeliness.** Local governments must provide information regularly and with minimal delay. Updated information about revenue, expenditure, and debt is especially important. The amendments to the 1994 Budget Law will be consequential in this regard as they compel government agencies to disclose information on time.
- Accuracy. Incentives for and checks on accuracy can be reinforced by the appointment of independent auditing agencies to verify the information provided by local governments. Relevant public employees can also be held accountable for the accuracy of the information.

A stand-alone debt information management system may be necessary

Effective debt management requires local governments to provide complete, transparent, and accurate information in their budgets concerning financial and nonfinancial assets, liabilities incurred, and provisioning for debt. If a government's financial management information system cannot feasibly provide such information, an enhanced debt management information system can be used. Local officials must be trained to use the system. Such an enhanced, stand-alone debt management information system could ultimately become a module of an expanded and integrated financial management information, with appropriate authority to correct weaknesses, would be important to the success of the system. Many countries create debt management offices within the local finance bureau to address these needs.²¹

Medium-term expenditure frameworks foster fiscal discipline and budget dialogue

C. Medium-Term Expenditure Frameworks

Budget financing and debt management are inherently multiyear. But the state budget provides only an annual perspective. A medium-term expenditure framework (MTEF), which will help to clarify the financing outlook and assist in detecting emerging fiscal issues, is being phased in.²² The MTEF will also bring order to the budget process and extend it,

²¹ See ADB (2012b, 2012c, 2013a, and 2014b) for further discussion of information management practices.

²² See for example the interview with the Minister of Finance at http://www.mof.gov.cn/zhengwuxinxi/ caijingshidian/zyrmgbdt/201407/t20140704_1108546.html.

and help link annual budgets with medium-term priorities (such as those set out in planning documents). Baseline and forward estimates prepared for the next 3 years, for example, can be an important management tool for reviewing government operations. The MTEF can provide more certainty in planning and budgeting, and can foster fiscal discipline and support broader dialogue on government priorities.

However, the potential benefits of adopting the MTEF may not be realized if the exercise is done mechanically without serious attention to a government's fiscal capacity and needs. A broader perspective, instead of an incremental approach to budgeting, is required. Their proven effectiveness in many countries should encourage the adoption of MTEFs in the PRC.

Hebei Province already has a pilot MTEF that affords a 3-year rolling view of its capital (development fund) budget (Box 3.1). This pilot project will draw attention to the additional resources and time needed to train staff and develop and implement an MTEF, as well as the impact on fiscal discipline and the effectiveness and efficiency of government operations. Other provinces will then be better able to decide whether an MTEF fits their needs.

If MTEFs are to be used more widely and in the current budget process, the central government must coordinate efforts by establishing its own MTEF. This move would increase confidence in revenue projections, which would no longer be broad and merely illustrative.

D. Performance Budgeting

Performance budgeting is an important tool for enhancing transparency and accountability. In the US, local governments are not required to use performance budgeting but many do so

Box 3.1: The Three Steps in Budget Preparation under Hebei's Medium-Term Expenditure Framework

Stage 1: Preparation. In the first quarter of every year, the provincial Department of Finance requests all departments and agencies in the province to prepare a 3-year budget rollover plan for development expenditure. In April and May, the departments and agencies draw up their 3-year plans and overall arrangement for the 3-year budget rollover according to their medium-and long-term development plans. After receiving feedback from the Department of Finance, they have their plans reviewed and approved by the provincial government.

Stage 2: Presentation. All departments and agencies prepare detailed project budgets and budget advice. In June and July, they evaluate and finalize their 3-year development expenditure programs. After these are examined and approved by the Department of Finance, the projects are added to the Department's project repository. In August and September, all departments choose development projects from this project repository. They then prepare a 3-year budget and submit it to the Department of Finance.

Stage 3: Review and approval. In October, the Department of Finance examines all the 3-year budgets and provides detailed feedback and advice on the next year's development budget, and guidance on the development budget for the next 2 years.

Source: ADB (2013h).

to earn trust and confidence. A performance budget is a citizen-friendly way of presenting local budgets that explains the services provided and their costs.

The PRC has adopted a gradual and cautious approach to implementing performance budgeting at the local level. The approach emphasizes learning by doing. This is a welcome approach, as fast-track implementation, without adequate preparation, poses significant risks. Over time, the use of performance information will help in benchmarking local government performance, and assist performance audits and periodic whole-of-government expenditure reviews.

E. Cash Management and the Treasury Single Account

Better cash management will help guard against liquidity crisis

> An advanced treasury single account system aids in cash management

The rising levels of public debt with short maturities have increased the risk of liquidity problems for highly indebted local governments. Local governments that are unable to roll over maturing debt may find their cash holdings inadequate to cover all payments due. Expenditure programs would be disrupted and the financial credibility of the PRC's governments would suffer. Stronger cash management practices can lessen such risk.

The overriding objective of treasury cash management is to enable the government to fund its expenditures and meet its obligations in a timely manner. Treasury cash management procedures have developed substantially since the 1970s and in developed economies have evolved into a universally sound practice in modern public finance. Like many other countries, the PRC can improve treasury cash management in local government by strengthening its TSA system.

The TSA, which is normally integrated with centralized revenue and expenditure management, should capture all flows (both budget and off-budget) and be accompanied by an integrated government financial management information system.

The PRC's TSA system comprises a set of inter-linked bank accounts through which central and provincial governments transact all payments. These are zero-balance accounts into which approved payments are made. The accounts are swept daily for consolidation into the TSA, and cash balances are centralized at the central (MOF) level. This system helps in cash management, supervision of government bank accounts, cash planning, forecasting of borrowing requirements, and debt and financial asset management.

In the PRC, however, the effectiveness of the TSA system is impaired by the exclusion of off-budget activities, which are normally processed through commercial bank accounts outside the system. Broadening the coverage of the TSA system to include those off-budget activities is one improvement that should be made in information and control mechanisms for effective debt management.

The issue that remains to be resolved is how subprovincial governments, which are now outside the TSA system, should be integrated. Internationally, there are three main approaches:

- full integration, or full consolidation of treasury cash management within the central TSA;
- full autonomy, or full separation of local treasury cash management from central treasury cash management; or
- an intermediate model between full integration and full autonomy, under which the central TSA does not cover lower-level governments but central controls are imposed on lower-level governments through the regulatory framework, limiting short-term borrowings and setting standards for short-term investments.

All three options have advantages and disadvantages. The intermediate model is currently favored by the PRC's authorities. If this is to proceed, there are arguments for taking a pragmatic approach that acknowledges gaps in capacity and the need to tighten local government fiscal management. While provinces should have their own TSAs, they do not need to engage in detailed asset management and cash planning as well. If the TSAs are nested, then this function can be carried out more efficiently by the apex TSA in MOF. The links with the TSA of MOF can suffice for cash management purposes. Indeed, there should be a distinct policy minimizing the opening of accounts by local governments, given the possibility of capture and leakage. Own-source revenues, shared revenues, and equalization transfers would be captured within the provincial TSAs.

Instead of incurring the cost of creating TSAs below the provincial level, and uncertainty concerning their effectiveness, lower-level (e.g., municipal) governments can open zerobalance accounts to facilitate revenue collection and payments. Such zero-balance accounts would be linked to the provincial TSA. The zero-balance accounts can be used to receive earmarked transfers from the center for social or investment purposes. This approach would allow all transactions to be tracked on a realtime basis in the provincial TSAs. This simpler system for lower-level governments, combined with provincial government oversight, may be the most efficient way of strengthening accountability.²³

F. Budgeting for Public-Private Partnerships

PPPs are a component of public sector management reform that can improve budget outcomes if they are prepared and managed well in a supportive environment (see Box 3.2).

The secret to success for PPPs is good project preparation and management. This involves close attention to the selection of the private partner through a competitive process, risk allocation, the reliability of the project's revenue streams, the duration of the partnership, and the quality of the PPP agreement and its ability to generate productive performance incentives, among other matters. The legal and regulatory environment must create certainty and confidence for all parties and respect reasonable investor rights, and be conducive to the use of good practices. And the capacity to build and sustain good PPPs must be in place in both the public and private sectors.

A good publicprivate partnership can improve budget outcomes

²³ See ADB (2012c) for further discussion of the TSA system.

Box 3.2: How Public-Private Partnerships Can Improve Budget Outcomes

By fostering public sector reform. Public-private partnerships (PPPs) encourage governments to think and behave in new ways and normally form part of broader reform agendas. For example, PPPs are often used as a tool for reorienting services toward a results-based approach or promoting competition in service delivery. A PPP is more than a one-off contract with the private sector. A good PPP program is based on firm policy foundations, long-term political commitment, and a sound and predictable legal and regulatory environment. In addition, governments must maintain fiscal discipline in order to be a credible PPP partner.

By lowering life-cycle costs. In most PPPs, the private partner is responsible for maintainance and operations, and bears the cost of any deficiences in construction. This responsibility heightens the incentive for good-quality design and construction, and encourages the optimization of investment and maintenance programs to minimize the lifecycle cost of service provision. In contrast, in a conventional project the construction and operation decisions are separated and may even be undertaken by different agencies. Lowering life-cycle costs helps minimize financial support from the budget.

By improving the preparation, procurement, and management of public projects. To structure and deliver high quality PPPs successfully, governments normally need to improve their strategic planning and their project management and negotiating capacity, and develop skills in managing long-term, complex contracts. These improvements benefit both PPPs and conventional projects.

By making risk more transparent. A good PPP will identify key project risks so they can be allocated to the partner best able to manage them. The quality of risk management thus improves and the budget is better protected.

By utilizing market discipline. The private partner and its financiers will put projects through much greater due diligence and quality assurance than is normally undertaken for conventional government projects. Market discipline will force investors to scrutinize and improve projects so that they become commercially viable. Investment quality is higher than it would otherwise be, and poor investments are identified and avoided. Sophisticated private sector partners understand the importance of these factors and will look for them when deciding whether or not to participate in a project. Such external market pressures help improve the performance of governments.

And by reorienting public service delivery toward value for money. This concept is central to PPPs. Value for money does not just mean the cheapest possible outcome. It is about obtaining the best outcome in the delivery of services across a number of factors, including price, quality of service delivery, design amenity, and sustainability. The value for money of delivering a project as a PPP should always be compared with delivery as a conventional project, and a PPP project should be accepted only if it provides better value for money.

Source: ADB staff.

Fiscal safeguards are nonetheless justified

While PPPs offer a range of benefits, governments need to be proactive and put in place systems of fiscal checks and balances tailored to the PPPs. Good PPPs must be encouraged, but potential problem PPPs must be identified early and either fixed or stopped. There are many international examples of low-quality PPP projects that have become a burden to government budgets and impaired governance. Common pitfalls, some of which are evident in the PRC, include:

- governments taking on too much project risk, by entering into fixed rate-of-return contracts or overly generous take-or-pay arrangements, or by issuing guarantees or comfort letters, resulting in unexpected calls on the budget;
- insufficient information disclosure by the government so the costs of a PPP to the budget are known publicly only when it is already too late;
- failure to budget for long-term commitments under a PPP agreement, either because they are consciously overlooked or they simply do not fit into the annual budget system;
- misguided efforts to hide a government's true debt by creating project structures that shift financial obligations off-budget; and
- excessive approval of PPPs prompted by the low initial cost of a PPP to governments or misplaced expectations that there will be no costs at all.

The risk of fiscal stress from public investment is, of course, not unique to PPPs. Conventional projects directly funded from a budget, or projects delivered through SOEs and off-budget entities (e.g., the LGIVs), also create fiscal problems if managed poorly. They can also create liabilities—such as the cost to government of correcting performance problems—but these are typically incurred unnoticed. A PPP, however, is probably more likely to bring any problems into the open. A good PPP agreement will identify and allocate all risks, thereby making the potential liabilites borne by the government more transparent. The private partner has rights it can exercise to expose problems that often remain internal to government under a conventional project.

The OECD's "Principles for Public Governance of PPPs" (2012) offer overall guidance in guarding against the fiscal risks of PPPs. The use of a transparent budgetary process to minimize fiscal risks and protect the integrity of the procurement process is the key principle. The central budget authority is seen as having a key role in vetting projects to make sure that they are affordable and that the overall investment envelope is sustainable. The need to disclose all costs and contingent liabilities throughout the public sector in the budget documents is emphasized. To prevent waste and corruption and ensure the integrity of procurement, the OECD recommends that the necessary procurement powers be vested in the relevant authorities (OECD 2012).

The PRC's efforts to implement such principles will be constrained by the limits of the PRC's annual, cash-based budget, which is not well suited to recognizing the multiyear commitments or the contingent liabilities that PPPs can create. Even when contingent liabilities are known, the cash-based budget is not designed to record and monitor them. The evolution of the budget system now under way, especially the move to a multiyear budget and the possible adoption of accrual accounting being considered, will suit PPPs. But such reforms will take time. Some smaller add-ons to the budget system can quickly improve PPP budgeting.

Potential near-term improvements include the following:

• Adjusting budget documents to provide for the disclosure of PPP commitments and their inclusion within long-term expenditure and financing projections. Separate, summary releases of PPP activity and liabilities may be desirable (UK Treasury, 2012).

Add-ons can be made to the annual cash budget

- Adjusting government accounts to provide for at least the disclosure of direct and contingent liabilities arising from PPPs. This is likely to require revisiting the accounting standards, potentially through selective alignment with international accounting standards for PPPs.²⁴
- Expanding the NAO's audit activities to include audits of government debt, guarantees, and contingent liabilities of PPPs.
- Making PPP units within MOF and local government finance bureaus responsible for supervising and facilitating fiscal aspects of PPPs. They could, for example, review the affordability of PPPs and fiscal risks, and conduct of scenario analyses and stress tests of the PPP program. MOF has already established a leading group on PPPs, which would act as a central PPP unit for MOF.²⁵ Similar arrangements are to be replicated by local government.
- Releasing completed PPP agreements (after removing confidential information) to enhance information disclosure. This is already common practice in some countries.
- Integrating liabilities arising from PPPs into debt targets and early-warning systems.

Such add-ons could initially be adopted as administrative measures on a pilot basis, and then given greater force through inclusion within laws or regulations, such as the concession law now being prepared by the National Development and Reform Commission.²⁶

The adoption of a procurement system for the special needs of PPPs, backed by training for procurement authorities, is also important. Priorities relate to the need to reinforce the use of open bidding, and to provide for practices common to PPPs that are difficult to apply under existing practices (e.g., flexibility in market testing, in post-bid negotiations with bidders, in bid evaluations based on value for money, and in evaluating best and final offers from bidders).

The identification and prioritization of PPPs is another issue that warrants attention. There are two main scenarios to guard against. One is the pursuit of low-quality projects. PPPs are sometimes incorrectly treated as an option of last resort, with a project pursued as a PPP only when it fails to make the budget. This can lead to a PPP program that contains only low-quality projects—the same projects that are most likely to impose a burden on the budget. The PPP approach cannot turn a bad project into a good one. Low-quality PPPs must be identified early and dropped.

The second scenario to guard against is a bias toward PPPs because of their low initial cost. For a project delivered in the conventional manner, the annual budget will show its full construction cost before the project is approved. In contrast, PPPs will normally impose no cost on governments in their early years. Because there is no need for a budget allocation, governments can find it easy to approve a PPP and may pursue too many as a result. This can

²⁴ Notably the International Public Sector Accounting Standards 32 (Service Concession Arrangements: Grantor), approved in 2011 by the International Public Sector Accounting Standards.

²⁵ MOF established a PPP leading group in May 2014. Chaired by Vice Minister Wang Baoan, the group includes representatives from MOF's finance, economic construction, treaty and law, budget, and international departments, and from the China Clean Development Mechanism Fund.

²⁶ This law is included in the State Council's list of proposed laws for approval in 2015.

be a problem if the project has longer-term costs, which can build up unnoticed and without adequate budget provisioning.

A practical, immediate solution is to select PPPs through a two-step process that makes maximum use of existing planning and budget processes. In the first step, investment projects are identified and selected in the normal way. That is, the standard approvals are sought from the National Development and Reform Commission or its local branches, and then the project enters the preliminary budget stages.²⁷ In the second step, an assessment of the pipeline of approved investment projects would identify the projects that would be better delivered as PPPs. Suitable projects would then be converted to and finalized as PPPs, but always with checks made to ensure that they offer better value for money than delivery as a conventional project. This two-step process should ensure that all investment projects are assessed according to the same criteria (e.g., cost-benefit assessment, policy priorities, and affordability), irrespective of the financing method ultimately used. Although it does not allow the assessment of the pipeline of public projects to take into account the possible benefits of using a PPP, this process would provide the PRC's local governments with a fiscally safer approach (Funke, Irwin, and Rial, 2013).

G. A Way Forward

Reforms targeting better local government debt management can be complemented by improvements in the budget system and practices. Important initiatives already under way include the strengthening of information management systems, the adoption of MTEFs and performance budgeting, and the tightening of cash management through the development of the TSA system. These initiatives will enhance transparency and efficiency in the use of public funds and will help guard against a future build-up in fiscal pressures at the local government level.

Budgeting for PPPs is a new area for the PRC. The interest in PPPs is on the rise, and they could account for a sizable share of public investment. But PPPs have special needs that require a tailored response. Most notably, the long-term commitments they involve do not fit with the annual, cash-based budget used in the PRC. Ways must be found to bring PPPs within the budget system so they do not become a new, hidden source of local government financing.

For PPPs, the priorities are to make sure that any budget commitments to PPPs are understood and tracked and can be met when they fall due, and that firewalls are in place to allow governments to avoid projects that could become a burden. Some quick fixes are available in the form of simple add-ons to the budget system, such as the annual release of a consolidated statement of approved PPPs and their budget obligations. Uncomplicated project approval systems for PPPs can also be adopted. More permanent solutions can be provided via the recognition of fiscal issues in laws and regulations. Project identification and prioritization require extra measures

Stronger budgeting practices will complement debt reforms

Public-private partnerships should be run and managed within the budget system

Firewalls are needed against bad public-private participation projects

²⁷ The PPP would not need to complete the full budget process. But it should proceed far enough to allow adequate scrutiny of the project and confirm the genuine commitment of the government.

Advancing Tax Reform

A. Introduction

Tax reforms in 1994 and subsequent initiatives have provided the PRC with most of the basic instruments and administrative arrangements required for an effective tax system.²⁸ The tax system is now ready for the next phase of reform. As the impact of taxation is felt across a wide front (see, for example, the discussion in Box 4.1), tax reforms must fit in with a range of policy goals. The priorities for the tax system are to help meet the country's macroeconomic needs, facilitate structural change in the economy, ease pressing environmental problems such as air and water pollution, and address income inequality.

The long-term fiscal equation for the PRC is a simple one. Unless the ratio of expenditure to GDP is reduced, a higher ratio of tax to GDP will be needed to halt the recent upward trend in the debt-to-GDP ratio. Large demands for public services, notably to address the needs of rapid urbanization and an aging population, and reforms in the system of household registration (*hukou*) will make it difficult to reduce the ratio of expenditure to GDP.²⁹ Social sector expenditure is still relatively low, and even higher expenditure is justified in the sector (World Bank and DRC 2013, 2014) (World Bank, 2014 and DRC, 2013). The tax system will therefore need to make a large contribution to the fiscal adjustment now required.

Increases in taxes will probably be required and international comparisons suggest there is some room for these. Although the ratio of total tax revenue to GDP in the PRC has been rising steadily since 1994 and in 2012 reached about 22.5%, it is still well below that seen in most OECD countries including Australia, Japan, Republic of Korea, and the US, all of which have ratios of 25%–30%. The OECD average is around 34%. (Commonwealth of Australia, 2006) A higher tax-to-GDP ratio can be achieved with a broader tax base: new taxes can be introduced or existing ones redesigned, tax rates can be raised, and tax compliance and enforcement can be improved.

The PRC now relies heavily on the VAT, consumption and business taxes, and other indirect taxes (Figure 4.1). This reliance is more pronounced than in most OECD countries and the PRC raises a relatively lower proportion of revenue from direct taxes—the EIT and the

²⁸ The PRC's tax system and its origins are summarized in Appendix 2. An overview of the tax system is available on the website of the State Administration of Taxation of the PRC (http://www.chinatax.gov.cn/ n6669073/ n6669133/6887407.html).

²⁹ About 670 million people were living in urban areas in the PRC in 2010, and the urban population is projected to increase to 900 million over the next 15 years (ADB 2013g). The PRC has the largest senior population in the world, with 194 million people at or above the age of 60 by the end of 2012. The age group is expected to grow to 243 million by 2020, and one-third of the population is projected to be over the age of 60 by 2050 (China National Committee on Aging, as reported on http://news.xinhuanet.com/ english/china/2014-02/07/c_133098352.htm).

Box 4.1: Different Roles of Taxation

Reducing Income Inequality

Income inequality in the People's Republic of China (PRC) has increased rapidly in the past 2 decades. In 1990, income inequality as measured by the Gini coefficient was 0.32, comparable with that in Western Europe and one of the lowest in Asia. By 2012 the Gini coefficient had risen to 0.47, higher than the average for Asia. This 50% rise in the coefficient was one of the most rapid increases in overall inequality in recent history. Other measures of inequality confirm those results. For instance, the ratio of the income of the top 10% households relative to the bottom 10% has increased to 15, compared with less than 10 in India, Indonesia, Pakistan, and Viet Nam.

Traditionally, regional income differences have been the greatest cause of inequality in the PRC. The gap between urban and rural incomes is large (urban households' earning incomes over three times those of rural households), and so is the gap between the coastal and the western regions.

The roots of inequality lie in the growth model adopted 3 three decades ago. As economic reforms progressed, state redistributive mechanisms weakened. In the 1990s provision of public services was decentralized to local governments without a corresponding increase in fiscal transfers, and a serious mismatch emerged between expenditures and revenues at the local government level. Revenues are heavily sourced from indirect taxes, which are regressive, undermining efforts to balance income distribution. Furthermore, taxes are biased in favor of manufacturing, to the detriment of the service sector, hampering the development of a sector that stands as a crucial source of future growth.

In February 2013, the State Council unveiled policy guidelines for reforms in the income distribution system. The guidelines call for improvements in secondary redistribution through taxes, social insurance, and transfers. The taxation system is to be made more progressive through reforms in individual income tax, property tax, and reduced taxes for small enterprises and microenterprises. These proposals for reform were reinforced at the Third Plenum of the 18th Central Committee of the Communist Party of China held in November 2013.

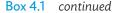
This call for tax reform is an important one. In most OECD countries, the tax system is a primary mechanism for lowering inequality. In contrast, the PRC's tax system was contributing almost nothing to reducing inequality.

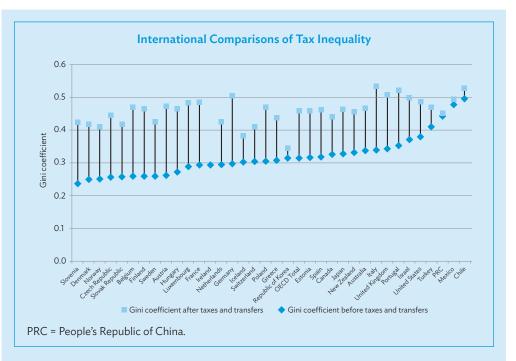
Reducing Environmental Damage

The PRC's rapid economic growth has exerted enormous pressure on the environment. Environmental problems have increased, reflecting excessive resource exploitation, and the emission of polluting gases and wastewater:

- More than 40% of land in the western region is degraded, and close to a third of the PRC's total land area shows some signs of desertification.
- Many of the PRC's largest cities do not meet the air quality standards recommended by the World Health Organization, and seven are ranked among the 10 most polluted cities in the world.
- Some river basins and groundwater sources are already overexploited, and water quality has fallen below safety standards in many heavily populated urban areas.

continued on next page





Looming constraints on sustainable urban growth and better quality of life include increasing water scarcity, water and air pollution, solid waste, rising energy demand, road congestion, and competition for land and other natural resources. Urban demand for water is forecast to increase by 70% to 100% between 2005 and 2025, largely because of increases in the use of residential water. Rising urbanization has the potential to double urban energy consumption by 2025.

The PRC's carbon dioxide emissions reflect a largely coal-based energy sector and heavy industry's reliance on fossil fuels. Climate change already poses a serious threat to the natural environment—the country is experiencing rising temperatures and sea levels, shrinking glaciers and permafrost, and more frequent extreme weather events—and the government has placed equal emphasis on adaptation. Total carbon dioxide emissions increased from 1,483 million tons in 1978 to 6,896 million tons in 2008, or by about 5.2% per year on average. Carbon dioxide emissions per capita increased from 1.5 tons in 1978 to 5.2 tons in 2008. The PRC is now the world's largest emitter, accounting for almost a quarter of the world's carbon dioxide emissions.

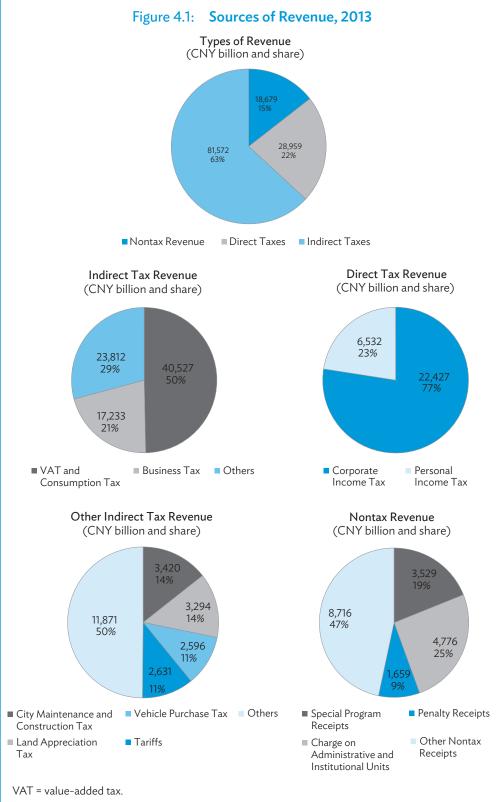
At the United Nations Climate Change Conference in Copenhagen in 2009, the PRC reiterated the government's commitment to reduce carbon dioxide emissions by 40%–45% per unit of gross domestic product by 2020 from the 2005 level. The 12th Five-Year Plan, 2011–2015, emphasizes the need to protect the environment, save energy, reduce greenhouse-gas emissions, and promote the development of a recycling economy. These commitments were reiterated at the Third Plenum.

It is now recognized internationally that taxation can be used as an important tool to curb environmentally damaging activities by raising their cost. This point is also accepted by the PRC. Environmental taxes are already in place, albeit in a limited form, and the Third Plenum committed itself to expanding environmental taxation further.

OECD = Organisation for Economic Co-operation and Development.

Note: The figure shows data for the late-2000s for OECD countries, and for the mid-2000s in the case of the PRC. The after-tax Gini coefficient in the PRC has decreased slightly from the mid-2000s value shown in the chart (from 0.44 to 0.41).

Source: ADB (2013e), Brys et al. (2013, 30).



Note: Direct taxes are the corporate income tax and personal income tax. Other taxes are indirect. Source: ADB staff estimates, based on MOF (2014).

PIT, with the EIT by far the larger of the two. Very little revenue is raised from charges on effluent, air pollution, and congestion and other environmental charges. A robust property tax, probably the main source of local government tax internationally, is yet to be put in place.

The heavy reliance on indirect taxes rather than direct taxes makes it difficult to achieve equity goals. An emphasis on central government taxes means local governments lack the revenue to fund their expenditure. And the light taxation of environmentally harmful activities is a missed opportunity to curb damage to the environment.

The valueadded tax, the property tax, the consumption tax, and environmental taxes are priorities Reform of the VAT is under way, and a pilot property tax has also started implementation. The Third Plenum called for the reform of the consumption tax and environmental tax. New tax instruments can also be considered in the area of environmental taxation to redress pressing environmental problems such as air pollution. Complementary improvements in tax administration for these taxes would be beneficial. Improvements in the PIT and EIT would also help but have a lower priority.

The tax modernization agenda being pursued by the PRC is a challenging one. Experience with tax reform in the PRC, and internationally, provides key lessons for this coming phase of the PRC's tax reform (see Box 4.2). Building on these lessons, the rest of this section examines potential improvements in tax design and administration.

B. Replacing the Business Tax

The business tax covers services that did not fall under the VAT at first. The business tax is levied at varying rates by local governments on the supply of services, covering the transportation, construction, finance, and insurance sectors, the transfer of intangible property, and the sale of real property.

The business tax is a penalty on business activity

The business tax is now being replaced by the VAT—a step toward structural reform. The business tax discriminates against services because there is no credit for business taxes paid on services. In addition, it has a cascading effect, as the tax paid by one business is taxed again if the services are purchased by another business. Conversely, most businesses that buy goods receive a credit for VAT paid on those goods. Experiments with replacing the business tax with the VAT began in Shanghai in 2012 and were extended to 10 provinces and cities in August 2012, before nationwide implementation in August 2013.

The revenue from the business tax is substantial and provides the main source of tax revenue for local governments, which retain 100% of the revenue from the tax (Figure 4.2). However, they retain only 25% of the revenue from the VAT. Managing the loss of revenue is the key issue to be faced in the replacement of the business tax with the VAT. The pilot reforms undertaken in 12 municipalities in 2012 reduced annual gross tax revenue by around CNY40 billion. Around 1 million firms benefited from a reduction in tax liability (ADB 2013f). Simulations by the SAT indicated that converting the business tax to a VAT will reduce net tax revenue by more than CNY100 billion. The net loss of revenue will add to pressure to secure financing from land leases, the LGIVs, and other indirect sources.

Box 4.2: Key Lessons from Tax Reform

The level and structure of the tax system depends on its specific objectives. There is no single optimal level or structure. Instead, there is a useful set of tax instruments for dealing with specific objectives. There is no optimal tax level, as it is determined by the menu of public services that needs to be delivered, consistent with citizen preferences, and the efficiency of these services. The structure of taxes needs to respond to the policy goals and these vary across governments and over time.

The tax must be kept simple. This normally means levying taxes on a broad base at low rates. Such an approach will enhance equity and tax collection, facilitate transparency, and improve compliance.

A systemic view of tax reform must be taken. Various tax instruments balance multiple objectives, which can conflict. Even piecemeal tax reform should take into account other elements of the tax system.

Distortions must be managed carefully. All taxes introduce economic distortions as they change production and consumption decisions. Such distortions need to be kept to a minimum, or at least to offer broader, indirect benefits (e.g., by reducing smoking). It is particularly important to avoid the cascading of taxes as one tax is levied on another.

Administration matters must be attended to. Tax policy design must recognize the feasibility of tax administration and options for strengthening tax compliance.

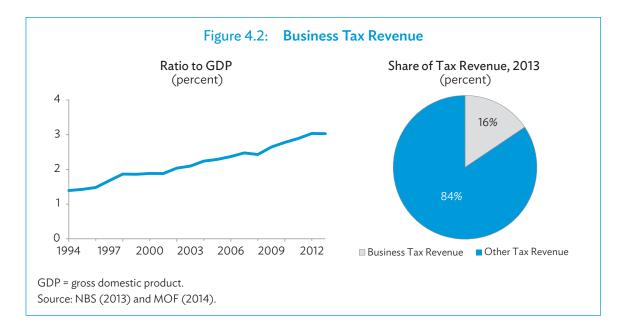
The dimensions of fiscal federalism must be recognized. Which level of government collects revenue is important, as it affects the incentive to do so, and the ability to meet expenditure responsibilities and achieve sustainable financing.

Time must be allowed for reform. Enough time must be set aside for building consensus for reform, developing a transition path, training people, publicizing new initiatives, and putting in place the required processes and administrative machinery.

Source: ADB (2014b).

The revenue losses from the replacement of the business tax with the VAT will vary greatly across provinces, with the richer provinces being less affected than economically weaker provinces. This uneven impact suggests the need for a mechanism to tailor compensation to the most affected provinces. One possible mechanism would involve adjusting central government transfers to local governments. The replacement of the business tax with the VAT illustrates the importance of implementing tax reforms as a package, rather than individually.³⁰

³⁰ See ADB (2012b, 2012d, 2013f, and 2014e) for further discussion of the business tax



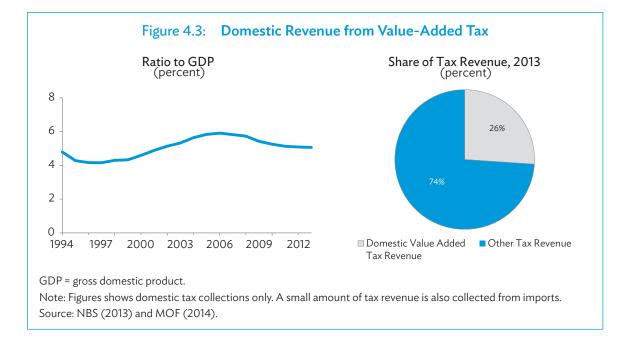
C. Expanding the Value-Added Tax

The VAT implemented in 1994 was of the production-type, with no credit given for VAT paid on investment and capital goods.³¹ This design meant that the VAT was a tax on production input. It penalized production, and discriminated against exporters and domestic firms relative to imports. The production-type design was adopted largely to maximize revenue, and because the refund mechanism, which required giving businesses credit for VAT paid, could have been abused in the early stages of implementation of the VAT and the establishment of the SAT.

In 2009, the VAT was changed to a consumption-type tax, which allowed VAT on the purchase of capital goods to be credited against VAT liabilities on the sales of goods. This change brought the design into line with international best practice, and reduced distortions against the PRC's firms. However, it also contributed to a reduction in the relative importance of VAT revenue, with the impact varying among the provinces (Figure 4.3). The VAT is now levied at a standard rate of 17%, a lower rate of 13% for certain commodities (e.g., grains and oil, gas, agricultural input, books), and a 0% rate for exporters.

The 1994 VAT covered the secondary sector, excluding construction. The tertiary sector (service industries), on the other hand, was subject to the business tax. This design was appropriate for the economic structure and administrative capacity in the PRC at the time. But the continued development of the market economy has exaggerated the weaknesses of such industry-specific taxes and the distortions they impose on economic activity. As indicated

³¹ Under a well-designed VAT, business can claim credits for VAT paid on production input. The liability is passed onto end-users, and the VAT does not become a tax on production. Special arrangements are put in place to ensure that VAT is not payable on exports.



above, the pilot project in Shanghai laid the foundation for the nationwide expansion of VAT to the tertiary sector, with an emphasis on telecommunications and transport services. Rail and postal services were included in the pilot implementation in January 2014.

The expansion is important not only in reducing economic distortions, but also in creating an information base that can be used to improve the operation of other tax instruments, notably the PIT. Recent research has shown the need for information generated from the VAT regarding transactions and components of value-added (wages and profits) to make income taxes operate efficiently. Such tax-on-tax interactions are critical in guiding the development of a VAT.

Experience with the pilot projects has been generally positive, and provides reassurance that VAT expansion is feasible and can now cover the entire country. If instead the VAT were expanded through a slow or protracted process, the basic problems caused by the dual VAT-business tax system would remain. In the VAT expansion, the key challenges that must be handled are: (i) setting the VAT rate; (ii) treating difficult-to-tax services, such as the finance industry; (iii) sharing VAT revenue among different levels of government; and (iv) administering the tax.

1. Standardizing VAT Rates

The Third Plenum called for simplified VAT rates. The standard VAT rate in the PRC of 17% is close to the OECD average, but is higher than the rate in other East Asian countries. The level of this standard rate is not the issue. The foremost concern is that exports are subject to varying rates of refunds of VAT paid on input. As a result, VAT is imposed on some exports, reducing their international competitiveness. A second concern is that VAT

There are good reasons for increasing the pace of reform of the value-added tax

Variable valueadded tax rates create distortions is used as a tool of industrial policy, with some industries receiving preferential treatment, in the process complicating VAT administration and introducing distortions into business investment decisions. While these distortions are consistent with explicit goals of industrial policy, there are other ways of achieving these goals. Still another concern is the possibility that the differential rate for small business may have unintended adverse consequences on the form and scale of business organizations. It may create strong incentives for the breakup of existing business to take advantage of substantial tax preferences for being small, or discourage small firms from becoming larger.

A VAT based on the destination principle, applied at a uniform rate and on a broad base (of final consumption without exemption), with full crediting of taxes paid on input throughout the production and distribution stages, is recognized internationally as an efficient tax. It is neutral with respect to business decisions on the type of business organization and choice of capital and other input, and does not affect international competitiveness or relative prices, as the tax burden falls on final consumption.

However, only a handful of OECD countries levy the VAT at a uniform rate. These include Canada, Chile, Denmark, Israel, Japan, Republic of Korea, Mexico, and New Zealand. Most OECD countries typically levy three differential rates. The standard tax rate used in 2012 varied from a low of 5% in Canada and Japan to a high of 27% in Hungary, with an unweighted average rate of 18.7%.³² Exports are zero rated in the OECD countries and do not bear any VAT liability. OECD countries typically do not use VAT as a tool of industrial policy and instead rely on other measures.

The PRC has already come a long way in introducing a relatively modern system of consumption-based VAT. A few further refinements would lessen the limitations of the system. Most importantly, exporters must receive a full refund of VAT. The suitability of the VAT as a tool of industrial policy and its impact on business organization must also be reexamined, so that distortions in the scale and structure of businesses can be avoided.

2. Bringing Financial Services into the Value-Added Tax System

The expansion of the value-added tax should not cause harm to financial institutions The finance industry provides a wide variety of services, including bank deposits and loans, life insurance, property and casualty insurance, leases, financial intermediation (by agents and brokers), and financial asset management. These services, which represent a sizable potential tax base, are currently disadvantaged by being outside the VAT net. Given the importance of the PRC's financial industry and the pressures already created by reforms to raise its market orientation (e.g., interest rate liberalization and the entry of new private banks), careful consideration should be given to its treatment under the VAT.

Newer VAT systems, such as those in India and South Africa, tend to include financial services in their coverage. An alternative approach, which is followed by many other countries in the early stage of VAT implementation, as well as countries in the European Union, is to exempt financial services. The main reason for the exemption is to simplify administration (Box 4.3).

³² Brys et al. (2013).

Box 4.3: Difficulty of Applying Value-Added Tax to Financial Services

The charge for the services provided by financial intermediaries (such as banks and insurance companies) is often not explicit, and is built into interest, dividends, annuity payments, or such other financial flows from the transactions. For example, banks often provide, operate, and maintain deposit accounts but charge no explicit fee. There is, however, an implicit fee, which is the difference between the interest that banks can earn from the use of these deposits and any interest paid to depositors.

It would be straightforward to levy a value-added tax on this implicit fee if the reference rate (the interest the banks receive) were easily observable. In the case of loans, the fee would be the interest charged by the bank in excess of the pure interest rate. The spread between borrowing and lending rates could provide a measure of the total value-added of the intermediary. But this would work only for the simplest financial service of lending. And for the crediting mechanism to work properly, it is necessary to go further and allocate this value-added across borrowers (with a credit on the tax paid due only to registered taxpayers). This would again raise the problem of identifying the reference pure interest rate applied to each borrower, as it will vary across borrowers.

Source: ADB (2013f).

Financial institutions in the PRC have adopted this arrangement.³³ While the exemption frees governments in the PRC from the need to measure the tax base for financial transactions, it gives rise to distortions in the financial markets.

Exemption from the VAT means that financial institutions cannot claim credit for VAT paid on input. They become the end user and must bear the VAT liability. While they will try to pass on the VAT by raising charges, etc., they are not assured of being able to do so. Other industries will, in contrast, levy VAT, claim a credit for the VAT they have paid, and remit to SAT only the tax due on their value-added. The financial sector will be at a disadvantage when competing with other sectors for resources, or visàvis those countries that do not have a VAT or where the VAT is zero rated on international transactions. The denial of credit to the exempt financial institutions for the VAT charged on their input also creates disincentives for them to outsource their business process operations. Where they render services to business clients (in business-to-business transactions), the blockage of input tax credits results in tax cascading, which could have a negative impact on their competitive position in the international markets.

Alternative approaches to applying the VAT to financial services start from a recognition that at a broad conceptual level, financial activities can be divided into two categories: (i) principal transactions or contracts for sales, swaps, issuance, and acceptance of financial instruments (which include loans, deposits, insurance, bonds, shares, financial derivatives, and other forms of monetary rights and obligations); and (ii) activities of agents, brokers, and The denial of value-added tax credits adds to industry costs and creates economic distortions

³³ Some arrangements are in place for special activities, but they are still evolving. The rules for sale-and-leaseback arrangements, for example, changed three times between 2010 and 2013. As of December 2013, the financial leasing company could deduct the cost of the tangible movable asset (see http://www.china-briefing.com/news/2013/12/17/china-releases-new-regulations-to-clarify-issues-in-expanding-vat-reform.html#sthash.QLrjfERV.dpuf).

other intermediaries, other than principals, acting as facilitators or managers of transactions in financial instruments between the principals. In the case of principal transactions, the consideration for the services rendered could be an explicit charge (e.g., a fee for the granting of a loan, or a deposit account maintenance charge), or an implicit margin in the form of a positive or negative markup applied to the selling or buying price of a financial instrument (e.g., the spread between the buying and selling prices of foreign currency, or debt securities) or to the loan and deposit interest rates.

When VATs were first implemented, most financial services were exempted from the tax (Box 4.4). This approach is now seldom used in mature VAT schemes. There is a better understanding of the means of, and the need for, extending the VAT to financial services. Building on this experience, most countries bring financial services within the VAT net and make the tax payable on explicit fees for principal transactions, and in some cases on additional services (approaches B and C in Box 4.4). This modern thinking helps in improving the efficiency of the economy's production structure and is more suited to the PRC. It will also avoid putting the PRC's financial industries at a disadvantage vis-à-vis jurisdictions that do not have a VAT, or where the VAT is zero rated on international transactions.

Under one recent proposal considered for the pilot VAT expansion, financial and insurance services would be taxed on the basis of a simplified calculation method. This method would determine the tax liability by multiplying the amount of sales by the applicable VAT rate, with input VAT not recoverable.³⁴ International experience offers more efficient alternatives.

3. Sharing Value-Added Tax Revenue

A quarter of domestic revenue from the VAT is shared with local governments on the basis of origin. Ensuring a meaningful sharing of this revenue is technically challenging. Firms operating in different locations and with extensive supply chains in different provinces are able to vary the declaration of origin almost at will. This practice could encourage wasteful activity if firms were to lobby local government to extract favorable conditions for their operations in return for a favorable declaration of origin by the firm (Xu, Wang, and Huang 2011). Moreover, for administrative convenience most firms report total VAT liabilities at their headquarters—an expedient that tends to favor the major regions and municipalities where the headquarters are typically based.

A systematic approach to valueadded tax revenue sharing would help

The expansion of the VAT raises additional challenges. The extra revenue from the VAT expansion is being allocated on the basis of the business tax forgone, to minimize the fiscal impact of the VAT-business tax reform. But it is a difficult and uncertain practice that is best seen as a temporary measure only.

The main proposals debated in the PRC for sharing the revenue from an expanded VAT have been:

 retain the existing pattern of revenue collection by having the VAT revenue on the newly included services collected by local tax bureaus and that revenue retained by local governments;

³⁴ Brys et.al.(2013) p.23.

Box 4.4: International Approaches to Applying the Value-Added Tax to Financial Services

Three broad approaches are followed internationally in applying the tax to financial services. These are shown in the table below as approaches A, B, and C.

Under **approach A**, which is followed in Europe and Canada, services of principals as well as agents are exempted, regardless of whether the consideration takes the form of a margin or an explicit fee. Both life and property and casualty insurance are exempted, while asset management services could be partially taxable. Internationally, much of the pressure for removing the exemption of financial services from the VAT has come from the industry itself as it seeks to become more competitive.

Under **approach B**, services of third-party agents, brokers, and managers, for which consideration is always in the form of an explicit fee, are brought fully within the tax net. Exemptions are restricted to principal transactions, excluding property and casualty insurance. Singapore and New Zealand VATs are examples of this approach.

Under **approach C**, all explicit fees for principal transactions, as well as for the services of agents, brokers, and managers, are subject to tax, as they are in South Africa. Exemptions are limited to principal transactions where the consideration for services is earned in the form of a margin.

Under all three approaches, international financial transactions are generally zero rated. When a transaction is zero rated, VAT is payable on input but a zero tax rate applies. There are different ways of doing this. For example, Singapore has effectively extended zero rating to domestic business-to-business margin transactions by allowing the financial institutions to claim an additional input tax credit in respect of input attributable to their other exempt margin revenue from business loans and deposits. The additional input tax credit is not calculated precisely for each institution. It is instead factored into the overall input tax credit percentages prescribed for various categories of financial institutions, taking into account the mix of their business. This approach goes a long way in avoiding the potential for cascading taxation.

Nature of Services	Approach A	Approach B	Approach C
Principal Services			
Deposits and Loans			
Margin Revenues	Exempt	Exempt	Exempt
Explicit Fees	Exempt	Exempt	Taxable
Credit Card Services			
Interest	Exempt	Exempt	Exempt
Explicit Fees	Exempt	Exempt	Taxable
Life Insurance	Exempt	Exempt	Exempt
Property and Casualty Insurance	Exempt	Taxable	Taxable
International Services	Zero Rated	Zero Rated	Zero Rated
Third-Party Services			
Security brokers and agents	Exempt	Taxable	Taxable
Asset Management Services	Exempt/Taxable	Taxable	Taxable

Options for Treatment of Financial Services under VAT

Source: ADB (2013f).

- collect the VAT centrally, with revenue from the newly included services to be collected by the SAT and returned to local governments via transfer payments; or
- thoroughly reform the fiscal system by consolidating the SAT and local tax bureaus, and reassigning the tax sharing among central and local governments.

The first option would result in SAT collecting VAT on goods while local tax bureaus would collect VAT on services. It would be difficult to identify the portion attributable to services for each transaction. Most transactions bundle supplies of both goods and services. A simple example is car repairs, which involve both parts and technical services. Asking traders to distinguish accurately between the two in VAT returns is effectively impossible: they lack incentive to make an accurate distinction in reports, and the compliance costs could be considerable. For purely practical reasons, there may be no alternative but to adopt some simple sharing rule, such as treating the revenue from services embodied in mixed supplies as x% of the revenue. But setting such a rule in a meaningful manner would be difficult.

The expansion of the value-added tax provides an opportunity to merge local tax bureaus with the State Administration of Taxation Clearly, the collection of VAT by a single authority, as under the second and third options, is preferable. This will, however, require a workable basis for returning revenue to local governments. As noted above, doing so on the basis of origin is problematic. In the short-term, it may be necessary to return the estimated business tax lost to local governments via grants. Otherwise local governments may face substantial disruption in their expenditure programs. In the longer term, a case can be made for addressing revenue sharing in the context of the whole fiscal equalization process rather than for each individual tax.

The issue raised by the third option, of whether local tax bureaus are needed, is connected to institutional reform of tax administration. The case for such reform has been strong for a long time.

4. Strengthening Value-Added Tax Administration

The expansion of the VAT to services will bring in a large number of businesses, many of which are small. Nonstandard accounting practices could create administrative complications. Imposing VAT on services needs to be done in step with the level of tax compliance and administration. A prudent approach would be to initially control the number of taxpayers in the services sector, notably by setting a relatively high threshold for applying the tax and expanding the threshold as administrative capacity improves.

A key benefit is that the VAT can be a catalyst for modernizing tax administration. It can enhance the incentive to report information correctly, as not doing so accurately and on time incurs penalties. The tax administration should have the ability to identify, through risk-based audit and selective enforcement, risky cases with a potential for misreporting. VAT refunds are particularly prone to abuse when the information base and administration are weak.

Value-added tax administration can enhance enterprise income tax and personal income tax compliance

In the longer run, the information generated by a complete VAT chain is critical to the operations of the EIT and PIT, as well as other taxes. These are the weak points in most developing countries, and the formulation of and experience with the VAT tends to be used to improve the administration of other taxes. This is one reason why modern tax administrations are organized on a functional basis and cut across taxes—with a focus on

taxpayer services and facilitation, large or smaller taxpayers, and electronic filing and riskbased audit—replacing old-style tax administrations that specialized according to type of tax and level of government.

The synergies between the VAT and modern tax administration have implications for the design of tax assignments between levels of government. It is no longer technically necessary for a local government to maintain its own tax administration. Indeed, the true capture of information flows and management of risks would be jeopardized by the compartmentalization of tax administration by local governments. If there were full trust in a national tax administration, the size of the revenue pie for all levels of government would increase, avoiding the inefficiencies of compartmentalized information flows.

In many developing countries that lack a taxpaying culture, and with nascent tax administrations, there are considerable incentives to cheat, especially if the tax administration is undertaken by different agencies and information flows are curtailed. In general, therefore, it is important to maintain the VAT information chain, preferably under a single tax administration. The generation of information from the VAT, along with other third-party information, could be used to block loopholes in income and other taxes.³⁵

D. Establishing a Robust Property Tax

1. Introduction

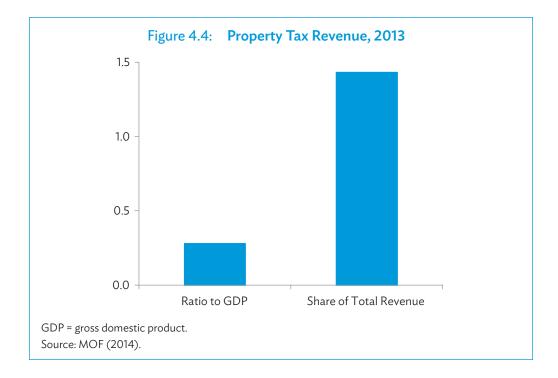
A modern property tax is imposed on property owners on the basis of the size or value of their properties. The tax is widely used in other countries and is an important, stable source of revenue for local governments.

The property tax offers a number of advantages: (i) stable and predictable revenue, facilitating longerterm budgeting and infrastructure development planning; (ii) revenue resiliency during downturns because the tax base (property size or values) is normally less exposed to economic downturns; (iii) low administration costs; (iv) transparency and high collection rates because the tax is hard to evade; and (v) progressive taxation.

In addition, the property tax can be formulated as a tax that pays for related public services (e.g., roads, lighting, water, sewerage). Public acceptance of the tax will increase, as will the accountability of local governments, because communities will expect their local governments to deliver services commensurate with the tax they pay.

There are five "property taxes" in the PRC: the real estate tax, the urban land use tax, the VAT on land, the cultivated land occupation tax, and the deed tax. Little revenue is collected through these taxes (Figure 4.4).

³⁵ See ADB (2012b, 2012d, 2013f, and 2014e) for further discussion of the VAT.



The revenue from property taxes is low primarily because of the following factors:

- the transaction (rather than ownership) focus of the taxes, prompting tax evasion through underreporting of transacted amounts;
- the exclusion of owner-occupied residential properties from the tax base, resulting in a very narrow tax base, given that over 85% of households in the PRC own their homes;
- the use of the original price, instead of the higher market values, as basis for the taxes; and
- poor-quality assessments and weak assessor capacity, due in part to the absence of nationwide standards.

Other issues facing property taxation in the PRC are: (i) poor-quality property and land registration data; (ii) the separation of land and building registration authorities; (iii) the difficulty of assessing the market value of land, rural housing, and subsidized housing of government and SOE employees; (iv) the lack of independence of property appraisal firms, which are still dominated by subsidiary companies of local governments; and (v) resistance to the adoption of property residential taxation because of vested interests.

Experimental taxation schemes for residential properties were started in 2011 in Chongqing and Shanghai, but these have had little impact so far. The focus was on luxury units in Chongqing and new purchases in Shanghai, and both municipalities opted for low rates with many exemptions. In Chongqing, the tax has been levied on less than 1% of all properties and yielded less than 1% of local government revenues. The results in Shanghai have been similar, with property tax revenue amounting to less than 1% of local government revenue in 2012, and coverage ratio also low.

2. Implementation and Design Issues

These key lessons have been gained from the international experience with property taxes: (i) recurring taxes are preferable to one-off taxes; (ii) a variety of valuation methods can be used; (iii) low tax rates with a broad base and minimal exemptions are preferable; and (iv) success rests on the capacity of the implementing agencies (Box 4.5).

The pilot schemes in Shanghai and Chongqing, which are designed to phase in a genuine property tax based on home values on all urban homes, provide a starting point for a property tax revamp. These pilot schemes can be strengthened and used as a source of learning for the national rollout of the property tax. The rollout cannot be immediate, but it can start in municipalities that participated in the SAT pilots in property value assessment. Starting in urban areas makes sense, given urban-rural income disparities and the difficulty of valuing rural land.

The inclusion of residential property in the tax base is fundamental to the success of a property tax. A broad-based property tax would be more effective in moderating speculative investments in real estate. If municipalities are reluctant to include all residential property immediately in the tax base, they could start by levying the tax on new units or on an owner's second property (including investment properties), or only on higher-cost properties. Standard definitions of the tax base increase transparency and facilitate the development of a nationwide appraisal system.

While it is best to avoid exemptions, especially those that could be granted through ad hoc special permissions, equity considerations must also be taken into account. Low-income owner-occupiers could be exempted or a tax-free threshold (a zero tax rate up to a minimum property value or property size) could be set. Graduated property tax rates that rise with the value of the property or its land area (depending on the tax base) may also be an effective way of defining a progressive tax.

Property taxes have been difficult to implement in developing countries, partly because of incomplete or out-of-date property registers. Moreover, valuations tend to be based on historical values rather than current transactions. These difficulties compound the lack of incentives for local officials to implement a visible tax. The temptation to cut corners and do "deals" tends to be high. The incentive to avoid taxing local friends and relatives often translates into finding ways to avoid recognizing liabilities, which can accumulate until there is a crisis. In some countries, such as Mexico, the placing of the valuation and recording functions at the municipal level led to collusion between tax collectors and property owners. Centralized administration can help lessen these problems. Local agencies could still be involved, but under a framework and supervision from elsewhere that takes responsibility for difficult decisions.

Smart design can also help. For example, in Bogotá, Colombia, and Bangalore, India, the property tax is based on self-declared property values. But a potential penalty of resumption of the property at a certain percentage above the declared values applies in cases of gross misdeclaration. This approach led to a very substantive increase in property taxes, which had been declining as the assessed values failed to keep up with market transactions.

The design of the property tax warrants deeper consideration

Box 4.5: Lessons from International Experience with Property Taxes

Recurring taxes are preferred over one-off taxes. One-off taxes typically take the form of property transfer taxes that occur during changes in ownership. One-off taxes tend to reduce the turnover rate of properties, in the process distorting capital allocation and potentially creating gray markets for transactions. An increasing number of countries opt for recurrent property taxes, which consist of an annual tax on land, commercial, and residential properties. Recurrent property taxes take the form of a flat tax on each property taxes, where owners pay different amounts based on established criteria. Because of the regressive nature of the flat tax, most countries choose various systems of differentiated property tax, for which an appropriate base and valuation method must be defined.

Valuation methods vary. The three most common valuation methods are: (i) capital valuation, in which property tax is based on the assessed property value (predominant in OECD and Latin American countries); (ii) rental valuation, in which property tax is assessed on the potential rent that could be earned by the property in the open rental market (usual in former British colonies); and (iii) area-based valuation, where the tax base is the area and size of the property, either unadjusted or calibrated for location and use (common in Central and Eastern European countries). Recent trends show a shift toward capital valuation as the preferred method. However, valuation has proven complex, particularly in a volatile market.

Tax rates are normally low and applied on a broad base. Ideally all properties should be covered. If the tax base is broad enough, even a modest tax rate could yield significant revenues, especially when combined with broad coverage and high compliance ratios. Property taxes in the US vary across counties, but average less than 1% of assessed values. In Japan, local governments can levy no more than 2.1% of taxable value, under the Local Tax Law. In most countries, rates on residential property, the largest source of property tax income, are lower than nonresidential rates. Tax rates are normally either uniform or progressive, and a distinction is often made between residential and commercial properties, and urban and rural properties. Under rental and areabased valuation, a uniform tax rate is more common.

Exemptions should be minimized. The development of a property tax system often begins in urban areas to capture the capital gains from improved urban properties, and the tax is applied to rural areas at a later stage. Many countries exempt agricultural, government, religious, and other properties from taxation and use exemptions as incentives for commercial land development. But evidence suggests that the longer the list of exemptions, the larger the revenue loss for the government, and the greater the loss of transparency over the authority that confers exemptions. Governments commonly provide welfare support to property owners that cannot afford the tax.

Government capacity is instrumental in the success of property tax implementation. Rapid urbanization often results in outdated data and obsolete administrative capacity. Good-quality property data are indispensable to the consistent and fair distribution of tax liabilities among taxpayers, as are solid legal principles to guide the assessment. Countries are addressing these issues by turning to computer-assisted mass appraisal systems with greater private sector involvement. To keep the assessments independent, tax assessors in a growing number of countries are different from tax collection authorities, and are supported by mechanisms for resolving discrepancies with government tax assessments.

OECD = Organisation for Economic Co-operation and Development. Source: ADB (2014d). The administration of the property tax will thus require close attention. A reliable property database that includes registration information and valuations (if the tax base is capital values) will be needed, as will the commitment of local government resources and adequate skills and technical capacity. The capacity of both government agencies and the private sector will have to be developed. A long-term specialized capacity-building program with adequate resources and technical support will have to be set up for the training and certification of local assessors. Nationwide standards for methods and qualifications of appraisers will also be useful. One option would be to establish an independent, nonprofit agency, or an interprovincial body jointly owned by the relevant jurisdictions.

Unless the introduction of the property tax is matched by a reduction in other taxes, taxpayer resistance is likely. To minimize this resistance, taxpayers need to be confident that they will be treated professionally and equitably. A clear mechanism for information dissemination and oversight at the administrative and judicial levels is therefore crucial. In case of discrepancies (either in perceived valuation or in billing), taxpayers must be able to avail themselves of a clear conflict resolution mechanism to address queries and appeals impartially. The appeal process would involve clear information about the process, its timeline, the responsibilities of courts or tribunal bodies, and the entity that would bear the costs of legal representation.

A final design issue to consider is who controls the tax. The property tax is a natural tax for local governments, and it is best that they control the tax and set the rate. But this does not necessarily mean they should also administer it. These matters are revisited below.³⁶

E. Revitalizing the Consumption Tax

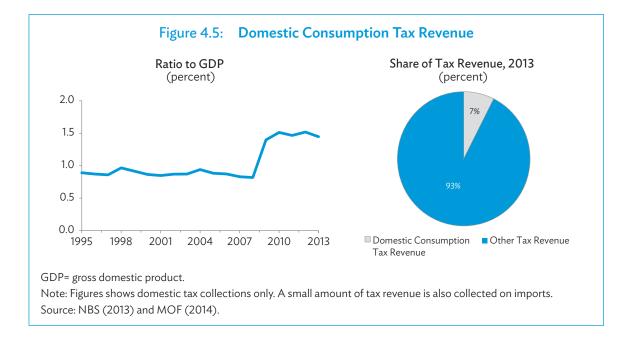
A consumption tax is imposed at varying rates on the sales amount or sales volume of 14 categories of goods. The tax is payable on the production, subcontracted processing, or importation of goods, rather than the wholesale or retail stage. The goods covered include tobacco products, alcoholic beverages, certain cosmetics, "luxury" goods (e.g., jewelry, golf balls, high-grade watches), passenger vehicles, oil products, and environmentally unfriendly goods. It is a central tax and all revenues accrue to the central treasury. It accounts for almost 10% of tax revenue (Figure 4.5).

There are a number of potential justifications for such a tax. One is that the demand for some of the goods chosen is likely to be reasonably price inelastic, that is, the demand is relatively unaffected by changes in price. Such goods are attractive candidates for raising revenue because demand should remain reasonably firm as the tax rate is increased. Another potential justification is that the tax can represent a payment for negative externalities (costs imposed on third parties) arising from the use of the good, such as environmental damage or costs imposed on the health system by caring for sick smokers. A third potential justification is that a tax on luxuries can be used to fund services or payments to lower-income groups, thereby reducing inequality.

Taxpayers should be encouraged to understand and support the property tax

The consumption tax can be used to raise revenue, to obtain some payment for negative externalities, or to help reduce inequality

³⁶ See ADB (2013c, 2013f, 2014b, 2014d, and 2014e) for further discussion of the property tax.



Under the 2006 reform of the consumption tax, disposable wooden chopsticks and wooden floors became taxable to help protect natural resources. Additional oil products, such as solvent oil, lubricating oil, fuel oil, and aviation kerosene were also brought into the original "oil" category to encourage energy conservation. In 2009 the consumption tax on gasoline and diesel was increased substantially (to CNY1.0/liter for gasoline, and to CNY0.1/liter for diesel oil). Higher consumption tax rates of CNY0.8/liter for biodiesel and for lamp kerosene and other kerosene grades took effect in January 2014. Unleaded gasoline is now subject to a tax of CNY1.0/liter, compared with CNY1.4/liter for leaded gasoline.

Higher rates and a broader base are needed

The consumption tax nonetheless still has a narrow tax base—it is limited to 14 categories of goods—and is levied at low rates. If it is to become an effective tool for raising revenue, taxing externalities, or helping reduce inequality, higher rates on a broader base are required.

Given the changing consumption patterns in the PRC, the so-called luxury goods have changed over time, and the tax on cosmetics, for example, is now a tax on a mainstream product. A consumption tax must be imposed on the new luxury goods, such as high-end cars, if equity considerations are to be met. Of course, it should be kept in mind that the demand for luxury items will ultimately decline as prices rise, so that there is a limit on the extent to which the tax could be levied on specific goods.

The extension of the consumption tax to other products that damage the environment is now being considered. Examples of such products are phosphorus-based detergent, disposable beverage containers, mercury-cadmium batteries, and products causing the destruction of the ozone layer. Such taxation is sensible as long as it is in line with the externalities associated with such goods. Other products such as coal, coke, and thermal power could also be brought under the consumption tax. It should, however, be noted that the reform of the consumption tax needs to be integrated and coordinated with the reform of environmental and other

taxes, so that the functions of each tax is clear and any overlap or conflicts are avoided. The role of the consumption tax as an environmental tax is discussed further below.³⁷

F. Taxing Environmental Harm

1. Introduction

The PRC has a number of environmental taxes in place as part of a "green agenda." Levied on polluting industries as well as pollutant emissions, these taxes provide incentives for industries and consumers to reduce the production of pollutants and consumption of related goods. The "polluter-pays" principle is not, however, applied in full: the system of environmental taxes is still narrow and tax rates are low. Moreover, polluters receive an unfair commercial advantage over nonpolluters; the former do not bear the full costs associated with their activities but the latter do. Tax policy in the PRC has yet to catch up with the environmental need.

The polluter-pays principle can be applied through taxes levied on producers or consumers that reflect the degree of environmental damage associated with their activities. Differentiated taxes impose penalties that help curb any excessive resource use or damaging management practices, and create incentives for modes of production and consumption that are compatible with environmental goals. Environmental taxes can help redirect economic activity away from sectors and enterprises that cause environmental damage and toward sustainable ones. Even if they do not raise much revenue, they can make an important contribution because they discourage damaging activities. The polluter-pays principle does, however, need to be applied carefully. Poorly targeted environmental taxes may increase the broader economic costs of taxation, while offering little in the way of compensating environmental gains.

2. Improving Existing Taxes

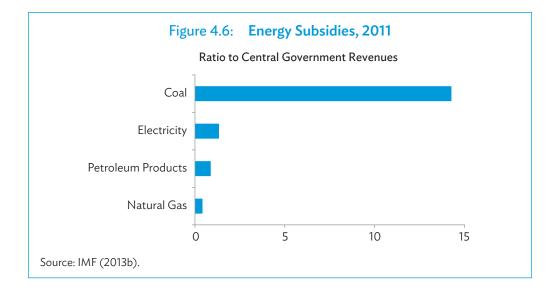
a. Reversing Negative Environmental Taxes

A sensible starting point for the application of the polluters-pays principle is the reversal of the PRC's large energy subsidies (Figure 4.6). Estimates place subsidies in the PRC in 2011 at nearly \$279 billion—around 17% of central government revenue, and 15% of world energy subsidies (IMF 2013b). Subsidies reduce the cost of energy below its true cost to society. They distort individual and business choices by encouraging excessive use of energy. In the long-term, technological innovation may be hampered because of the lower returns on alternative energy and energy-saving methods. The subsidies themselves reduce funding for other activities, with possible direct effects on the economy's competitiveness and equity outcomes.

The polluter-pays principle is central to tax reform

Energy subsidies encourage the overuse of energy

³⁷ See ADB (2012b, 2012d, 2013f, and 2014e) for further discussion of the consumption tax.



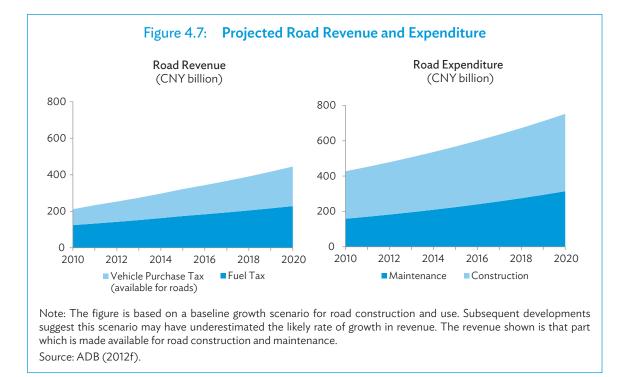
b. Raising Fuel and Vehicle Taxes

Some taxes partially offset the energy subsidies The PRC has quickly become a motorized society, with significant congestion and air contamination, particularly in the urban areas. The level of carbon dioxide and other polluting emissions, and hence degradation of the environment, is high. This suggests that it is time for market mechanisms such as taxes to play a role in stemming vehicle use in the major metropolitan areas and thereby reducing emissions.

In January 2009, a tax for highway maintenance was removed, and the consumption tax rate on refined oil products was increased (as described above). The revenue from the consumption tax on fuel, the fuel tax, is collected by the central government, which allocates part of the tax to local governments for use in road construction and maintenance. In 2010, after the fuel tax reforms, tolls on class II roads in 17 provinces were lifted—about 100,000 km of roads were converted to nontolled facilities and 1,723 toll stations were removed.

The fuel tax and the vehicle purchase tax are charges for using roads rather than environmental taxes A vehicle purchase tax, a portion of which is earmarked for the funding of road construction and maintenance, is also applied. Projections of the portion of the fuel and vehicle taxes available for road costs show that it will fall short of total road construction and maintenance costs (Figure 4.7). Higher rates of tax are needed if these taxes are to act as a penalty for the environmental externalities arising from fuel use.

The vehicle purchase tax is set at 10% of the value of the vehicle purchase price. This means that the tax is independent of the magnitude of emissions and the environmental effect of the vehicle. That is, a vehicle with high emissions could be taxed at the same rate as a vehicle with low emissions as long as the purchase price is the same. This weakness was partially, and temporarily, addressed in 2009 through a discount (a 5% tax rather than the standard 10% tax) on cars with small engines. The discount has since lapsed and is no longer provided. In contrast, since September 2008 the consumption tax on passenger vehicles has been levied at a higher rate for large vehicles. An annual vehicle and vessel tax was also introduced in



January 2012 at higher (but still very low) rates for larger vehicles. Such differentiation would enhance the environmental benefits of the vehicle purchase tax.

c. Improving Sewage Charges

The sewage charge targets more than 100 contaminants—mainly atmospheric pollutants and the revenue is used for special environmental protection initiatives.³⁸ Converting the sewage charge to a tax and making the following other changes could increase its environmental contribution:

- Raising the level of the charges. Sewage charges should ideally be set in accordance with the marginal cost of pollution control activities. But the current charge is typically less than the actual cost of contamination control. This means it is cheaper to pollute than to prevent pollution.
- Widening the base of the sewage charge so that it includes polluters currently excluded from the charge, such as households.
- Setting a minimum level of charges. At present, rates are set locally to allow tailoring to local conditions. This practice can, however, encourage rent-seeking behavior by polluting enterprises. Minimum levels could help curb such behavior.
- Strengthening enforcement.

³⁸ Under the 2003 regulation "Provision of Collection and Management of Sewage Charges."

3. New Directions for Environmental Taxation

The PRC has a range of options for using taxes to curb environmental damage. These include the simple excise, a targeted consumption tax, an emissions tax, and a carbon tax.

Excises are the simplest option. They are taxes levied on local production, normally at the point of production. Environmental concerns are, however, typically not the primary goal of excises, which are instead seen as revenue-raising instruments. Notably, excises on fuel are common, but they are usually not modulated according to the environmental impact of the specific energy sources, but rather tend to be based on revenue potential. For example, diesel is taxed less than gasoline in many countries because diesel is used in transporting goods and by industry (e.g., by the agriculture and fishing industries), and governments are reluctant to hamper such economic activity. The demand for gasoline, on the other hand, is seen as less responsive to tax increases, because more is used by households, and therefore a better means of raising revenue.

The consumption tax would be simple to apply

The PRC's consumption tax already has some differentiation by commodity based on an environmental or social rationale. For example, a higher consumption tax rate is applied to leaded gasoline, compared with unleaded gasoline, and to larger passenger vehicles. Higher consumption tax rates on a broader set of commodities that align with their adverse environmental impact would have the advantage of building on an existing tax system. Administration and compliance costs would be relatively low. The consumption tax also has the advantage of treating local and imported goods equally, in contrast to an excise, which is a tax on local production. The main challenge in implementing such an environmentally targeted consumption tax is the accurate determination of an appropriate tax rate.

The emission tax is a more sophisticated option

Taxes based on measured emissions are linked directly to metered or measured quantities of polluting effluent or emissions.³⁹ Specific examples of measured emission taxes include Sweden's tax on nitrogen oxide emissions, and emission charges for water pollution in the Netherlands. In all these cases, emission sources are charged an amount based on measured total emissions from each source. Compared with the consumption tax, measured emission taxes have the advantage of better targeting of environmental damage and coverage of all sources of emissions, not just the final users that are subject to the consumption tax.

Emission taxes are, however, complex and costly to administer. They can require some form of metering and this can be difficult and may require new procedures or new equipment and controls. For some goods, the taxes can also give rise to illegal, environmentally harmful behavior, such as dumping of toxic materials, in an effort to avoid paying the tax. Because of the complexity of emission taxes, the response of firms and individuals and the likely evolution of the technology can be hard to predict. To reduce administrative costs (and also

³⁹ An experimental cap-and-trade system was introduced in selected areas in the PRC in 2013, as a potential alternative to a carbon tax. The initial trade took place in Shenzen in June 2013 for CNY300,000, but it is still too early to assess the effectiveness of the system. Pilot emission trading schemes are likely to be launched next in Beijing, Guangdong, and Shanghai (see http://www.tanpaifang.com/ tanjiaoyi/2013/0622/21590.html and http://www.rsc.org/chemistryworld/2013/11/carbon-emissionstrading-schemes-debut-china).

resistance from taxpayers), the coverage of emission-based taxes is often kept low, but this, of course, lessens their impact.

The carbon tax now used in a number of countries is an emission tax in a form that makes it simple to administer. It relies on measurements of product use, based on assumptions of carbon content, rather than on the metering of carbon emissions. While carbon taxes are imposed on fossil fuels, with the intent of reducing greenhouse-gas emissions, they have the beneficial by-product of also reducing sulfur dioxide and nitrogen dioxide emissions. Higher pollutants are taxed more heavily; for example, a CNY30per-ton carbon tax translates (at international prices) into a 13% tax on coal (0.605 tons of carbon per ton of coal) and a 5% tax on natural gas (0.027 tons of carbon, same in volume as a ton of coal). Low-carbon taxes yield major dividends. They (i) combat climate change; (ii) strengthen the fiscal position of governments (e.g., a CNY30-per-ton carbon tax could raise revenue equivalent to as much as 1% of GDP); (iii) improve the economic efficiency of the tax system, as polluters are required to pay more of the full cost of their activities; and (iv) reduce local air pollution.

Ideally, a tax on emissions should be levied on all relevant firms, and individuals. In practice, emission taxes such as a carbon tax have faced challenges in minimizing exemptions. For example, when the European Union contemplated the introduction of a carbon tax in the early 1990s, an exemption for the six most energy-intensive sectors was proposed. But such measures also have drawbacks. They tend to exempt sectors with the greatest emissions and where the need of abatement is the greatest; provide the worst incentives, as they suggest that the tax can be avoided; and give rise to socially wasteful use of resources in lobbying for exemptions. Finally, exemptions generate a need for additional taxation to compensate for that is not raised revenue.

A gradual approach to expanding environmental taxation is attractive. Expansion can follow two distinct phases. First, the expansion could be in the form of an increase in consumption tax rates with a targeted expansion of the tax base. The second phase could use experience gained in the first and carefully explore the introduction of more complex emission taxes. The aim of the second phase would be to take a systematic, cohesive approach to environmental protection through taxation.

A key issue for the second phase would be the potential impact on the international competitiveness of the economy. This impact will become more pronounced as environmental taxes expand to cover all users (not just the final users that are subject to the consumption tax). Cascading taxes could arise through interindustry transactions. And where domestic output competes with products of foreign producers not subject to similar environmental taxes, the competitive position of domestic firms will be eroded.

A second key issue for the second phase is the distribution impact of environmental taxes, particularly taxes on energy. A large share of low-income household budgets is taken up by electricity, heating fuel, and transportation expenses. Environmental tax reforms need to be embedded within a complete package of measures that account for and offset these distributional effects.

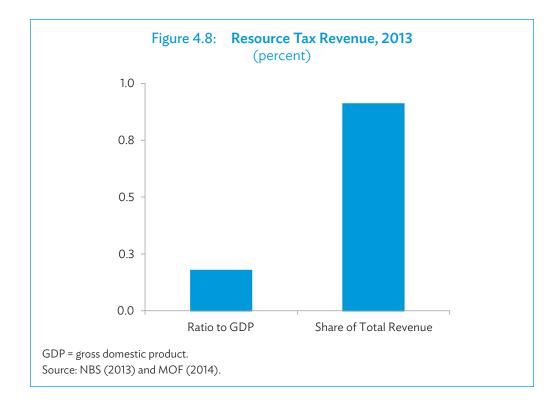
An environmentally targeted consumption tax could provide a first phase of reform

G. Ensuring Fair Taxation of Natural Resources

The PRC's natural resource taxes were first implemented in 1984, but revenue was low. Their relative importance declined further during the 1990s and the 2000s because the tax was a specific tax (i.e., a tax on quantity), and the rate was not adjusted over time. In 2011, the tax on oil and natural gas was converted to an ad valorem tax so that revenue would rise as the resources increased in value. Taxes on coal and ores were raised while remaining specific taxes. Nonetheless, revenue from resource taxes is still low (Figure 4.8). There are also many other related taxes, including a royalty on oil and gas production, an excess profit tax on oil, and a fee on the exploration and transfer of mining rights.

There are now 44 cities in the PRC classified as resource exhausted. Many face rising unemployment rates, as high as 80% in some cases. Pressure has thus been placed on funding for local services, and less resources are available for cities to develop alternative employment opportunities. In anticipation of such impact and in an effort to counter it, an environmental fund was established in 2006. This "tax-like" instrument required enterprises to contribute funds for mine rehabilitation and the establishment of sustainable, post-mining activities.

The system for raising revenue from natural resources that has evolved is cumbersome and has a poor record in managing environmental degradation. The resource tax itself does not generate much revenue and in the case of nonpetroleum products does not share the benefits of rising prices. Local governments have little incentive to enforce the environmental fund as it imposes additional costs on industries already in decline, and it does not form part of the budgets for which they are accountable. Firms, on the other hand, have few incentives



to invest in new technology or navigate through local regulations and red tape in order to make full use of the resources.

The PRC's experience highlights some challenges in taxing natural resources. In some federal countries, such as Canada and the US, natural resources are the property of the state or province, and the options and solutions are different from those facing unitary countries like the PRC and Indonesia, where the resources are the property of the country as a whole. However, the interests of the local governments where the resources are located must be taken into account.

Such a package should measure and consider the effects on producers, the sharing of the benefits of resource extraction with the producing region, and the need for sustainable development. While the environment fund is well intentioned, the management of yet another off-budget fund has proved challenging for stretched local resources and capabilities, and is exposed to rent seeking. There is a need for an alternative mechanism that is within local capacity and is backed by efforts to streamline the regulation of the industry so that resources are fully used. In addition, the revenue flowing to local governments must at least compensate for the environmental and social impact of natural resource exploration and exploitation.⁴⁰

H. Refining the Enterprise Income Tax

The 1994 tax reforms brought major improvements in the EIT (the equivalent of the corporate income tax or company tax in other countries). But not all issues were adequately addressed. Administration by ownership type continued, with local administrations still collecting EIT from locally owned SOEs, and the SAT administering the rest. While this arrangement helped to sell the idea of a SAT to the provinces, it perpetuated distortions associated with SOEs. Moreover, EIT regimes with differential features between foreign and domestically owned firms were maintained, together with generous tax incentives for foreign firms. Despite a common nominal statutory rate of 33%, the effective rate for foreign firms was at least 10 percentage points lower.

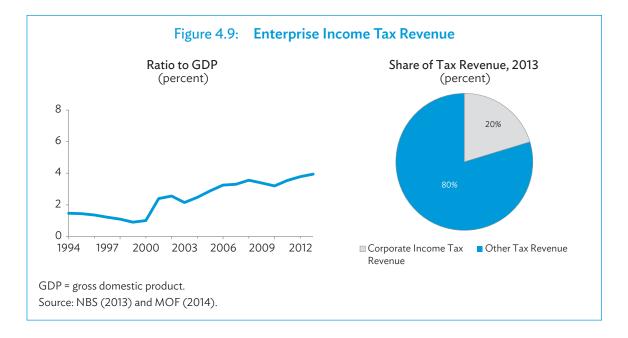
Reforms implemented in 2008 brought the EIT largely into line with international norms. They leveled the playing field for all companies, foreign and domestically owned, applied a tax rate of 25% that met international standards, and minimized preferences. The reforms supported a continued rise in EIT revenue (Figure 4.9).

Favorable tax treatment is afforded to investments in agriculture, fisheries, forestry, animal husbandry, basic infrastructure, environmental protection, energy and water conservation, and technology industries. Building and structures also receive relatively more favorable depreciation treatment than machinery and equipment. The tax regime offers windfall gains for existing investments or investments that would have been undertaken even in the absence of incentives. Long tax holiday periods are provided and accompanied by interest deductions and carry forward of capital consumption allowances and tax losses. Collectively,

Tax incentives warrant further consideration

The natural resource tax must be redesigned as part of a package

⁴⁰ See ADB (2012b, 2012d) for further discussion of resource taxation.



these measures have the potential to exceed the cost of incremental investment and give rise to negative marginal effective tax rates. Most tax incentives are discretionary and involve an application and approval process. Such discretionary arrangements are exposed to governance shortcomings.

Direct subsidies are a targeted and more transparent alternative

Tax incentives also distort investor choices as to the business organization, the sector, the type of asset, and the location of investments. They introduce significant complexity into the EIT and create opportunities for red tape, and worse, for corruption. An alternative would be a low-tax, low-incentive and stable regime. The costly tax holidays could be replaced by tax credits or fast write-off of designated investments. These alternatives could be provided automatically, thereby reducing the risk of corruption, and could be better targeted. Supporting industries with direct subsidies is another, more transparent alternative to providing incentives via the EIT.

The link between the EIT and the PIT is another matter that could be examined. In many developing countries with weak PIT design and implementation, the withholding of tax on dividends and interest payments at the EIT rate provides a mechanism for collecting the PIT. This is in effect the PRC's approach. Others countries such as Australia have adopted full imputation, applying a withholding tax while crediting an individual's PIT liability for the EIT paid.

Withholding taxes in the PRC average 10%, compared with 30% in Australia and the US. The PRC could consider raising the EIT withholding tax rate to the standard EIT rate, and allowing the amount of the tax to be credited toward the PIT liability of the individual. This practice would facilitate the integration of the EIT and PIT systems, and give the PIT a stronger redistributive role. Care must, however, be taken to prevent company directors and

staff from shifting their emoluments (e.g., cars, club memberships, expense accounts) into the expenses of the firm to avoid paying the PIT.⁴¹

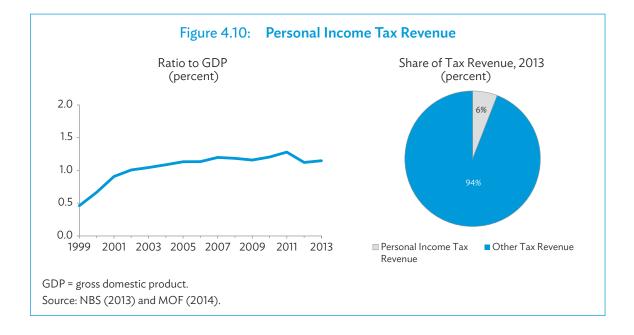
I. Improving the Personal Income Tax

The structure of the PIT remains largely as it was in 1994, with seven tax rates (tax brackets) up to a maximum of 45% applied to individuals with an annual income of over CNY3,500. In 2011 the general deduction amount was raised from the original CNY800 to CNY3,500, thus increasing progressivity by reducing the tax burdens of middle- and low-income individuals and raising the tax burden of higher-income individuals. But the number of PIT payers was also reduced, to only 3% of the total population, substantially narrowing the base, and reducing revenue (Figure 4.10).

Few taxpayers bear personal income tax and revenue is low

More effective design and implementation of the PIT is warranted. Such reform could substantially raise revenue and the share of taxes collected from direct taxes. This is important, as direct taxes are more effective in addressing distributional issues than indirect taxes, which currently yield the bulk of the PRC's tax revenue. This is a priority issue for the tax system, given the rising inequality in the PRC, and the attention paid by government policy to reducing inequality.

A PIT with wider coverage could also be an "automatic stabilizer" for macroeconomic management. Revenue would decline as the economy weakened, thereby helping offset the downturn, and increase in an economic upswing, so as to have a dampening effect on the economy.



⁴¹ See ADB (2012b, 2012d, 2013f, and 2014b) for further discussion of the EIT.

The PRC's PIT is largely a tax on labor income. Together with social security contributions, the effective tax on labor income borne by the small number of taxpayers is likely to be quite high, and much higher than the taxation of income from assets. As in Latin America, this is likely to encourage informality and evasion, and result in collections that are far below the potential.

Moreover, despite a highly progressive design, a relatively low tax rate on asset incomes and some potential to evade it altogether reduces the PIT's role in practice as a redistributive tool. This problem could be lessened if the tax rate on asset income were to be raised from the current 20% to the corporate tax rate of 25%. This would, however, provide an incentive to bestow benefits in kind and to transfer personal expenses to companies. If this problem can be managed, a possible option would be to set a withholding rate of 25%, but treat asset income as ordinary income. Asset income would thus attract a credit if the taxpayer's top marginal rate is below 25%, and be subject to an additional tax if the top marginal rate is higher.

The expansion of the VAT program provides an opportunity to develop a wide information base that can strengthen the administration of the PIT. The SAT has already initiated a project, the Golden Tax Project for the VAT, which will enable verification of information flows and provide the bulk of the observations needed for PIT administration. An option for the future is the establishment of a direct link between the VAT and the income tax systems through a tax identification number. This number would be unique for each taxpayer in the country, and linked to a master file of taxpayers. Data exchanges that draw on various third-party sources of information, such as of the equity holdings of taxpayers, are another option for strengthening the implementation of the EIT and PIT.

Coordination with the social security tax and the expanding system of social benefits could still improve.⁴² The link with the PIT is most important in avoiding a "poverty trap," which could arise if lower-income groups were to receive government-funded social benefits that decline as incomes rise. Such a system of progressively declining benefits, when combined with the higher PIT rates on higher incomes, would translate into very high effective tax rates for lower-income groups, reducing incentives for these groups to increase their income.

J. A Way Forward

The broad direction of the PRC's tax reform agenda has been set by the Third Plenum. The VAT, the PRC's main source of tax revenue, is to be expanded, and the implementation of an expanded property tax, accelerated. These two taxes will provide the bulk of government revenues for the foreseeable future. With careful design and implementation, they can

⁴² An urban enterprise pension system was established in 1997 to provide a contributory pension system for urban workers. This was based on an employee contribution of 8% of salary and an employer contribution of 20% of salary. By 2011, the scheme covered 280 million workers. A rural pension scheme based on voluntary contributions was established in 2009, and covered 460 million people by the end of 2012. In February 2014, the State Council announced that the systems for urban and rural residents would be combined into a single scheme with the aim of addressing pension gaps between urban and rural areas.

provide a stable source of revenue at low administrative costs, and with few adverse effects on the economy's competitiveness.

A key issue in VAT implementation is the treatment of the financial sector. To avoid putting the PRC's financial services at a disadvantage vis-à-vis those in other jurisdictions, all services that earn fees must be brought fully within the tax net. This move may seem counterintuitive, but it will actually insulate these services from the tax as financial institutions will then be able to pass on the VAT to users while claiming the full credit for VAT paid. The only financial services remaining outside the VAT net would be those for which a fee is earned in the form of a margin.

A second issue is the appropriate rate of VAT. The PRC applies multiple VAT rates, providing lower rates to selected activities in order to promote their expansion. But the efficiency of the VAT could be improved if the multiple rates were to be replaced with a single VAT rate applied on a broad base, with full crediting of taxes paid on input throughout the production and distribution stages. Targeted support for priority industries is best provided through other means. Converting the variable rate of refunds currently provided to exporters to a full refund would help improve the international competitiveness of the economy.

A third issue is the introduction of an effective property tax. The pilot schemes in Shanghai and Chongqing are aimed at introducing a genuine property tax on all urban homes based on home values. These schemes warrant extension, joined to design improvements that establish as wide a tax base as possible, which is taxed at a low rate with minimal exemptions. The tax base should be defined reliably and impartially, and taxpayers should be well informed and must have access to an effective, impartial conflict resolution mechanism. Success will rest on how well the government agencies and the private sector are prepared for the introduction of such a tax.

Fourth, the PRC is committed to ensuring environmentally sustainable growth. In the PRC, energy is heavily subsidized and there are virtually no environmental taxes. In such a situation, getting energy prices right by eliminating the subsidies must be a priority. This would be best undertaken following a comprehensive assessment of the regime for taxation and pricing of fossil fuels. Such an assessment would involve a review of the regimes in other countries, in particular those in Scandinavia and elsewhere that have advanced environmental taxation systems.

Careful consideration of the distributional impact of environmental taxes is also required. A large share of lower-income household budgets goes to electricity, heating fuel, and transportation expenses. Energy-based environmental tax reforms will be most constructive if they are part of a package that accounts for and offsets these distributional effects.

Fifth, the consumption tax, with some refinements, is well suited to addressing environmental issues. Higher tax rates levied on a broader range of goods will be required. Goods associated with environmental damage in production or consumption can be taxed according to their environmental impact. Goods that cause relatively less environmental damage may be taxed less heavily than their substitutes. Setting tax rates to match environmental costs will implement the polluters-pays principle. Such a tax can provide valuable experience

The treatment of the finance sector warrants further consideration

The property tax is a key local government tax in other countries and should be in the PRC as well

The government has announced its intention to implement environmental taxes

A pragmatic approach to environmental taxation is to expand the consumption tax in environmental taxation, and become a precursor to an emissions tax, such as a carbon tax. It would have low administration and compliance costs. The tax would discourage environmental damage while providing a new revenue source. But the revenue must always be recognized as being incidental to the primary aim of resolving an environmental problem.

The design and administration of the enterprise income tax and the personal income tax can be improved The Third Plenum called for an increase in the share of revenue generated by direct taxation. Among other benefits, this will improve the progressivity of the tax system and help correct rising income inequality in the PRC. While these taxes are relatively well advanced in their design, some improvements can be made (e.g., by raising the tax rate on capital income), and more importantly administration could be strengthened. The current EIT is applied to too narrow a base and at too low a rate to make an important contribution to ensuring a fair tax system.

The centralization of tax administration through the State Administration of Taxation has its merits Maximizing the effectiveness of tax administration and minimizing its cost is an important, overarching aim of tax policy. Taxation, and its administration, is much more centralized in the PRC than in most OECD countries. While this centralization has some disadvantages, notably in contributing to a mismatch in local government revenue and administration, it has the advantage of facilitating tax harmonization across the country. Centralizing administration facilitates information sharing and the adoption of modern administration techniques, such as single taxpayer identification numbers. It is particularly important for the VAT, as the information generated by a complete VAT chain is critical to the operations of other taxes, such as the EIT and the PIT. Centralized administration helps minimize tax evasion and avoidance, and the burden of tax compliance.

Centralized administration does not, however, mean that all tax revenue would flow to the central government. The allocation of tax revenue is a key issue for the PRC's public finances, and is addressed in the next section in the context of intergovernmental fiscal relations.

Matching Revenue Powers with Spending Responsibilities

A. Introduction

While much has been accomplished in developing a system of intergovernmental fiscal relations in the PRC, rapid economic transformation and fast-paced urbanization have brought to the fore a range of concerns:

- insufficient funding for local governments, both urban and rural, to meet their responsibility for delivering public services such as education, health, and social welfare;
- low priority accorded to funding infrastructure and public services in rural areas, which has resulted in social exclusion;
- extra difficulties for fiscally poor local governments;
- incompatibilities arising from funding responsibilities for specific functions of the central government that are delivered by local government, notably for social insurance; and
- absence of a legal and institutional framework for fiscal discipline and fiscal policy coordination, and the large overhang of local government debt this absence has fostered.

The origins of these concerns lie in the poor alignment between spending powers and responsibilities under the system of intergovernmental fiscal relations.

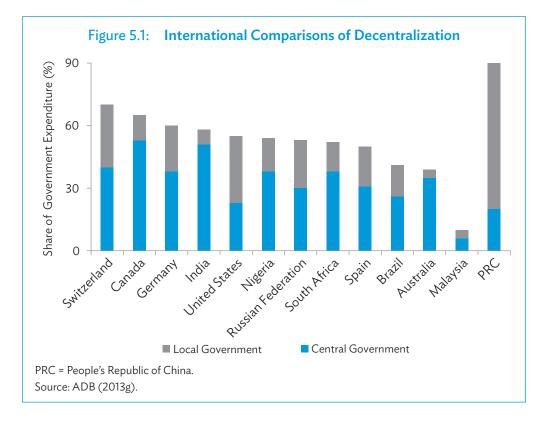
B. Allocation of Responsibilities and Resources

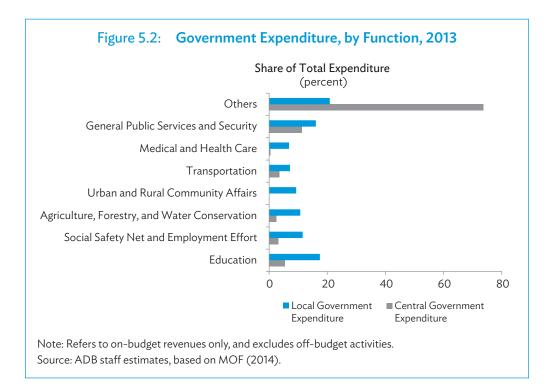
The PRC is a unitary state with one government but five levels, which execute the mandate of the unitary government. It has established one of the most decentralized fiscal systems in the world, as measured by the share of local government expenditure in total expenditure (Figure 5.1). The constitution entrusts central government with policy making, standard setting, and legislative responsibilities. The central government is also responsible for foreign affairs, currency, defense, and debt, and partly for scientific and technological development. Most service delivery responsibilities, which account for the bulk of government expenditure, are assigned to the four tiers of local government (Figure 5.2). Local governments account for around 85% of government expenditure.

The central government retains around half the tax revenue, collecting all VAT on imports, 75% of VAT on domestic production, consumption tax revenue, 60% of CIT and PIT revenue plus CIT payable on central government enterprises, and all revenue from customs duties, the vehicle purchase tax, and resource taxes. Revenue from the business tax flows to local governments, which also retain 25% of the VAT on domestic production, 40% of CIT and

Local governments carry most of the responsibility for service delivery

But local governments are allocated only half of the tax revenue





PIT revenue plus CIT payable on their own enterprises (excluding that payable on central government enterprises), and all property-related taxes. The authority to introduce taxes or to modify their structure—base and rate—resides largely with the central government, but local governments have full autonomy for those taxes whose revenues are assigned to them or that are collected by local tax agencies.

Adding to the centralization of tax revenue is a tendency for shared tax revenue to be paid to the jurisdiction where a business maintains its headquarters. This occurs even though the economic activity, the tax base, and ultimately the tax revenues collected may have been generated in several other jurisdictions, as is the case with a business that has factories in several provinces. These problems are most acute for the VAT and EIT, although the central government has recently taken steps to improve the allocation of EIT revenues by adopting a formula-based system of distribution.

The revenue effort of provinces has declined in recent years, as shown by a decline in the ratio of actual tax revenues to potential tax revenues for each province (Box 5.1). Local government revenues are now growing at a slower rate than GDP, and this is making it harder for local governments to fund their public service commitments in a rapidly growing and increasingly urbanized economy.

Some guidelines for revenue assignments to subprovincial governments have been issued by the central authorities, but in practice the provincial governments have considerable discretion in assigning revenue. This arrangement has given rise to a variety of revenue assignments at the subprovincial level, which tend to disadvantage county and township governments, particularly those in economically weaker areas. The general practice that has evolved is as follows:

- Revenue from major or key sectors or industries (e.g., the financial sector) is allocated to provincial governments;
- Taxes with relatively small revenue yields, such as the resource tax, the urban maintenance and construction tax, and the real estate tax, are typically assigned to the prefecture (including municipalities) and county governments; and
- Revenue from the major shared taxes, including the VAT, the EIT, the PIT, the business tax, and the urban land occupation tax, are shared by the provincial, prefecture (including municipalities), and county governments.

The system of intergovernmental fiscal relations that has emerged is characterized by large disparities across provinces and within provinces in tax revenue per capita (Figures 5.3 and 5.4).⁴³ This is not surprising, as differences in tax revenue per capita are a normal outcome in most decentralized systems where regional and local jurisdictions differ in the level of economic development. It is to be expected that richer jurisdictions will collect higher revenues per capita than poorer ones. But the differences in tax revenue per capita across the PRC's provinces have grown over time and remain high by international standards. These

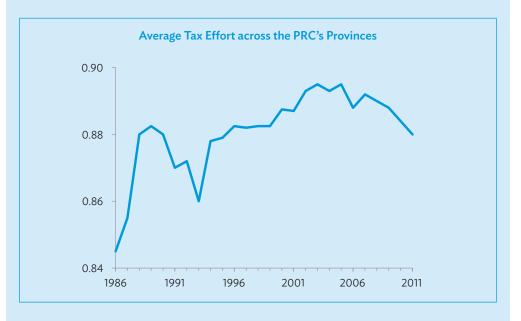
There are large disparities in tax revenue across local governments

⁴³ More formally, the system is subject to vertical fiscal imbalances, which refer to the differences between levels of government (as opposed to horizontal fiscal imbalances, which refer to the differences between governments at the same level).

Box 5.1: Some Empirical Observations

Tax effort by local governments varies across the provinces. How well local governments have done in collecting tax revenue is typically measured against a tax effort index. This is defined as the ratio of actual tax revenue to potential tax revenue for each province. The tax effort index varies substantially across provinces. Coastal and central provinces tend to show higher tax effort than western provinces. Provinces with higher fiscal deficits, higher degrees of fiscal decentralization, and higher educational level of tax officers tend to exert greater tax effort. And provinces with greater fiscal transfer dependence tend to exert lower tax effort.

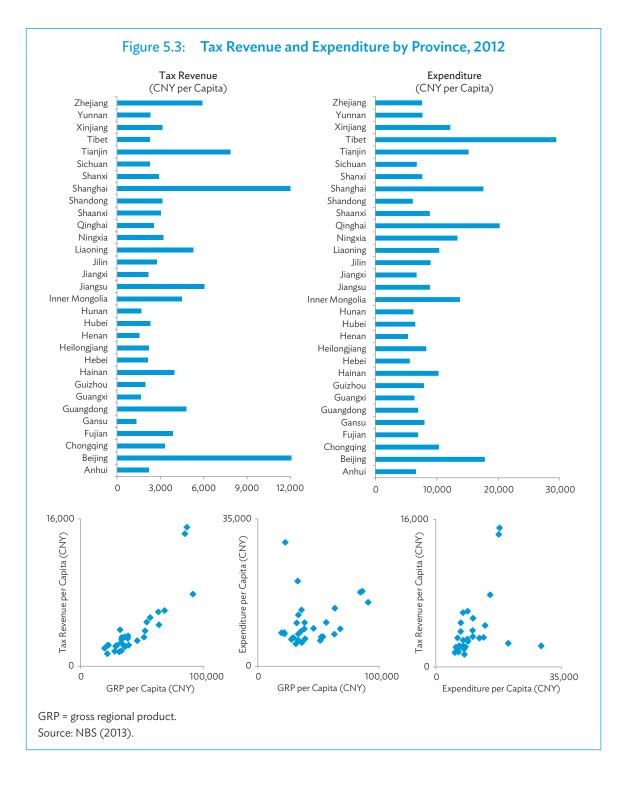
Local government tax effort is now trending downward. There was a rising trend in the tax effort index from the 1994 reforms until 2004, but tax effort has since declined. The decline coincided with the county power expansion reform, which loosened the control of provincial governments over county governments.

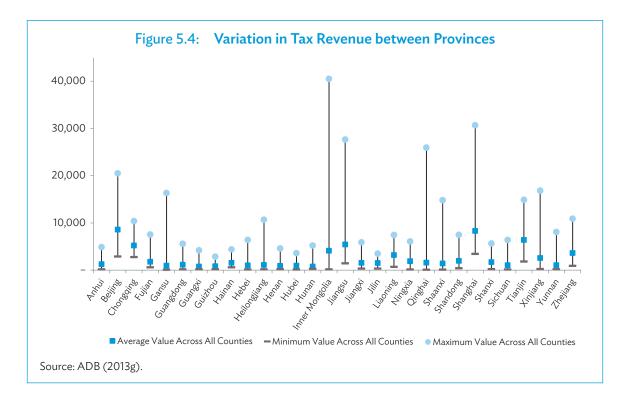


Local government revenues are growing relatively slowly. This growth in revenues is estimated in terms of revenue buoyancy, which is the responsiveness of local governments' own revenues to changes in GDP. The national average for provincial tax buoyancy is 0.93%, indicating that when real GDP rises by 1%, own revenue rises by 0.93%. An average buoyancy coefficient of less than one means that local government provincial resources would be less and less able to cover the costs associated with expanding demand for public services.

GDP = gross domestic product.

Note: Average tax effort refers to the ratio of actual tax revenues to potential revenues. Potential revenue is derived from the application of stochastic frontier analysis, which identifies the key determinants of revenue performance across provinces (e.g., the presence of manufacturing industries, population density) and estimates what a province could earn, given the presence of these determinants. Source: ADB (2013g).





differences are partly attributable to the tax rebate transfers provided to the richer provinces to gain their support for the 1994 reforms.⁴⁴

These disparities in revenue are only partly corrected by the transfer system

A well-designed system of intergovernmental fiscal relations can handle disparities in own-source revenues via the implementation of equalization grants. But the PRC's transfer system works only moderately well, and does not achieve equalization. Disparities in expenditure per capita are lower than those in own revenues, but the disparities in expenditure per capita remain high by international standards and have worsened in recent times. The ratio of the highest to the lowest value of expenditure per capita across provinces has risen, from 7.1 in 1995 to 9.3 by 2011.

Fiscally poorer provinces have become more transfer dependent. Transfer dependence is measured as the ratio of fiscal transfers to total expenditures in the province's budget. Trends vary across provinces, but richer provinces in the eastern region have generally become less reliant on transfers while poorer provinces in the central and especially the western regions have become increasingly more dependent on transfers. These different trends can at least be partially explained by the differing sizes of the regional economies and their respective rates of growth.

⁴⁴ The contribution of the tax rebate diminished over time as the tax rebate was fixed in nominal terms. It was, however, augmented recently by a portion of the growth in VAT revenue.

C. Consequences

1. Unequal Access to Public Services

The expenditure disparities result in unequal access to public services and undermine the equity of the PRC's development path. The differences in access to education and health services have declined substantially in recent years, but are still high.

The magnitude of the disparities in expenditure across provinces is made clearer by estimates of the extra transfers required to remove them. It has been estimated that raising poorer provinces' expenditure on a per capita basis to the national average would require a 27% increase in total central government transfers (based on the average values for 2009–2011).

2. Inefficient Assignment of Responsibilities

The basic expenditure assignments of the different levels of government remain fundamentally the same as they were several decades ago. Yet the arrangements that were in place several decades ago were not necessarily optimal for the delivery of public services. And the system of intergovernmental fiscal relations has failed to keep pace with the changes arising from the fast rate of industrialization and urbanization in the PRC and the availability of new technology for delivering public services. The issues are especially acute below the provincial level.

A conspicuous example is the responsibility assigned to municipal and county-level governments for pensions, unemployment, and income support schemes. Such support is almost nonexistent in some rural areas, and even in some urban areas the support can be poor. This is because poorer communities with the highest needs are least financially able to fund these expenditures. The inability of many lower-level governments to finance the social security schemes has led to widespread pension arrears and defaults. In some cases, the central government has had to intervene with subsidies.

In other countries, such assignments tend to be central government responsibilities because social security schemes require a level of risk pooling and redistribution that cannot be matched at low levels of government. Modern information technology makes large schemes both feasible and efficient. Either national or provincial systems would have offered a better arrangement. This point has been accepted, and in February 2014 the central government announced reforms that would introduce a single pension scheme covering rural and urban areas.

3. Excessive Variation in Subprovincial Arrangements

Even though the central government has been increasingly providing guidelines for subprovincial expenditure management, provinces retain a high level of administrative discretion in determining expenditure assignments and budget management for their subprovincial governments. Significant differences have emerged across provinces in the assignment of responsibilities to subprovincial governments.

Variations in approaches undermine service standards

In theory there is nothing wrong with a variety of approaches to expenditure assignments across provinces. But the absence of a holistic approach to expenditure (and tax revenue) assignments has made it more difficult to match revenue with expenditure functions at each local level. In addition, the multitude of arrangements has made it difficult to safely target pass-through transfers from the central government to lower-level local governments, and to set standards for the provision and performance monitoring of public services.

Variations in approaches can be a barrier to the implementation of central initiatives There is a general perception that provincial and prefecture-level governments do not allocate enough funds to lower-level governments, or that they have retained funds from central grants that are destined for counties and townships. Underfunding the lowerlevels of government can prevent policy directions established by the central government from being implemented. Being able to use their discretion in deciding how they want to organize their intergovernmental fiscal relations within a province has its advantages for provincial governments in a country as large and diverse as the PRC. But such flexibility must be balanced with the ability of the central government to implement policies and achieve national objectives. Recent "province manage county" reforms were in that direction, but more can still be done to balance provincial flexibility in setting fiscal arrangements with the attainment of national objectives.

4. Weakened Accountability

Difficulty in identifying which level of government is responsible for the delivery of specific services has weakened accountability. This has resulted in the failure of some local governments to prioritize local budget expenditures so as to best meet the needs and preferences of residents.

The lack of revenue autonomy among local governments tends to lower the efficiency of public expenditures, and also lowers overall fiscal responsibility in the public sector. It is much easier for local officials to overspend or spend on lower-priority items (even going so far as to create infrastructure with substantial excess capacity) if they and residents in their jurisdictions perceive the funds to have zero costs, as in the case of transfer funds. But, of course, those public funds received in the form of transfers do not have a zero cost for the country as a whole.

In addition, low accountability has distorted incentives because local officials have been rated and promoted for their performance mostly in the area of economic development, as opposed to the delivery of public services. The government is now shifting such incentives to performance delivery.

5. Blurred Roles for the Public and Private Sectors

Another consequence of the lack of explicit expenditure assignments has been a blurred distinction between public and private sector activities. During the transition from a planned to a market economy, the government has increasingly been relying on market mechanisms. But governments remain active in many areas dominated by the private sector in more market-oriented economies. Local governments at all levels continue to own a large number

There is considerable murkiness regarding which level of government is responsible for what of SOEs, and there are still channels through which governments can directly or indirectly encroach into private sector activities through their SOEs.

This issue has been reinforced by the "ownership" criterion for the sharing of taxes among different levels of government. That is, governments can still retain some taxes paid by their SOEs. This provides local governments with significant incentives to develop and own commercial enterprises.

6. Funding Uncertainty

There is no explicit rule for determining overall funding, and this is decided in the annual budget on an ad hoc basis. This results in budgetary uncertainty for local governments. Many countries have addressed this issue by using a formula for determining the pool of equalization funds, for example, a percentage of total tax revenues lagged one or two budget periods. The PRC has begun to move in that direction by earmarking the central government's share of income tax revenues for equalization objectives, but not all funds are used for equalization purposes.

7. A Multitude of Transfers

While the system of intergovernmental transfers has evolved on an ad hoc basis over the past 2 decades, it has retained its fundamental nature of origin-based shared taxes supplemented by grants and subsidies for a myriad purposes. One result has been a complex system of transfers that is fragmented and contains redundancies.

When the central government introduces an important policy toward local governments or has to address any emergency issue, it tends to establish an earmarked grant. This effectively leaves less funding available for equalization purposes, and can lead to confusion and increases the administrative burden on recipient governments. In addition, many conditional grants require local governments to match a portion of the funds, increasing pressure on local government budgets and resulting in less discretion over their budgets. Matching requirements can be effective, for example, in encouraging ownership by subnational governments of infrastructure projects they finance. However, in some cases matching requirements have led to "creative" public accounting practices by local governments, such as "rematching" (using the same funds to match different earmarked grants). But they would be more effective in a reformed and simplified system of conditional grants.

D. Reform Options

1. Clarification of Expenditure Assignments

Fundamental reform of the PRC's intergovernmental fiscal relations has not come easily. The two major reforms of intergovernmental relations, undertaken in 1979 and 1994, took place in the face of a looming fiscal crisis and focused on the revenue side of budget. They emphasized the reform of revenue assignments, tax policy, and tax administration. There

The total funding for equalization grants is uncertain has never been equivalent pressure to reform other aspects of the system, in particular, expenditure assignments.

Expenditure assignments warrant fundamental reform Reform is required to establish a clear and explicit assignment of expenditure responsibilities at all levels of government. This would (i) facilitate a more efficient organization and provision of basic public services; (ii) significantly improve the accountability of public officials; (iii) help eliminate government encroachment on the private sector; and (iv) help address fiscal disparities.

There are opportunities to move central government agencies away from micromanaging decisions that are ostensibly the responsibility of the local governments, from blurring the lines of service responsibility between the central and local governments, from placing a burden on the administrative capacity of local governments with duplicative requirements, and from reducing the budgetary autonomy of local governments. The system of intergovernmental relations must create constructive incentives for local governments, rather than contribute to micromanagement.

Reform of expenditure assignments will be most effective if it covers all levels of government and emphasizes exclusive over concurrent responsibilities. When concurrent responsibilities are unavoidable, they can be clarified through the explicit assignment of the multidimensional array of attributes that go with each function, including: (i) producing a good or delivering a service; (ii) providing or administering the service; (iii) financing the service; and (iv) setting standards, regulations, and policies for the provision of services.

In assigning expenditure responsibilities, it is appropriate to seek balance according to economies of scale, the internalization of costs, and the available administrative capacity. There should be asymmetric approaches to allow local government units with greater capacity to assume greater responsibilities. In addition, it will be important to improve coordinating institutions across levels of government to address any differences in interpretation or conflict arising from the expenditure assignments.

Near-term reforms are available

If a comprehensive reform of expenditure assignments is not immediately possible, less ambitious reforms are still worthwhile, in particular reform of the assignment of basic services at the subprovincial level. For example, financing and provision of social security services (pensions, and disability, survivor, and unemployment benefits) should be completely recentralized, at the provincial or central government levels. The recent policy measures, which assign more responsibility for social security to the central level, are steps in the right direction. Ideally, ambiguities in certain areas such as infrastructure, agriculture, education, culture, and health care would also be addressed.

2. Setting Aside the Property Tax as a Local Tax

Substantial revenue reform is also warranted Revenue reforms that increase the autonomy of local governments would be a sensible complement to the reform of expenditure responsibilities. A significant degree of local government revenue autonomy is central to the effective functioning of a decentralized fiscal system. One of the most important issues now facing intergovernmental relations in the PRC is how such autonomy can be provided so as to reduce expenditure inequalities while ensuring fiscal sustainability.

The need to address the rising debt of local governments has raised the imperative to provide local governments with better instruments for collecting own-source revenue. This refers to revenue that local governments can independently adjust in order to meet additional calls on their resources, such as rising liabilities. For example, an own-source tax would be designed to allow local governments to adjust tax rates.

The property tax has a number of advantages as a local tax, including relative ease in determining its origin. Setting aside the property tax as an own-source tax for local governments is in line with the central government's decision to expand the property tax. Tax rates could be set by local governments within maximum and minimum rates, and SAT could administer the tax on their behalf.

Establishing the property tax as the main tax exclusively controlled by local government will be a big challenge for some lower-level governments (e.g., counties and townships). Some of these jurisdictions are still isolated from the modern market economy and rely mainly on traditional agriculture, and revenue prospects are weak. Property taxes, however, are a good fit for the future needs of such governments.

3. Encouraging Tax Piggybacks

Another way of enhancing revenue autonomy is to allow the joint use of some major taxes. Internationally, the multiple use of the same tax base, if properly coordinated, has been found to be a good way of meeting revenue needs while simplifying administration and minimizing compliance costs.

The joint use of major taxes can be provided through piggybacked taxation. This would give local governments autonomy in setting their own rates for the designated taxes within maximum and minimum rates legislated by the central government. The revenue collected would then be provided to local governments.

Piggyback taxes could, over the long-term, potentially replace the current arrangements for tax sharing based on tax rates determined by the central government. Under the current arrangements, revenue is shared between different levels of government, but lower-level governments have no control over the tax rate. Accordingly, a shared tax is not genuine own-source revenue, whereas a piggyback tax gives local governments the power to control the revenue they receive. A piggybacked tax would remain centrally administered by SAT to maximize its efficiency and minimize its cost.

Piggybacked taxes bring to the fore the issue of tax competition across local governments. Even in the current system, tax competition has been taking place. But it has not always been transparent and rational. The adoption of piggybacked taxes would formalize tax competition in an open and transparent manner. Although some degree of interjurisdictional competition can be desirable, excesses such as "a run to the bottom" need to be avoided through the application of minimum tax rates.

The property tax is the best candidate for a local government tax

Piggyback taxation is a good long-term option

In other countries, piggyback taxation is most commonly applied to the EIT and PIT, which are currently shared taxes in the PRC. This approach is not without its challenges. One is the difficulty of accurately determining where income is generated. Also, profits, which are the tax base of the EIT, are subject to cyclical instability and tend to be volatile. The central government is better placed to manage such volatility through budget deficits, whereas local governments with their expenditure needs and more limited financing options require more stable tax bases.

The piggybacking of taxes may be best suited to provincial governments or larger municipalities. Piggybacking to lower-levels could incur a high administration cost in allocating taxes. Rather than piggybacking all taxes to the lowest level of government, more extensive intergovernmental grants and reservation of some taxes, such as the property tax, for local governments could potentially meet their revenue needs.

4. Rebalancing Transfers to Local Governments

Intergovernmental transfers can also be improved

The core problems to address are disparities in expenditure and service output across and within provinces. While fiscally poor provinces do receive substantially more transfers than richer provinces (Figure 5.5), large disparities in resourcing remain.

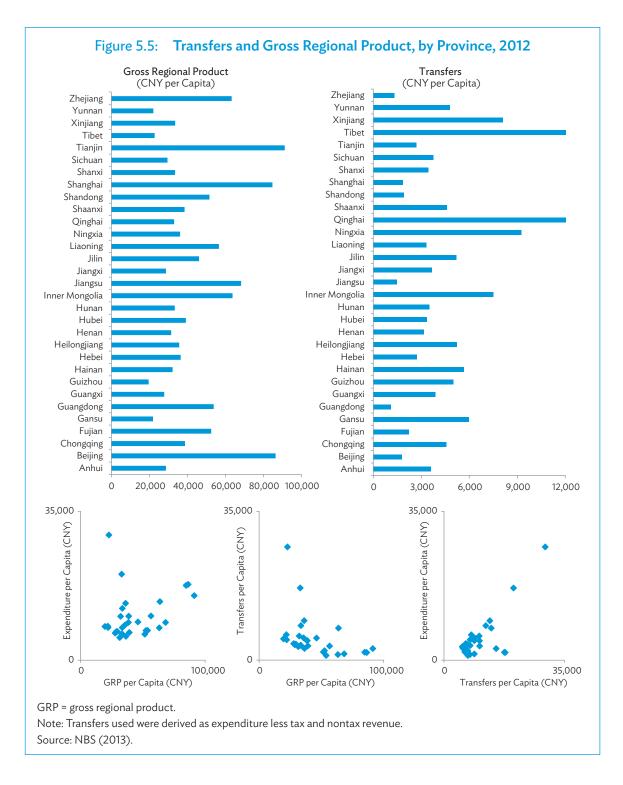
Revising equalization transfers could lessen the problem. New, stable, and transparent funding rules that address both the overall level of transfers and their distribution could be considered. Transfer formulas that use measures of expenditure needs and own-source revenue capacity could be tied to performance-based transfers that encourage budget process reforms and improvements in service delivery.

One reform option would be to provide for an overall increase in the value of the transfers, with the extra resources targeted at fiscally poorer governments. This would require a large increase in grants.

Some redistribution of grants is likely to be necessary

For example, it is estimated that raising the fiscal resources of local governments to the current national average would require a 27% increase in current transfers. Under this adjustment, 13 provinces would need additional transfers. Such a large increase is likely to be unaffordable. If all citizens are to have access to basic public services, some redistribution of existing transfers from fiscally richer to poorer provinces is probably required.

Lower-level transfer systems can be redesigned to achieve equality of treatment for governments at the various levels while allowing upper-level governments to pursue policy objectives through local government activities and budgets. Such reform would benefit from clear guidelines for the provinces, prefectures, and counties to introduce (i) sufficient funding for equalization grants for the governments immediately below; and (ii) distribution formulas that capture differences in fiscal opportunity and expenditure needs of lower-level governments. Stability and transparency should be the characteristics of these reforms, in order to increase the predictability of local budgets. International experience has shown that the use of formulas for the distribution of funds achieves transparency and stability at lower-levels of government.



Reform will be most effective if supported by clear frameworks for transfer systems at all levels of government. If the goal of the central government is to improve equity in the distribution of fiscal resources, it will not be enough to improve the design and size of central–provincial transfers. Provincial fiscal practices must also be restructured and controlled to make sure that the provinces follow effective equalization policies.

5. Merging Special Transfers into Block Transfers

The Third Plenum demanded the cleaning and standardization of special transfer payments, and committed itself to cutting the number of special transfer payments by one-third in 2014 and to continuing to cut them in coming years.

Many countries have moved away from a myriad special grants and transfers to the use of a smaller set of block grants and transfers, which are normally provided either as general budget support or for priority sectors. They are a better mechanism for ensuring transparent and timely disbursement of funds. Block transfers can still be conditional in the sense the resources could be provided for use in a specific sector, but they normally avoid micromanagement conditionality. They thus provide a compromise between the pursuit of sectoral objectives and budgetary autonomy for local governments.

Over the long-term, block transfers would be most effective if linked to revamped national sectoral policies in the affected sectors (e.g., education and health), and if their level were to be determined jointly with other intergovernmental transfers to achieve a holistic view. If such block transfers prove difficult to implement, a short-term alternative would be to consolidate existing transfers along the lines of priority policy goals.

6. Exploring User Charges and Self-Insurance

The health sector is one of the PRC's expanding sectors. In order to cater to an aging population and rising expectations, large investments have been made to expand facilities and modernize services. In the first 3 years of the new health reform, from 2009 to 2011, the government invested more than CNY1,410 billion in support of the sector's core services. This increased the share of expenditure on health in GDP to almost double the amounts spent over the 2000s. But there are concerns as to whether such expenditure levels can be maintained.

The government is addressing this issue by exploring the balance between user fees and health insurance. A long-term option is to establish universal insurance for basic health-care services. This can be achieved by making existing voluntary schemes—urban medical insurance and rural cooperative medical insurance—mandatory. Those reforms could be linked to improved mechanisms for purchasing medical services, aimed at lowering costs, and a framework for the competitive delivery of services.⁴⁵

Such a sector-wide approach illustrates alternative, innovative ways of addressing expenditure and revenue shortfalls.

⁴⁵ See ADB (2012e) for further discussion of health sector reform.

E. A Way Forward

The starting point for strengthening intergovernmental fiscal relations is to establish formal, stable, and sound expenditure assignments that clarify the responsibilities of all levels of government. An immediate priority is to reassign to the central government the responsibilities for unemployment and social insurance held by local governments.

A second step would be to increase the revenue autonomy of local governments so as to improve the matching of revenue-raising powers to expenditure responsibilities. Revenue autonomy of local governments can also be improved by setting aside taxes for local governments. The property tax is the best candidate for a local government tax, but the revenue of local governments will need to be bolstered by other sources.

The joint use of major taxes can be explored as a long-term option for doing so. The multiple, coordinated use of the same tax base can simplify administration and minimize compliance costs while meeting revenue needs. Instead of current tax-sharing arrangements, local governments can be allowed to piggyback on central government taxes, such as the EIT and the PIT.

A further important step would be to reform intergovernmental transfers to reduce disparities in expenditure and service output across and within provinces. Revised formulas for the level of transfers and their distribution could provide funding certainty and better-targeted fund allocation. This would require a large shift in resources to fiscally poor provinces through the redesign of transfers from the central government. Because provinces have discretion in setting transfers for lower-levels of government, ideally such reforms will be backed by clear frameworks for transfer systems at the subprovincial level.

Reform of intergovernmental transfers provides an opportunity to convert the myriad special grants into a more cohesive form of support. One option is to establish a smaller set of block grants that would be conditional on use against clear policy goals.

Such reforms would represent a major shift in revenue and expenditure across local governments. The aim is to develop an administratively simple approach to providing local governments with the resources needed to meet their expenditure responsibilities, taking into account own-source revenues. Careful study of likely impact, such as through simulation analysis, is required to prepare for such reform. Gradual, step-by-step reform may be better than a big-bang approach.

Expenditure responsibilities need to be reconsidered

The property tax can be set aside for local governments

The property tax should be supplemented by piggybacked taxes

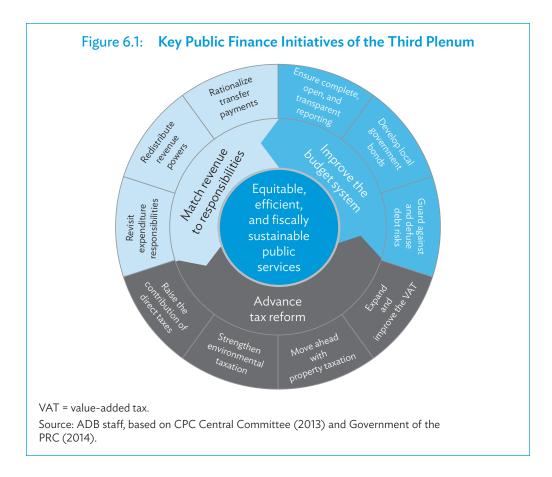
Intergovernmental transfers also warrant reform

Matching revenue powers to spending responsibilities would constitute a major reform program

Concluding Observations and Suggestions

The 1994 public finance reforms represented a pragmatic blend of improvements in tax, administration, and intergovernmental transfer systems to achieve sustained growth with full employment. The next phase of reform should also adopt a pragmatic approach and tailor the reform path to meet the immediate priorities and to work within the capacity for reform.

The Third Plenum outlined a robust reform agenda for public finances. The agenda directly addresses the necessity of improving the management of local government debt, while recognizing the need for a holistic response. A holistic response demands better debt management practices an improved budget system, a strengthened revenue system, and adjustments in the fiscal decentralization system to better align revenue powers with expenditure responsibilities. The key initiatives of the public finance reform agenda are summarized in Figure 6.1.



Studies undertaken under technical assistance provided by ADB suggest that a flexible, sequenced set of actions can make the reforms achievable, with short-term actions securing quick wins, or providing stepping-stones to the completion of larger and more complex longer-term actions. Key actions suggested by ADB are summarized in Table 6.1.

Key Government	ADB's Suggestions							
Initiatives ^a	Short- to medium-term actions	Long-term actions						
A. Improve the Budg	get System							
Complete, open, and transparent reporting	 Improve the debt information systems within MOF and local finance bureaus so that they record all government debt and provide regular public updates on the debt situation Prioritize the adoption of medium-term expenditure frameworks and strengthening of cash management practices Strengthen budgeting for PPPs through quick add-ons to the budget 	 Develop an integrated government financial information management system covering all levels of government and all revenue and expenditure Finalize implementation of medium-term expenditure frameworks Fully integrate PPPs into a multiyear budget framework 						
Develop local government bonds Guard against and defuse debt risks	 Extend the self-issue, self pay provincial bond scheme to other fiscally sound local governments Explore the use of revenue bonds Continue administrative controls on fiscally weak local governments Develop fiscal adjustment paths for governments at risk of debt distress Establish debt target ceilings for local governments Conduct debt sustainability assessments of local governments, inclusive of stress tests (e.g., against changes in land values) Implement an appropriate framework to support the development of independent providers of credit ratings for local governments Implement a pilot risk alert system for local governments 	 Expand the number of local governments issuing bonds Expand the range of bonds issued Consider embedding enhanced rule-based controls in the Budget Law Embed a refined risk alert system within the Budget Law Establish a framework for dealing with local governments in fiscal distress 						
B. Advance Tax Refe	orm							
Extend and improve the VAT	 Continue to replace the business tax with the VAT Provide full VAT refund to exporters Prepare to bring financial services into the VAT net 	 Complete the replacement of the business tax with the VAT Apply a uniform VAT rate across all commodities and paying industries Consider consolidating all VAT administration within a strengthened SAT 						
Move ahead with property taxation	 Expand the property tax pilot schemes in Shanghai and Chongqing to cover residential properties and to levy higher rates Gradually extend the pilot schemes to other municipalities included in the SAT pilot program of property value assessment Study the equity impact and develop targeted social welfare support systems as necessary Establish a credible cadastre, strengthen property databases and the valuation system, and train appraisers 	Complete the rollout of the property tax to all local governments on the basis of the pilot schemes						

Table 6.1: Suggested Actions for Public Finance Reform

Table 6.1 continued

Key Government	ADB's Suggestions							
Initiatives ^a	Short- to medium-term actions	Long-term actions						
Strengthen environmental taxation	 Adopt the polluter-pays principle, which requires tax rates on environmentally harmful goods to match the environmental damage caused 	 Phase out subsidies for environmentally harmful sources of energy 						
	 Expand coverage of the consumption tax to more goods causing environmental harm Adjust the vehicle purchase tax so higher-emitting vehicles pay a higher rate of tax 	• Continually adjust the coverage and rates of the consumption tax so that it remains an effective environment tax						
	 Conduct a comprehensive assessment of energy subsidies and taxation 	 Convert sewerage charges to an environmental tax and extend coverage to other pollutants 						
		• Consider the phased introduction of emission taxes, such as a carbon tax						
Gradually raise the share of direct taxation in total	 Equalize the PIT tax rate on asset income with that on labor income Prepare to replace preferential tax rates and tax 	 Expand the PIT base through adjustments in tax brackets and rates 						
revenue	 holidays in the EIT with targeted, direct assistance Align the withholding tax rate for EIT with the standard EIT rate 	Expand the PIT to other nonwage income, such as capital gainsExplore more effective means of						
	 Improve the integration within SAT of the administration of the EIT, PIT, and VAT 	linking the EIT and PIT, such as tax imputation						
	 Identify and address adverse equity impact (e.g, poverty traps) arising from the PIT 	Phase out tax preferences within the EIT						
C. Match Revenue P	Powers to Spending Responsibilities							
Revisit expenditure responsibilities	 Design revised expenditure assignments for the various levels of government Centralize the social safety net (social security and unemployment support) 	 Adopt new formal, stable, and sound expenditure assignments for the various levels, including those below the provincial level Centralize functions performed more efficiently by the central government 						
Redistribute revenue powers	 Set aside the property tax as an exclusive local government tax Prepare to adopt piggyback taxes as a gradual replacement of shared taxes 	 Complete implementation of the property tax as a local government tax Implement tax piggybacks for the PIT and EIT 						
Rationalize transfer payments	 Conduct a comprehensive study of the redistribution of intergovernmental transfers toward fiscally poorer governments, so as to reduce inequities in access to public services Initiate the consolidation of special transfer 	 Implement a new formula-based system for intergovernmental transfers aimed at equalizing opportunity Complete the consolidation of 						
	payments along the lines of priority policy goals, or possibly into block grants	special transfer payments						

EIT = enterprise income tax, MOF = Ministry of Finance, PIT = personal income tax, PPP = public-private partnership, SAT = State Administration of Taxation, VAT = value-added tax.

^a Based on the public finance Initiatives of the Third Plenum of the 18th Central Committee of the Communist Party of China. Source: ADB staff estimates, based on CPC Central Committee (2013) and Government of the PRC (2014). One of the themes of the reforms is that local governments should be provided with more fiscal autonomy. This may appear counterintuitive since concerns about rising local government debt spurred the reforms. But the absence of the financing instruments and revenue autonomy commonly available to local governments in other countries is one of the underlying causes of the debt problem. The situation is compounded by the absence of hard budget constraints and an expectation that the central government will ultimately assume responsibility for local government debt.

In making the transition to a modern financial system, local governments must understand that they will be fully accountable for their actions. In addition, other participants must be made to understand that they carry the risks associated with any local government fiscal difficulties.

It is important to recognize that some local governments are better positioned to make the transition to a modern system of public financing than others. These can be provided with earlier access to more flexible mechanisms for financing their activities, through such means as the extension of the pilot local government bond scheme and easier access to even more innovative instruments. Those local governments that are not yet ready, either because their fiscal position is weak or because they do not have the required capacity, probably need to be subject to tighter fiscal controls. Some may even need to be put under fiscal adjustment paths, with the prospect of greater fiscal flexibility in the future providing an incentive to improve performance. Training in public financial management needs to be central to the reform process.

Reforms in public finance and in many other policy areas in the PRC have begun with a pilot program. This allows experience and capacity to accumulate, and the reforms to be adjusted to take lessons and actual conditions into account, before the reforms are expanded nationwide. Pilot programs also allow time to build broad understanding and support for reform.

The opening of local government bond markets, and property tax and VAT reform, are at a relatively advanced stage of pilot implementation. Reform of the fiscal decentralization system, which is required for a better match between spending powers and expenditure responsibilities, is relatively less advanced. These reforms are primarily driven by the need to give more help to local governments that are under-resourced and require extra support from higher-level governments. More attention may have to be paid to improving the fiscal decentralization system so that it does not become a binding constraint that prevents reforms in debt, budget, and revenue management from feeding through to better service delivery.

APPENDIX 1 Background Reports

This Asian Development Bank (ADB) publication draws on extensive analysis and policy advice provided by leading public finance experts from the People's Republic of China (PRC) and other countries. The following authors contributed to that work:

- Professor Gou Yannan, associate professor, at Fudan University, Shanghai;
- *Professor Jia Kang*, president, Research Institute for Fiscal Science, Ministry of Finance (MOF), Beijing;
- *Professor Kuang Xiaoping*, professor of taxation, Jiangxi University of Finance and Economics, Nanchang;
- *Professor Liu Junmin*, researcher, Research Institute for Fiscal Science, MOF, Beijing;
- *Dean Ma Haitao,* School of Public Finance, Central University of Finance and Economics, Beijing;
- *Director Peng Runzhong,* professor, Asia-Pacific Finance and Development Center, Shanghai;
- *Zhiyan Liu,* professor and director of the Urban Economy Studies Division, Research Center for Urban and Environmental Studies, Chinese Academy of Social Sciences, Beijing; and
- *Lezheng Liu,* assistant professor, Central University of Finance and Economics, Beijing.

This publication has also benefited from input and guidance received from senior officials and scholars at 2013 workshops in Shanghai, Beihai, and Beijing, especially from the following:¹

- *Baoyun Qiao,* professor of economics and dean, China Academy of Public Finance and Public Policy, Central University of Finance and Economics, Beijing;²
- Jorge Martinez-Vazquez, Regents Professor of Economics and director of the International Center for Public Policy, Andrew Young School of Policy Studies, Georgia State University, Atlanta, Georgia, USA;
- Tao Ran, professor at the School of Economics of Renmin University of China in Beijing, director of the university's China Center for Public Economics and Governance, and senior fellow at the Brookings Institution in Washington, DC;
- *Kyung-Min Kim,* associate professor, Seoul National University;

¹ A. Shah. 2013. A Study of Local Public Finance Management in the People's Republic of China: Challenges and Opportunities. Synthesis Paper. July (Prepared under ADB. 2011. *Technical Assistance to the People's Republic of China for Strengthening Fiscal Policy and Public Finance Reform Over the Mid-Term.* Manila [TA 7763-PRC]).

J. Martinez-Vazquez and B. Qiao. 2013. Three Decades of Fiscal Decentralization in the PRC: Taking Stock and Performance (Prepared under ADB. 2011. Technical Assistance to the People's Republic of China for Strengthening Fiscal Policy and Public Finance Reform Over the Mid-Term. Manila [TA 7763-PRC]).

- *Norihisa Shima,* assistant professor at the Department of Civil Engineering and adjunct research fellow, United Nations University Institute for the Advanced Study of Sustainability, Tokyo;
- *Roger Sandilands,* professor, Department of Economics, University of Strathclyde, Glasgow, Scotland;
- *Tetsuo Kidokoro*, associate professor, Department of Urban Engineering, University of Tokyo;
- Ehtisham Ahmad, visiting senior fellow at the Asia Research Centre of the London School of Economics (LSE) and senior fellow at the Center for Development Research of the University of Bonn, and *Wang Zhikai*, visiting fellow at the LSE Asia Research Centre and professor of economics and doctoral supervisor at Zhejiang University, Hangzhou, who co-authored an examination of the next steps in public finance reform in the PRC following the appeal issued by the 3rd Plenum in November 2013 (the study was reviewed at the Public Finance Roundtable in the PRC Resident Mission of ADB in December 2013);³ and
- Anwar Shah, director of the Center for Public Economics at the School of Public Finance and Taxation of the Southwestern University of Finance and Economics in Chendu, who did a study of tax, intergovernmental finance, and expenditure reforms in the PRC.⁴

Recent technical assistance (TA) supported by ADB in the field of public finance includes the following:

- Supporting Fiscal Reforms in High Priority Sectors (TA 7095-PRC). The objective of the TA was to enhance fiscal effectiveness by improving public sector resource management. The TA assisted in the setting up of a suitable performance monitoring system for evaluating the cost-effectiveness of pilot funding systems for health-care services, which guided government policy formulation in health-care delivery. Other assistance provided under the TA involved drafting a blueprint for managing the implicit and explicit debt of subnational government, and designing model treasury cash management systems suitable for local governments in the PRC. The work on the main report was led by Baoyun Qiao, Qian Chen, Lezheng Liu, Shen Guo, Jianmei Zhao, and Xiangyi Meng of the China Research Center for Public Policy, and lan Storkey. The report was based on sub-reports on fiscal reforms in the health sector, local debt management risk mitigation, and local government treasury cash management.⁵
- Fiscal Policy Support for Economic Development in Henan (TA 7192-PRC). The TA led to the preparation of a fiscal policy blueprint based on analysis and indepth background studies and focusing on the use of fiscal instruments, as well as a strategic report on fiscal policy for accelerating Henan's economic development. The report was based on background papers on (i) the improvement of sustainable

³ E. Ahmad and W. Zhikai. 2013. The PRC: Packaging Tax, Financing and Governance Reforms.

⁴ Prepared under ADB. 2013. Public Finance Development Strategy 2020. Technical Assistance to the People's Republic of China for Public Finance Development Strategy 2020. Manila (TA 8379-PRC).

⁵ ADB. 2008. Technical Assistance to the People's Republic of China for Supporting Fiscal Reforms in High Priority Sectors. Manila (TA 7095-PRC).

livelihood and the promotion of a harmonious society; (ii) industrial and infrastructure development and market transformation; (iii) the modernization of the services sector; (iv) the preservation of cultural heritage; and (v) a fiscal strategy for export promotion. The main authors were Zhao Baoyou, Tang Min, Wang Jianguo, Guo Xibao, Wu Haifeng, and Wei Shaosheng of the Henan Social Sciences Academy.⁶

- Policy Study on Strategic Options for Urbanization (TA 7533-PRC). The TA supported the PRC's efforts to sustain urbanization, as measured by the delivery of the urban development strategy in the 12th Five-Year Plan (2011–2015) and the related policy and public intervention measures outlined in the strategy. The policy study on strategic options for urbanization in the PRC involved in-depth and systematic analyses of three important urban development issues: (i) the projected pace and spatial distribution of urbanization in the PRC; (ii) the emerging urban structural pattern of the city system across the country; and (iii) the policy and institutional reforms and other interventions needed for coherent, sustainable urban development in the PRC. Special attention was given to the provision of adequate basic infrastructure, public employment services, and social security coverage for the fast-growing urban population. The main authors of the TA report were Tao Ran, Wu Haiyang, Dou Hong, Qiu Aijun, He Zengrong, Mao Qizhi, Yuan Chongfa, Li Jingwen, Li Tie, Qiao Runling and Liu Zhiyan. International experts included Kyung-Min Kim, Norihisa Shima, Roger Sandilands, and Tetsuo Kidoro.⁷
- Supporting Reforms in Taxation and Budget Management (TA 7568-PRC). To strengthen fiscal policy, taxation, and budget management in the PRC, the TA supported studies on (i) macroeconomic and tax reform, (ii) tax structure optimization, and (iii) tax assignment and the tax burden. The main authors of the report—Liu Shangxi, Wang Zhenyu, Chen Shaoqiang, Xing Li, and Jingming Bai—were mostly from the Research Institute for Fiscal Science of the MOF and the Taxation Science and Research Institute of the State Administration of Taxation.⁸
- **Strengthening Fiscal Policy and Public Finance Reform Over the Medium-Term** (TA 7763-PRC). The TA built on the findings of ADB TA 7568-PRC: Supporting Reforms in Taxation and Budget Management to recommend a medium-term strategy (until 2020) for implementing reforms in public finance that would promote inclusive growth and a more balanced income distribution. Three sub-reports analyzed fiscal and taxation reform priorities from the perspective of (i) public finance management reform to define government functions at all levels; (ii) taxation and tax administration reform to balance income distribution and eliminate tax distortions; and (iii) forecast optimal revenue levels to

⁶ ADB. 2008. Technical Assistance to the People's Republic of China for Fiscal Policy Support for Economic Development in Henan. Manila (TA 7192-PRC).

⁷ ADB. 2010. Technical Assistance to the People's Republic of China for Policy Study on Strategic Options for Urbanization. Manila (TA 7533-PRC).

⁸ ADB. 2010. Technical Assistance to the People's Republic of China for Supporting Reforms in Taxation and Budget Management. Manila (TA 7568-PRC).

address development needs and ensure equitable provision of public services amid declining growth. The main authors of the reports were Christine Wong, Christopher Heady, Roy Bahl, Qiao Baoyun, Chen Suihong, Haitao Ma, Hong Fan Ma, Ehtisham Ahmad, Meng Chun, Chong En Bai, Gou Yannan, Anwar Shah, Yin Xingmin, Liu Junmin, Yan Yan, Zhikai Wang, and Kuang Xiao Ping.⁹

- Public Finance and Financial Management Reform (TA 7896-PRC). The objective of this TA is to increase fiscal effectiveness in national and subnational governments and deepen financial management reform. It covers framework design for improvements in fiscal policy for emergency management and in social insurance fund management, a study on the development of the local government bond market, and support for leading accounting talent. The key consultants for this TA are the Research Institute for Fiscal Science of the MOF and Timothy Goodspeed, the Center for Information Studies and Social Research and Stuart Leckie, the China Central Depository and Clearing Company and Stephen Wells, and the Shanghai National Accounting Institute and John Hardy.¹⁰
- Innovative Financing for Urban Infrastructure and Municipal Services in Harbin (TA 8103-PRC). The TA will enable the Harbin municipal government to finance infrastructure and service growth, help provide jobs and increased social services for low-income households migrating into the city from the rural areas, and ensure longterm economic health by strengthening the capacity of Harbin's municipal financing mechanisms. The municipality's fiscal health, local government investment vehicles, and infrastructure financing needs and options will be analyzed, and new ideas for financing municipal needs, including taxes, bond issuance, and public-private partnership, will be presented. The key consultants for this TA are Li Tian, Sun Jie, Jianming Cai, Fan Qian, Douglas Webster, Stephen Wells, and Philip Kelly.¹¹
- **Public Finance Development Strategy 2020 (TA 8379-PRC).** Under this TA, a strategy will be drawn up to guide public finance reform until 2020, to promote inclusive growth and more balanced income distribution in the PRC. Fiscal and taxation reform priorities will be analyzed from various standpoints: (i) the role of the government and public finance and how they should function to address market failures, (ii) taxation and tax administration reform to balance income distribution and eliminate tax distortions, and (iii) optimal revenue levels to address development needs The key consultants are Jia Kang, Bai JingMing, Su Ming, Liu Shangxi, Lv Wangshi, Zhang Xiaoyun, and Anwar Shah.¹²

⁹ ADB. 2011. Technical Assistance to the People's Republic of China for Strengthening Fiscal Policy and Public Finance Reform Over the Medium-Term. Manila (TA 7763-PRC).

¹⁰ ADB. 2011. Technical Assistance to the People's Republic of China for Public Finance and Financial Management Reform. Manila (TA 7896-PRC).

¹¹ ADB. 2012. Technical Assistance to the People's Republic of China for Innovative Financing for Urban Infrastructure and Municipal Services in Harbin. Manila (TA 8103-PRC)

¹² ADB. 2013. Technical Assistance to the People's Republic of China for Public Finance Development Strategy 2020. Manila (TA 8379-PRC).

APPENDIX 2 The Public Finance System in the People's Republic of China and Its Origins

A. History of Tax Reform

1. Reforms before 1984

The current public finance system in the People's Republic of China (PRC) is the product of a set of incremental reforms started in the transition to a market economy in the late 1970s and early 1980s. Under the central planning system, all expenditure was budgeted by the central government, and the main function of the fiscal system was to keep records of all revenue accrued and expenditure disbursed by the central government. Under central planning the fiscal system performed mostly an accounting function, since the belief was that taxation should be eliminated eventually, as all of the economy's resources would be owned by the state.

Before the transition to a market economy, the tax system was very simple: it comprised only the unified tax for industry and commerce and the agriculture tax. The collection of all revenue was delegated to local governments. The major revenue source for government was the profits from state-owned enterprises (SOEs), which at the end of the 1970s, accounted for nearly half of total government revenue. The accounts of SOEs were regarded as part of the fiscal system. In fact, these accounts were relatively easy to monitor via the centrally fixed prices and the planned output and sales under the economic plan.

In this centralized system, local governments were mere agents of the central government. They were responsible for collecting taxes, and received the necessary fiscal resources from the central government, which was the exclusively judge of those needs. Local budgets did not enjoy any autonomy and local governments' accounts were part of the central government's accounts. The central government set spending priorities, approved local budgets, and set policies for civil service salary scales, pension and unemployment benefit levels, educational and health-care standards, and any other relevant aspect of local budgets.

In general, the central planning system did not provide any incentives to encourage local officials to pursue local economic development and local social welfare. Instead, local governments simply collected taxes and delivered centrally designed services with centrally assigned funds.

From the start of the transition to a market economy in the late 1970s to the fiscal reform of 1994 that largely defined the public finance system now in place, the PRC underwent a series of fiscal reforms, which experimented with different approaches to establishing a public finance system more compatible with the new economic model.

2. Fiscal Responsibility System of 1984

The reforms started in the late 1970s redefined the relationship between the government and nongovernment sectors. To meet the requirements of the new economic system, after some initial fiscal decentralization experiments in 1978–1983, the PRC started the formal nationwide fiscal reforms in 1984 with the adoption of the fiscal responsibility system (FRS). The 1984 reform replaced the direct appropriation of profits in the old system with the introduction of a corporate income tax (CIT) for SOEs together with some other elements of a new tax system.

Compared with the previous centrally planned economic system, the FRS did provide local governments with separate budgets and with some incentives to expand their own revenue. Key aspects of the FRS included the extended separation of the government function from private sector activities, and the fact that local governments could now get more fiscal revenue by exerting more effort to collect taxes. More specifically, the central government allowed provincial governments to retain part of the proceeds remaining after the remittance of a fixed sum of revenue to the central government over a given period of time. The revenue transferred to the central government was presented in contracts established in one-to-one bargaining between the central and provincial governments.

The system gave local governments the incentive to collect more taxes by offering the exclusive ownership of selected fiscal resources. In addition, the lack of strict tax laws in combination with decentralized tax administration gave provincial governments the power to informally control effective tax rates and actual tax bases of all taxes, even if local governments did not have the legal authority to alter the statutory rates or bases. In this environment, local governments favored local enterprises, as they provided them with greater direct resources and incentives, such as tax exemptions. This had an immediate consequence of leading to a contraction in revenue. Meanwhile, the lack of transparency, and the weak legal framework, led to laborious bargaining between the central authorities and each one of the provincial governments. Hence, the FRS system resulted in a trend of decline in revenue, and a shrinking central government's share in total fiscal revenue.

During this period the trend toward lower tax collections was of less importance to local governments because their extra-budgetary accounts provided an alternative way of financing their expenditure needs. The use of extra-budgetary funds had the added benefit of not running the risk of an eventual clawback by the central government.¹ Lacking formal taxing powers and finding transfers from higher levels increasingly unreliable, local governments energetically pursued the expansion of off-budget revenue (Wong 1998; Fan 1998).² Extrabudgetary funds to a large extent could be regarded as part of total government budgetary revenue because they were being used for projects ranging from infrastructure to public service delivery.³ However, extra-budgetary funds were more compatible with the incentives

¹ That is, any increase in formal tax collections by local governments meant the greater likelihood of tougher contractual terms in the next round of contracting with the central governments, and therefore the clawback of some part of the additional tax resources formally collected.

² Wong (1998), Fan (1998).

³ Extra-budgetary funds were formally allowed and funded with fees and other revenue but not included in the formal budget. On the other hand, off-budget funds are funded with "illegal" fees, especially at the

of local governments, which could use them to shield tax collections from revenue-sharing agreements with the central government. The FRS reform made extra-budgetary funds increasingly more important for local governments, and their volume and relative importance vis-à-vis formal budgetary revenue continued increasing in the next round of fiscal reform in 1988.

3. Fiscal Contracting System of 1988

In 1988, the government introduced the fiscal contracting system (FCS), consisting of contracting modules tailored to each province, to improve the performance of the fiscal system and correct the imbalances introduced by the FRS system. The major modules were:

- (i) **Fixed grants.** For provinces whose expenditures were larger than their base amount of revenue, the central government would provide them with fixed grants. Sixteen provinces adopted this module.
- (ii) **Fixed remittance.** In this module, provincial governments would remit a fixed amount to the central government. Three provincial governments adopted this module.
- (iii) Increasing remittance. In this case, provincial governments would remit to the central government a fixed amount plus annually increasing amounts at a fixed growth rate (as contracted between the central and local governments). Two provincial governments adopted this module.
- (iv) **Fixed sharing rate.** Under this module, total revenue was shared by the central government and local governments at a fixed sharing rate. Three provincial governments adopted this module.
- (v) Increasing sharing rate. Total revenue was shared by the central government and local governments at annually increasing sharing rates, as negotiated between the two levels.
- (vi) **Fixed sharing rate plus.** In this module, the base revenue was shared by the central government and local government at a fixed sharing rate, while the incremental revenue was shared by the central and local governments at another different fixed sharing rate. Three provincial governments adopted this module.

The FCS was designed to provide the country with a more stable fiscal system. However, the FCS proved difficult to manage. This was primarily because the system involved too many negotiations and variable factors. It led to greater decentralization of fiscal resources and a further contraction in total tax revenue as a ratio to gross domestic product (GDP) (Bahl and Wallich 1992).⁴

4. Tax-Sharing System of 1994

In 1994, the government introduced the tax-sharing system (TSS). This had two major, explicit goals of increasing the share of government expenditure in total GDP and the share of central budgetary revenue in total budget revenue. Total tax revenue as a percentage

lowest level of government, and not authorized at the central or provincial levels.

⁴ Bahl and Wallich (1992)

of GDP had declined from 22.2% in 1985 to 10.8% in 1994, while the share of the central government in that revenue had declined from 38.4% in 1985 to 22% in 1993.

The TSS established for the first time a clear and stable assignment of tax revenue between the central and provincial governments and created separate tax administration services at the central and provincial levels. More importantly, the TSS introduced the value-added tax (VAT) as the major government revenue source and set up a uniform taxsharing system with all the provinces. The tax-sharing rates for the VAT were set at 75% for the central government and 25% for the local governments.

From the institutional point of view, the TSS created a new agency, the State Administration of Taxation (SAT) to collect the taxes fully assigned to the central government, and the taxes to be shared with local governments.⁵ The new system provided for separate local tax services for the collection of the taxes fully assigned to local governments. The headquarters of the SAT was empowered to supervise the local tax services and suppress the use of tax exemptions by local governments, to correct imbalances created under previous fiscal arrangements.

With the 1994 TSS, the central government also proceeded to gradually establish a relatively formal intergovernmental transfer system. The TSS did not, however, address the two important pillars of intergovernmental fiscal relations: the assignment of expenditure responsibilities and local borrowing. The resulting disconnect between the revenue and expenditure pillars of fiscal decentralization led to a continuous decline in the share of the central government in total public expenditure after 1994. The goal of increasing total tax revenue collection was, however, achieved. Total tax revenue as a percentage of GDP increased from about 10% GDP in 1995 to 22% of GDP in 2011.

The TSS continued the complete centralization of legislative power of taxation in the PRC. Local governments generally lacked the autonomy to introduce new taxes, define the tax base, or determine the tax rate. The central government, however, designed a list of taxes as local taxes, which were administered and directly collected by local tax agencies, and which in the revenue assignment system were formally regarded as local taxes. The only element of local tax autonomy was the selection of tax rates of the urban and township land use tax within maximum and minimum legislated rates.

5. Post-1994 Tax Reforms and the Current Tax System

A number of subsequent policy changes have supplemented the TSS. These have focused on simplifying the taxation system, broadening the tax basis, lowering tax rates, and strengthening tax collection practices. The most important reforms related to the CIT, the resource tax, the VAT, the business tax, and the personal income tax (PIT).

⁵ Recall that before 1994 all taxes were collected by the local governments.

a. Corporate Income Tax

CIT is levied on the worldwide income of resident enterprises and on the PRC source income of nonresident enterprises. Before 2008, the CIT had a two-tier rate structure that differentiated between domestic and foreign-invested enterprises, with the latter enjoying lower CIT rates and some other favorable tax treatments. A unified CIT (25%) was implemented in 2008.

A number of sector and location-specific tax incentives are provided through a reduced CIT rate. Qualified small and thin-profit enterprises are eligible for a 20% rate (until 2015). New high-tech enterprises, integrated circuit enterprises with a total investment in excess of CNY8 billion or that produce integrated circuits with a line width of less than 0.25 micrometer, and qualified advanced-technology service enterprises in 21 cities (until 2018), and enterprises in the western regions (until 2020), are eligible for a reduced preferential rate of 15%. Key software production or design enterprises and small and thin-profit enterprises with annual taxable income of less than CNY60,000 (until 2015) are eligible for a reduced CIT rate of 10%.

For CIT purposes, fixed assets are depreciated using a straight-line method with minimum life (usually less than the economic life) of assets defined by the law. The law specifies a minimum life for various assets. Tax losses can be carried forward up to 5 years but carryback of such losses is not permitted. Foreign tax credits are allowed and may be carried forward up to 5 years. Foreign (nonresident) enterprises are subject to a withholding tax rate of 10% on gross income unless reduced by a bilateral tax treaty. The PRC also has tax information exchange agreements with tax-haven countries.

b. Resource Taxation

The implementation of the PRC's natural resource taxes began in 1984. The momentum picked up in June 2010 through the reform of the resource tax in Xinjiang Uighur Autonomous Region, which was aimed at improving the efficiency of energy industries. The main change was the move from a volume-based resource tax to an ad valorem system. The reform significantly improved local revenue, although from a very low base. In December 2010, this reform was extended to 12 Western provinces, and from November 2011, crude oil and natural gas were taxed on the basis of sale values rather than the amount of production (see Table A2.1). Coking coal and rare-earth metals were also made subject to higher tonnage or volume based resource tax rates.

A mining royalty is also issued on both onshore and offshore petroleum production. The rate varies from 4% to 12.5% for offshore petroleum resources, 2% to 12.5% for onshore petroleum resources, and 1% to 3% for offshore and onshore natural gas. An excess oil profit tax that applies at high oil prices was introduced in 2006. A mineral resource compensation fee was levied on mineral products in 1994 at 0.5% to 4% of sales revenue, with 60% of the revenue going to the central government and 40% to the autonomous regions. More than

Tax Item	New Tax Rate	Old Tax Rate
Crude Oil	5%–10% of sale amounts	CNY8-CNY30/ton
Natural Gas	5%–10% of sale amounts	CNY2-CNY15/kilo cubic meter
Coal		
Coking coal	CNY8-CNY 20 /ton	CNY0.3-CNY5/ton
Others	CNY0.3-CNY5/ton	
Other Nonmetallic ores		
Common nonmetallic ore	CNY0.5-CNY20/ton or cubic meter	CNY0.5-CNY20/ton or cubic meter
Precious nonmetallic ore	CNY0.5-CNY20/ton or cubic meter	
Ferrous metal ores	CNY2-CNY30/ton	CNY2-CNY30/ton
Nonferrous metal ores		
Rare earth ore	CNY0.4-CNY60/ton	CNY0.4-CNY30/ton
Other nonferrous metal ores	CNY0.4-CNY30/ton	
Salts		
Solid salt	CNY10-CNY60/ton	CNY10-CNY60/ton
Liquid salt	CNY2-CNY10/ton	CNY2-CNY10/ton

Table A2.1: Resource Tax Reform of 2011

kg = kilogram.

Source: www.chinatax.gov.cn

10 other fees also apply, including a coal price adjustment fee that is designed to adjust the supply and demand of coal, stabilize the coal and electricity price within a province, and support the development of the coal and electricity industry.

c. Value-Added Tax

The VAT was for years a production-based VAT, with no deductions for capital investment. Its transformation into a consumption VAT was started by the central government in 2004, and was completed in 2009. This reform has had a significant impact on VAT revenue, which has decreased significantly. The VAT now taxes domestic sales and imports of goods and provision of repair, replacement, and processing services, and provides for credit for taxes paid on intermediate goods including fixed assets. The standard tax rate for VAT is 17%, with a 13% rate for necessities and a 3% rate on small-scale (small-business) taxpayers. Exports are zero rated and are eligible for credits on intermediate input at varying rates ranging from 0% to 17%. The VAT is collected by the central government through its SAT, and 25% of proceeds are transferred to local governments. The revenue is allocated across provinces on an origin basis. It is the single-largest tax, contributing 27% of consolidated public sector revenue in 2012.

The VAT was originally levied on manufacturing only, and is now being extended to selected services nationwide. Effective 1 August 2013, all these services are being brought under the VAT and will be taxed at 3% for small-scale providers, 6% for priority services, 11% for transportation services, and 17% for tangible movable property leasing services. All other services such as media and communication services will also be covered by the VAT nationwide and the business tax is expected to be abolished altogether (PricewaterhouseCoopers 2013).⁶

d. Business Tax

The business tax was designed to cover the services that do not fall under the VAT tax net. It is levied at varying rates by local governments on the supply of services, the transfer of intangible property, and the sale of real property. Effective 1 January 1997, the rate for financial and insurance industry was increased from 5% to 8%, and the incremental tax revenue from this change was assigned to the central government. In order to support the development of financial and insurance industry, the tax rate was decreased by 1% each year from 2001 until it returned to 5% in 2003. At that time, the central share in the incremental tax revenue was abolished.

e. Personal Income Tax

PRC residents are subject to a PIT on their worldwide taxable income, defined as gross income less any mandatory social security taxes and contributions for pensions, medical insurance, and unemployment insurance. The employee social security contributions vary by location but on average amount to about 12% of annual income. The base monthly income exempt from PIT was raised in 2008 to CNY3,500 (CNY4,800 for expatriates), and the rest is taxed depending on the tax bracket. Taxpayers are grouped into seven brackets, with marginal PIT rates ranging from 3% to 45%, the top marginal rate applying to all incomes in excess of CNY80,000. There are no allowances for dependent spouse and children or for disabilities. The PIT on employment income is assessed monthly and withheld at source.

Passive income, such as interest, dividends, capital gains, and royalties, is taxable at a standard rate of 20%. Dividends from companies listed on the PRC stock exchanges are taxed at 5% to 20% depending on the holding period. Income from other business is taxed at 5% to 35%. Certain types of interest income, such as interest on bank savings account deposits, State treasury bonds issued by the Ministry of Finance (MOF), and approved education savings funds, are exempt from tax. Capital losses are not deductible against taxable income. Gifts from employers are taxed, but gifts from individuals are not. No special incentives are provided for educational or retirement savings. Mortgage interest expenses are not a deductible expense. Only taxpayers with annual income exceeding CNY120,000 are required to file tax returns.

⁶ PricewaterhouseCoopers (2013)

f. Property Taxation

The PRC introduced property taxation in 1951 through the Provisional Regulations on Urban Real Estate Tax. After 1985, more regulations were introduced and there are currently five property taxes: real estate tax, urban land use tax, land value-added tax, cultivated land occupation tax, and deed tax. On 27 January 2011, Directive No. 136 of the State Council initiated pilot projects for the collection of property tax on individual housing in Chongqing and Shanghai.⁷

6. Total Revenue and Its Structure

Under the tax system now in place, indirect tax represents the lion's share of tax revenue. The combined collection of the CIT and PIT accounted for only 22% of total government revenue in 2011.⁸ That year, the most important tax, the VAT, represented 27% of total fiscal revenue. This ratio of direct to indirect tax is low even by Asian standards. For example, in 2005, the ratio stood at 0.91 for Asian countries, 1.49 for the world average, and 2.27 for Organisation for Economic Co-operation and Development (OECD) countries (Martinez-Vazquez 2011). Nontax revenue represents an important share of total fiscal collection, especially at the local level. In 2011, nontax revenue stood at 14% of total government revenue.

7. Tax Sharing

Taxes are divided into three groups: central taxes, shared taxes, and local taxes. Revenue from central assigned taxes goes directly to the central government. Slightly less than half of total tax revenue is assigned exclusively to either the central or the local governments: exclusive central government taxes relate to foreign trade or consumption taxes (i.e., an excise) on tobacco, alcohol, petroleum products, cars, and jewelry; exclusive local government taxes cover services and property taxes. The remaining portion of tax revenue is shared between the central and local governments. Shared taxes (i.e., shared between the central and local governments) represent the most significant source of revenue at the local level (Table A2.3). Shared taxes include: the business tax, VAT, the CIT, the PIT, and the stamp tax on security transactions.

⁷ The Chongqing municipal government issued the "Interim Measures for Carrying Out Pilot Collecting Property Tax on Some of Individual Housing in Chongqing" (Chongqing Government Order No. 247), and the Shanghai municipal government, the "Interim Measures for Carrying Out Pilot Property Tax on Some of Individual Housing in Shanghai" (Shanghai Government Order No. 3, 2011).

⁸ Under some classifications, property taxes are also categorized as direct taxes. But adding all the different taxes on property together would add just several percentage points to the total share of direct taxes.

	Total		Ce	Central		Local	
ltem	Amount CNY	Share (percent)	CNY	Share (percent)	CNY	Share (percent)	
Total Government Revenue	129,210	100.4	60,198	100.0	69,011	100.0	
Total Tax Revenue	110,531	85.5	56,640	94.1	53,891	78.1	
Domestic VAT	28,810	26.1	20,534	36.3	8,276	15.4	
Domestic Consumption Tax	8,231	7.4	8,231	14.5	0.0	0.0	
VAT and Consumption Tax from Imports	14,005	12.7	14,005	24.7	0.0	0.0	
VAT and Consumption Tax Rebate for Exports	(10,519)	(9.5)	(10,519)	(18.6)	0.0	0.0	
Business Tax	17,233	15.6	78	0.1	17,155	31.8	
Corporate Income Tax	22,427	20.3	14,444	25.5	7,983	14.8	
Personal Income Tax	6,532	5.9	3,919	6.9	2,613	4.8	
Resource Tax	1,006	0.9	45	0.1	960	1.8	
City Maintenance and Construction Tax	3,420	3.1	176	0.3	3,244	6.0	
House Property Tax	1,582	1.4	0.0	0.0	1,582	2.9	
Stamp Tax	1,244	1.1	456	0.8	789	1.5	
Stamp Tax on Security Exchange	470	0.4	456	0.8	14	0.0	
Urban Land Use Tax	1,719	1.6	0.0	0.0	1,719	3.2	
Land Appreciation Tax	3,294	3.0	0.0	0.0	3,294	6.1	
Tax on Vehicles and Boat Operation	474	0.4	0.0	0.0	474	0.9	
Tax on Ship Tonnage	44	0.0	44	0.1	0.0	0.0	
Vehicle Purchase Tax	2,596	2.3	2,596	4.6	0.0	0.0	
Tariffs	2,631	2.4	2,631	4.6	0.0	0.0	
Farm Land Occupation Tax	1,808	1.6	0.0	0.0	1,808	3.4	
Deed Tax	3,844	3.5	0.0	0.0	3,844	7.1	
Tobacco Leaf Tax	150	0.1	0.0	0.0	150	0.3	
Other Tax Revenue	1	0.0	0.0	0.0	1	0.0	
Nontax Revenue	18,679	14.5	3,559	5.9	15,120	21.9	
Special Program Receipts	3,529	18.9	406	11.4	3,122	20.6	
Charge of Administrative and Institutional Units	4,776	25.6	278	7.8	4,497	29.7	
Penalty Receipts	1,659	8.9	45	1.3	1,613	10.7	
Other Nontax Receipts	8,716	46.66	2,828	79.48	5,887	38.9	

Table A2.2: Revenue, 2013

() = negative number, VAT = value-added tax.

Source: Ministry of Finance, 2013.

Tax	Provincial	Prefecture	County	Township		
Share of local government tax revenue (percent)						
Value-Added Tax	19.6	32.0	31.9	16.6		
Business Tax	29.2	30.5	29.1	11.3		
Urban Maintenance and Development Tax	6.4	44.5	36.1	13.0		
Personal Income Tax	37.8	31.1	23.0	8.1		
Corporate Income Tax	34.6	31.2	25.1	9.0		
Property Tax	8.0	37.9	39.7	14.5		
Resource Tax	19.4	16.7	37.0	26.9		
Other	6.3	32.2	40.7	20.7		
All	23.3	32.9	31.1	12.7		

Table A2.3:Distribution of Tax Sources, by Level of Subnational Government,
2009

Source: Local Fiscal Statistical Yearbook, 2010.

The revenue assignments introduced in the 1994 reform have been adjusted several times. The most important changes are the following:

- (i) CIT and PIT. Except for the "special enterprises," including the policy banks, four major commercial banks, two major oil companies, railways, and the post office, whose CIT revenue go fully to the central government, all other CIT and PIT revenue is shared jointly by the central government and local governments. The central share was 50% in 2002, and then was increased to 60% in 2003. The additional 10% of the increased revenue to the central government was earmarked for intergovernmental transfers, mainly the "general transfer" allocated to the middle and western regions of the country.
- (ii) Security stamp tax. The central sharing ratio increased to 88% from 50% in 1997, to 91% in 2000, to 94% in 2001, and to 97% in 2002. The increased revenue of the central government was used mainly to increase the transfers to poorer jurisdictions in the western regions. These increased revenue have been also used for the supplemental social security fund.
- (iii) Export tax refund. The export tax refund was all paid from central government revenue. The comprehensive refund rate was increased from 8.29% in 1998 to 9.24% in 2003, and further increased to 11.8% in 1997. To increase the incentive for the local governments to deal with fake export tax refunds, the increased payment was shared by the central and local government in 2004 on the basis of 2003 data, with a ratio of 75:25. The ratio has changed to 92.5:7.5 since 2007.
- (iv) Rural tax and fee reform. This reform had the objective of reducing the tax burden on farmers; it was first experimented with in eastern Anhui province in 1994 and, 2 years later, in 50 selected counties in seven other major agricultural provinces. The central government extended the experiment to the whole of Anhui province in 2000 in a bid to standardize the tax burden on farmers and eliminate the growing arbitrary administrative fees they were being charged. In

2002, the central government further rolled out the rural tax and fee reform in a total of 20 provinces, comprising 620 million farmers, or three-quarters of the country's total. The financial burden on farmers was cut by at least 30%, as a result. The central government further took the decision in late 2003 to abolish, exempt, or lower 15 charges on the country's 900 million farmers.

Besides the foregoing reforms, there were other, minor reforms in revenue sharing such as the reform of the business tax on noncentral SOE sharing from 2001 to 2004. Also, the vehicle purchasing tax and the vessel tax became central government taxes in 2001. The current sharing arrangements are summarized in Table A2.4.

The general rules for sharing of VAT have remained as set at the time of the 1994 TSS reform, which set the base amount of VAT revenue sharing as the difference between the amounts received from all transfers in 1993, less the sum of proposed "local taxes" and 25% of VAT collections. This held all provinces at the same level as the previous year, and protected the subsidized position of the "deficit" provinces. An additional 30% of the increment in national VAT and consumption tax collections was subsequently added to this amount to provide revenue growth.

Revenue assignments for subprovincial governments are at the discretion of each provincial government. Provinces use various mechanisms for this purpose, including: (i) the sharing of revenue from specific taxes; (ii) the assignment of specific taxes; (iii) the sharing of the increase in the yield from a base year; and (iv) the assignment of an amount that depends on a predetermined growth rate. On average, the largest share of all local (subprovincial) taxes is taken by the prefectural governments. This is true of all separate local taxes except for the property and resource taxes, which mainly accrue to county and township governments.

To improve budget management at the subprovincial government level, the central government in December 2002 issued the "Suggestions on Improving Subprovincial Fiscal Relations," in which MOF provided further guidelines on subprovincial revenue assignments. In practice, there are considerable differences both across and within provinces in the distribution of taxes to lower-level authorities.

B. Nontax Revenue

Besides tax revenue and grants from the central government (which are discussed below), local government budgets also include a range of nontax revenues. These include land transactions (local governments sell land-use rights, typically for periods of 30 and 70 years), net profits from SOEs, administrative fees, penalties and confiscated income, income from the use of sea resources, drilling, and others. As a percentage of GDP, nontax revenue for local governments stood at 6.6% in 2009, almost as much as tax revenue. Nontax revenue is significant at all local levels of government with the exception of the township level.

Governments also benefit from extra-budget revenue. But it has declined substantially since the reforms of 1994, and is now about the equivalent of 1% of GDP, compared with 17% in 1986. Almost all of this is collected by local governments.

Category	Tax	Share of Central Government	Share of Local Government
Central	Customs duties	100%	0%
	Consumption Tax	100%	0%
Shared	VAT	100% of VAT on imports and 75% of VAT on domestically produced goods	25% of VAT on domestically produced goods
	Business Tax	100% of tax on rail transportation, and headquarters of banks and insurance companies	100% of tax from other sources
	Stamp Tax on Security Transaction	97%	3%
	Personal Income Tax	60%	40%
	Company income Tax	100% of tax on rail transportation, headquarters of banks and insurance companies, centrally owned enterprises, local and foreign banks, and other financial corporations	40% of tax from other sources
		60% of tax from other sources	
	Resource Tax	100% of tax on offshore activities	100% of tax on onshore activities
	Urban Maintenance and Construction Tax	100% of tax on rail transportation, and headquarters of banks and insurance companies	100% of tax from other sources
Local	Urban and Township Iand Use Tax	0%	100%
	Housing Property Tax	0%	100%
	Vehicle and Vessel Utilization Tax	0%	100%
	Land Appreciation Tax	0%	100%
	Stamp Tax	0%	100%
	Contract Tax	0%	100%
	Farmland Occupation Tax	0%	100%

Table A2.4: Assignment of Key Taxes, 2013

VAT = value-added tax.

Source: Ministry of Finance.

ltem	Central	Local	Provincial	Prefecture	County	Township
	Share of GDP (percent)					
Taxes	9.8	7.6	1.8	2.5	2.4	1.0
Fees and Penalties	0.2	2.2	0.8	0.7	0.6	0.1
Asset Income	0.0	0.6	0.1	0.2	0.3	0.0
Other	1.4	1.7	0.7	0.5	0.4	0.1
Nontax Revenue	1.6	4.4	1.5	1.4	1.4	0.2
Land Sales (net)	0	2.1	0.1	1.1	0.9	0.0
Nontax plus Land Sales (net)	1.6	6.5	1.7	2.5	2.2	0.2
Total	11.4	14.2	3.4	5.0	4.6	1.2

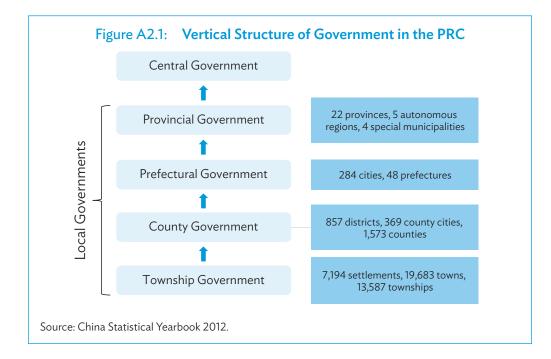
Table A2.5:Taxes and Other Sources of Revenue, by Level of Government,
2009

GDP = gross domestic product.

Source: Local Fiscal Statistical Yearbook, 2010.

C. Expenditure Assignments

Expenditure assignments are an important part of the PRC's public finance system. The government hierarchy in the PRC has five levels: central, provincial, prefectural, county, and township (Figure A2.1). Fiscal reforms during the last 3 decades have focused on relations between the central and provincial governments, with the latter representing the entire local government.



The TSS reform was accompanied by a restatement of the pre-reform expenditure assignment practices, and provided only basic guidelines to define expenditure responsibilities between central and local governments. The State Council Regulations on the Implementation of the TSS defined expenditure responsibilities of central and local governments as follows:

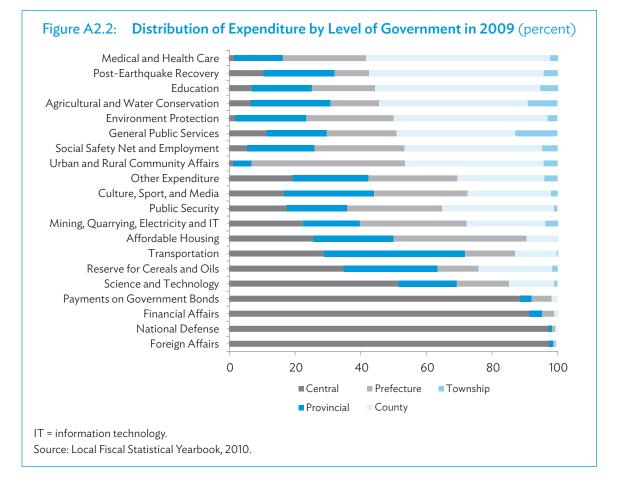
Central budgets are mainly responsible for national security, international affairs, the running costs of the central government, the needs for adjusting the structure of national economy, coordinating regional development, adjusting and controlling the macro economy, and others. Detail items include: national defense, cost of military police, international affairs and foreign aid, administration costs of the central government, central financed capital investments, the technical renovation of central enterprises and new product development costs, the costs of support to agriculture, debt, and the costs of central culture, education, and health, price subsidies and other expenditure.

Local budgets are mainly responsible for the running costs of local government, and the needs for local social economic development. Detail items include: running costs of local government, the needs of local economic development, a part of the running costs of the military police and militia, locally financed capital investments, the technical renovation of local enterprises and new product development costs, the costs of support to agriculture, urban maintenance and construction, and the costs of local culture, education, and health, price subsidies and other expenditure. (Liu and Qiao 2013)

Therefore, both the central government and local governments have extensive expenditure responsibilities. These responsibilities widely overlap, and are defined vaguely. In essence, there are few responsibilities exclusive to the central government or to local governments. The central government tends to be responsible for national defense issues, while local governments provide basic public services. This has resulted in a situation in which responsibilities that usually correspond to central governments (social security, food safety, pensions, etc.) have been delegated to county-level governments. In particular, counties were responsible for 42% of expenditure on the social safety net and unemployment insurance in 2009.

Under this system, local governments have taken on the bulk of expenditure responsibilities: 85% of expenditure in 2012 was undertaken by local governments. The trend toward expenditure decentralization has been increasing. The PRC's fiscal system is now one of the most decentralized internationally.

The central government has provided guidelines in an effort to clarify the expenditure responsibilities of local governments. Notably, the State Council Regulations on the Implementation of the TSS required provincial governments to define the expenditure responsibilities of subprovincial governments. The Suggestions on Improving the Fiscal Management System in Counties and Townships Experimenting with Rural Tax-Fee Reform released by the MOF in 2000 required: (i) a clear definition of expenditure responsibilities



between the county and township governments; (ii) the improvement of the structure of township government, and strict control of the quota of township employees; and (iii) the monitoring of fiscal risks of county and township governments. The Notice about Eliminating Fiscal Difficulties of County and Township Government issued by MOF in 2005 was aimed at strengthening the monitoring and expenditure performance system.

Expenditure assignments operate within two types of subprovincial fiscal management systems in the PRC: the province-managing-county model and the city- (prefecture-) managing-county model.

Under the province-managing-county model, the provincial government directly manages the cities (prefectures) and counties. In this model, there are direct intergovernmental relations between the provincial government and the city (prefecture) government, and separately between the provincial and the county governments. These responsibilities relate to revenue assignments, expenditure assignments, intergovernmental transfers, special subsidies, and other relevant aspects. A feature is that there are no fiscal relationships between the city (prefecture) and the county governments. The model has been used in Zhejinag, Anhui, Hubei, Hailongjiang, Fujian, Hainan, and Ningxia provinces, and in the four provincial-level cities of Beijing, Shanghai, Tianjin, and Chongqing. The model also applies to the cities of Dalian, Qingdao, Shenzhen, Xiamen, and Ningbo, where no prefecture government has ever existed.

Under the city- (prefecture-) managing-county model, there are intergovernmental fiscal relations between the provincial and the city (prefecture) governments, and there is no direct fiscal relationship between the provincial and county level governments. This model is used in all other provinces.

D. Budget Practices

The PRC has a unified state budget, which provides an annual overview of operating and capital expenditures by all levels of government in a single document. This contrasts with the situation in large federal countries such as the US and India, where budgets of various orders of government, by design, are not integrated. The PRC's state budget offers a unique window on all government operations. It is a useful tool for internal management and control, and can also enhance accountability by ensuring that residents are well informed about their local government's budget.

Budgeting and budgetary institutions include the budget processes, the legislative framework for budgeting, budget methods, and the framework for debt monitoring and management. The PRC follows an integrated countrywide budget system resulting from both top-down and bottom-up interactions. The central government exercises some control over the number of total positions and wages and benefits at the local level, and appoints persons to top positions. Local governments have significant budgetary autonomy within the overall envelope established at the center. Local governments have discretion in personnel management and hiring and firing of personnel. They also have complete discretion in the design and delivery of public services at the local level.

Local budgeting is annual, and is based on input and cash accounting. External and internal controls are in place, but effectiveness varies across local governments. Processes for both internal and external audits are in place.

Local governments in the PRC traditionally present their budgets either by object of expenditure (e.g., wages, employee benefits, travel, office supplies, other material costs, utilities and equipment) or by organization (by administrative and institutional or legislative unit). The former presentation is useful for internal management and compliance controls. The latter is required for accountability, legal appropriations, fiscal controls, and management and oversight of budget execution. Since 1 January 2007, local budgets have also been using functional classification (by education, health, transport, etc.) as well as economic classification (e.g., transfers to individuals, grants to other levels of government, subsidies to firms) (see ADB, 2013h). The presentation of the budget along functional (service delivery) and economic classifications helps in policy analysis and the benchmarking of local government performance against relevant comparators. These changes have meant that the PRC's local budget formats have a high degree of comparability with those of OECD countries.

The PRC has a unified state budget, with the calendar year also serving as the fiscal year. Provincial and local government budgets are prepared by the local executive and approved by the People's Congress at the local level. These budgets, however, are subject to review by the State Council and the National People's Congress at the center.

The budget formulation process at the provincial level entails four steps—the "two cycles of top down and bottom up processes"—as follows:

- (i) Step 1 (April-May). The provincial finance bureau, after consulting with the central MOF, issues a budget circular inviting provincial departments to submit funding requests for the next year, as well as revised estimates of current-year spending and actual data on the previous year's spending. The circular also asks local governments to follow a similar process and prepare local budgets for approval by the people's congress at the local level, for final submission to the provincial finance bureau. Department and local governments are expected to carry out an evaluation of their current programs, using evaluation by objectives in deciding on continuation. They are also expected to follow a "zero-based budgeting" (a budgeting system where every item of expenditure has to be justified every year) approach in determining allocation priorities for the next year.
- Step 2 (June-July). Departments submit their wish lists and estimates to the provincial finance bureau.
- (iii) **Step 3 (August-September).** The provincial finance bureau reviews departmental proposals and provides feedback on departmental spending caps as well as individual programs. It also advises local governments on the availability of higher-level financing for the next year.
- (iv) Step 4 (October-November). Provincial departments submit their final requests to the provincial finance bureau along with current spending estimates and actual expenditures over the previous year. Local governments also submit their approved budgets to the provincial finance bureau for information.

The budget approval process comprises two additional steps:

- (i) Step 5 (November). The provincial finance bureau collates local government budgets, departmental spending proposals, revenue forecasts, current-year revenue estimates, and actual revenues of the previous year into a budget document for review and approval by the provincial council. The provincial council solicits advice from the standing committees in the provincial people's congress on budget priorities.
- (ii) Step 6 (December). The final budget approved by the provincial council is submitted for review by the people's congress at the provincial Level. It is reviewed by the standing committees and voted on by the congress as a whole. Once approved by the congress, the budget is submitted to the central MOF for inclusion in the state budget.

Local budgeting and financial management nonetheless remains in its infancy. Local budgets are incremental and segmented and do not provide a good overview of all aspects of

government operations. External and internal controls are not yet well developed and the local people's congress does not have the means or the capability to exercise effective oversight.

Other features of the PRC's budget system are:

- (i) **a single budgeting system,** under which each government agency or public service unit should have a single budget combining all budgetary and extrabudgetary funds;
- (ii) the treasury single account (TSA) system and centralized payment administration, under which all expenditure funds for each government are controlled in a single account at the central bank, with payments going directly to the service providers; and
- (iii) standardized governmental purchasing, under which all government purchasing of products, projects, and services over a defined amount should go through standard tendering procedures.

E. Intergovernmental Transfers

The 1994 fiscal reform tried to build a framework of intergovernmental transfers system that would provide, for the first time, a rules-based mechanism for transfers between governments. This was to move such transfers away from the ad hoc, negotiated system used previously. However, although these intergovernmental transfers finance a significant part of local expenditure, the framework for intergovernmental transfers between the central and provincial governments is still not well developed. In addition, not much has been done to put in place a transparent transfer framework at the subprovincial level.

There are multiple transfers from the central government to local governments, but the two main types are the general unconditional transfers and the specific-purpose grants or earmarked transfers. There are three main general unconditional transfers: the equalization transfer, the tax rebate, and gap-filling transfers.

The equalization transfer is designed to help equalize fiscal disparities across provinces. The distribution is based on a formula that incorporates objective measurements of fiscal capacity and expenditure needs of the provinces. The actual amount distributed is calculated on the basis of the gap between standard current expenditure and standard current needs, adjusted for coefficients that take into account the size of the gap. Fiscal capacity is measured using estimates of the tax bases and standard tax rates. Expenditure needs are calculated using standard expenditure needs in a large number of categories including spending on administration services, public safety, education, urban maintenance, social assistance, and heating. In 2012, MOF announced a revised formula for calculating the equalization transfer, which improved the stability and transparency of the transfer.

The tax rebate was introduced as a "hold-harmless" provision in reference to the fiscal system prevalent just before the TSS reform. The amount of the tax rebate for the VAT and excise tax is computed according to a formula. The tax rebate transfer is determined on the basis of the nominal collections in a base year, and so although it was very significant in absolute and relative terms in the initial years, its relative importance has rapidly decreased over time.

As a percentage of total transfers, the tax rebate now represents about one-third of what it was in 1994. The tax rebates are highly unequalizing within the system of intergovernmental finance because they go largely to richer provinces and lower-level local jurisdictions, which were collecting more before 1994.

The main purpose of the gap-filling transfers is to address vertical imbalance at the local level by filling the fiscal gap for local governments. There are several categories within this type of transfers. The major categories are: revenue return; transfer to minority regions; transfer to increase the wage expenditure of public employees; transfer for the rural fee-to-tax reform; transfer for the elimination of the agriculture tax; and other general transfers.

There are hundreds of special-purpose grants or earmarked transfers associated with a variety of programs at the central level. An example is the "compulsory education transfer" introduced by the central government in support of the rural compulsory education program. Another example is the transfer introduced to subsidize the issuance of state bonds. As new problems and challenges have arisen in the intergovernmental finance system, there has been a tendency to create a new earmarked transfer to address each of these particular problems. The most important sectoral-functional destinations of the specific transfers are now transportation and affordable housing.

Transfers are also made from the provincial government to subprovincial governments. These are mostly at the discretion of the provincial government and vary across provinces. Transfers can be classified into general unconditional transfers and specific-purpose transfers. In 2009, general transfers represented 30% of the total revenue of county-level governments and below, and specific-purpose transfers, 23%. Prefecture-level governments were less dependent on these types of revenue. In general, the system of subprovincial transfers is far from being well developed and they still serve mainly to fill a gap.

Central-local transfers (including tax rebates) now fund around two-thirds of local government expenditure (Table A2.6). Central transfers flow through the layer-cake governance structure. Provinces receive these transfers from the center and pass them on to local governments using either the same criteria used by the central government (done in most provinces) or a modified form to suit local circumstances. There are occasional complaints that in some instances the passthrough is either incomplete or delayed (World Bank 2012). Two-thirds of fiscal transfers are provided as general-purpose transfers in an unconditional manner, and the rest for specific purposes.

The PRC has three types of general-purpose central-local transfers: (i) revenue sharing from VAT, enterprise income tax, and PIT; (ii) VAT tax rebates equal to the previous year's rebates plus 30% of the growth in VAT and consumption tax revenues in local jurisdiction, to compensate for the 1994 centralization of VAT and excise taxes and to provide incentives for growth in productive activity and consumption; and (iii) equalization transfers using complex need-based criteria.

Type of Transfer	Amount (CNY billion)	Share (percent)
General Unconditional Transfers	2,659	59
Equalization Transfer	858	19
Tax Rebate	512	11
VAT and excise tax return	389	9
EIT and PIT return	91	2
Tax return in support of oil tax and fee reform	153	3
Local transfers to the central government	(121)	(3)
Compulsory education transfer	161	4
Basic Pension and Associated Transfers	376	8
Transfers to Increase Wage Expenditure of Public Employees	236	5
Rural Corporate Health Transfer	106	2
Support for Basic Fiscal Capacity of County-Level Government	108	2
Rural Fee-to-Tax Reform and Transfer for Elimination of Agriculture Tax	75	2
Oil Tax and Fee Reform	61	1
Transfers to Fundamental Law Enforcement Units	47	1
Transfers to Minority, Border, and Remote Regions	56	1
Transfers to Ecological Function Regions	37	1
Rewards for Large Grain Production Counties	28	1
Rewards for Villages' Public Services	25	1
Transfers to Resource-Exhausted Cities	16	0
Local Marketplace Management Fee and Individual Industry and Commercial Entity Fee	8	0
Other Transfers	110	3
Special-Purpose Transfers	1,879	41
Agriculture, Forestry, and Irrigation	525	12
Transportation	311	7
Affordable Housing	219	5
Education	107	2
Health	91	2
General Public Services	25	1
Green Society	193	4
Social Security and Employment	141	3
Resource Exploration, Information Technology, etc.	48	1
Service Industry	45	1
Community Services	43	1
Food Reserves	35	1

 Table A2.6:
 Intergovernmental Transfers from the Central Government, 2012

continued on next page

Table A2.6continued

Type of Transfer	Amount (CNY billion)	Share (percent)
Culture Development, Sports, and Media	30	1
Public Safety	23	1
Land Resource–Related	18	0
Research and Development	8	0
Other Transfers	5	0
Reconstruction after Earthquake	5	0
Financing for Monitoring	5	0
Defense	2	0

() = negative numbers, EIT = enterprise income tax, PIT = personal income tax, VAT = value-added tax. Source: Ministry of Finance, 2013.

Specific-purpose transfers include wage grants, grants for rural tax reform, financing of rural education and health, grants to minority regions and local subsidies that were grandfathered by the 1994 reform, and earmarked grants of various central line agencies. A few of the better-known programs are:

- (i) Grants for increasing wages of civil servants. This grant compensated provincial-local governments for centrally mandated wage increases during 1999–2001. This program made sense for the year it was instituted but the rationale for maintaining this program in the long run is not clear. The program represents a tacit admission on the part of the central government that existing tax assignment and transfers are not commensurate with fiscal responsibilities at subnational levels. But such fiscal deficiency is best addressed through tax decentralization or tax base sharing programs. Providing grants for civil service wages creates perverse incentives for inflating the payrolls. Other countries like Brazil have introduced fiscal responsibility legislation to cap the wage expenditures at all orders of government so that government agencies have incentive to deliver services rather than work as employment creation agencies.
- (ii) Grants for rural tax reform. This transfer is intended to deal with the fiscal gap for rural governments arising from the elimination of rural taxes and charges in 2000. Again, such transfer can only be a stopgap transitory measure and not a long term solution to problems of rural public finance. A long-term solution requires an examination of options to reassign taxing and spending responsibilities or to institute output-based transfers.
- (iii) Special grant for minority regions. Preserving diversity of cultures is an important goal of the PRC government. Provinces with ethnic minorities receive an ad hoc grant equal to a base amount of CNY1 billion in 2000 with a yearly growth rate of central VAT revenue and rebate of 80% of the central increased VAT collection in the minority provinces. While the rationale for this transfer is easy to justify, the specific design of a small ad hoc grant needs reexamination.

(iv) Pre-1994 Subsidies. These subsidies, equivalent to the fiscal gap experienced by some provinces in 1993, have been sustained for more than a decade. These subsidies can no longer be justified.

The PRC also has more than 200 additional transfers from line agencies. There is little information available on these programs.

F. Local Government Debt

1. Classification of Debt

Article 28 of the 1994 Budget Law stipulates that: "the local budgets at various levels should be compiled according to the principles of keeping expenditure within the limits of revenue and maintaining a balance between revenue and expenditure, and should not have deficits. The local government may not issue local government bonds except as prescribed by laws or the State Council." However, local governments do incur deficits and need to borrow. They do so mainly through indirect means.

MOF breaks down local government liabilities into three categories according to the nature of the responsibility assumed by the local governments: liabilities with direct responsibility from local governments, liabilities with guarantees from local governments, and liabilities with implicit guarantee from local governments. The first category corresponds to direct explicit liabilities; the second, to explicit contingent liabilities; and the third, to implicit liabilities.⁹

Explicit liabilities borne directly by the local governments comprise:

- (i) Local government bonds. For example, in 2009, local government bonds worth CNY200 billion were issued by the MOF.
- (ii) Transfer loans from higher-level governments (including entrust loans in foreign exchange, lending policy of treasury bonds, comprehensive agricultural development borrowing, and other financial transfer loans) that used to finance nonprofit public infrastructure projects. The redemption of these loans relies on ordinary fiscal funds. For example, the lending policy of treasury bonds refers to bond funds from the Treasury that are lent to local governments by the MOF for some local construction projects supervised by central government institutions.
- (iii) Amounts owed by local governments and their affiliated agencies to other institutions and persons. Such arrears are generally due to the shortage of fiscal resources and overstaffing, and manifest themselves as overdue wages or unpaid bills to providers. They are most common at county or lower-level governments.
- (iv) Loans of government-affiliated institutions explicitly borne by those institutions.
- (v) Loans for local government financing platforms to be repaid by local governments, as explicitly stipulated in the contracts.

⁹ Brixi and Mody (2002).

Liabilities guaranteed by local governments are contingent in nature and comprise:

- (i) Part of the transfer loans from upper-level governments (including guaranteed loans in foreign exchange, lending policies of Treasury bond funds, comprehensive agricultural development borrowing, and other financial transfer loans), which are invested in profitable competitive projects. When the profit streams from the project are not enough to pay off the loan, the upper level governments can withhold transfer funds and from the lower-level government.
- (ii) Direct liabilities from a financing platform, government-affiliated institutions, and public institutions guaranteed by the government, except for the direct debt paid by the direct financial fund.

Liabilities with implicit guarantees from local governments are also contingent in nature and comprise:

- Loans taken out by government-affiliated institutions (such as universities and hospitals) for infrastructure construction projects that are not explicitly committed or guaranteed by the government, but excluding transfer loans from upper-level government financing.
- (ii) Loans of public institutions for infrastructure construction projects (water service, heating, gas supply, sewage disposal, garbage collection, and similar projects) that are not committed or guaranteed by government, excluding the transfer loan of upperlevel governments.
- (iii) Loans of financing platforms for infrastructure construction projects that are not committed or guaranteed by government, excluding the transfer loans of upperlevel governments.
- (iv) Loans due for infrastructure construction projects guaranteed by government affiliated institutions, public institutions, and financing platforms, excluding the direct liabilities assumed by government as guarantor.

2. Level and Composition of Debt

Local government borrowing has a long history in the PRC, although the central government has made repeated efforts to restrict it. Local governments started accumulating debt as early as 1979, and by 1996 all provinces, 90% of municipalities, and 87% of all counties had incurred debt. In 1996, local government debt totaled CNY0.2 trillion, equivalent to 3.5% of the PRC's GDP. From this relatively low base, debt levels increased significantly following the 1998 Asian financial crisis and then again following the global economic and financial crisis.

By the end of 1998, local government debt reached CNY0.4 trillion, or 5.3% of GDP. Although annual growth rates declined afterward, local government debt increased further to CNY4.5 trillion, or 17.0% of GDP, by the end of 2007. It then increased sharply again (by 137.6% in nominal terms and 57.3% in real terms) over the next 3 years, reaching CNY10.7 trillion, or 26.7% of GDP, by the end of 2010. By that time, only 54 county governments out of nearly 2,800 in the country had zero debt. The main reason for the sharp increase was the responsibility of local government to shoulder the larger part of the fiscal stimulus through which the government mitigated the impact of the global financial crisis on

the PRC economy. Debt rose again after 2010, and had reached CNY17.89 trillion of GDP by mid-2013.

The debt concept applied by the National Audit Office is broad in the sense that it includes (i) debt for which provincial, municipal, and county-level governments bear direct responsibility; (ii) debt guaranteed by those governments; and (iii) debt owned by local government agencies or local government investment vehicles (LGIVs) for which local government may also be responsible. It does not, however, cover possible payment arrears visà-vis suppliers or employees, possible debt of governments below the country level, and debt held by SOEs. SOE debt is usually considered part of enterprise sector debt.

As of mid-2013:

- (i) Municipal governments were responsible for 45% of all local government debt, while provinces accounted for 16%, and counties 36%.
- (ii) Most debt was intended to be used for capital infrastructure, with urban infrastructure construction and transportation being the two main reported subcategories.
- (iii) Fifty-seven percent of local government debt in mid-2013 was financed through bank loans, 10% through bonds, 8% through the build-transfer mechanism, and 25% through other sources including trust funds and other instruments associated with "shadow banking" in the PRC.
- (iv) Municipal governments had the largest share of local government debt, at 45%, followed by county-level governments, at 36%. Provincial governments, on the other hand, had only a 16% share of the total debt.
- (v) Thirty-nine percent of the local debt was held by LGIVs, 23% by government units, and 18% by SOEs.

Even though much of the debt is financing long-term infrastructure projects, most of the local debt is short-term. The result is a maturity mismatch. Bank loans accounted for 57% of local government borrowing by mid-2013. In contrast, bond issuances were just 10% of the total.

References*

- Asian Development Bank (ADB). 2008. *Public-Private Partnership Handbook*. Manila (available in English and Chinese at http://www.adb.org/documents/public-private -partnership-ppp-handbook).
- ———. 2012a. Housing Security Policies in China's Urbanization: Affordable Housing Projects versus Affordable Housing Conditions. Prepared by T. Ran (TA 7533-PRC). Manila.
- ———. 2012b. Summary Report: Supporting Reforms in Taxation and Budget Management. Prepared by J. Bai (TA 7568-PRC). Manila.
- ——. 2012c. Accelerating Reform of Local Treasury Cash Management in the PRC. Observations and Suggestions No. 2012-2. Manila.
- ———. 2012d. General Report: Further Deepening the Tax Reforms in PRC. Prepared by Research Institute for Fiscal Science (TA 7568-PRC). Manila.
- ———. 2012e. Government Investment Model and Compensation Mechanism for Healthcare Facilities. Prepared by China Research Center for Public Policy (TA 7095-PRC). Manila.
- ——. 2012f. Financing Road Construction and Maintenance after the Fuel Tax Reform. Prepared by Y. Li, C. Secrest, J. Gu, and M. Su. Manila.
- ———. 2012g. Blueprint for better management of local government implicit and explicit debt. Prepared by B. Qiao, Q. Chen, L. Liu, S. Guo, J. Zhao, and X. Meng (TA 7095-PRC). Manila.
- ———. 2012h. *Public-Private Partnership Operational Plan 2012-2020*. Manila (available in English and Chinese at http://www.adb.org/documents/public-private-partnership -operational-plan-2012-2020).
- ———. 2013a. A *Study of Local Government Bond Markets*. Prepared by China Central Depository and Clearing Company (TA 7896-PRC). Manila.
- ———. 2013b. Packaging Tax, Financing, and Governance Reforms in the People's Republic of China. Prepared by E. Ahmad and Z. Wang (TA 7763-PRC). Manila.
- ———. 2013c. Research Report on Local Residential Property (Housing) Taxes in China. Prepared by Y. Gou, X. Kuang, J. Liu, H. Ma, C. Meng, Y. Yan, and X. Yin. (TA 7763-PRC). Manila.
- ———. 2013d. Local Public Debt Management in China. Prepared by J. Liu (TA 7763-PRC). Manila.
- ———. 2013e. Reducing Inequality in the People's Republic of China through Fiscal Reform. Consultant's report. Manila.

^{*} ADB recognizes "China" as the People's Republic of China.

- —. 2013f. Three Decades of Fiscal Decentralization in the People's Republic of China: Taking Stock and Performance. Prepared by J. Martinez-Vazquez and B. Qiao. (TA 7763-PRC). Manila.
- ——. 2013g. Strategic Options for Urbanization in the People's Republic of China: Key Findings. Manila. September.
- ——. 2013h. Budgeting Reform at the Provincial Level in China. Prepared by Y. Gou (TA 7763-PRC). Manila.
- ——. 2014a. Financing of Infrastructure Projects. Innovating Financing for Urban Infrastructure and Municipal Services in Harbin. Prepared by S. Wells. (TA 8103-PRC). Draft.
- ———. 2014b. Working Draft: Public Finance Development Strategy 2020. Prepared by A. Shah (TA 8379-PRC). Manila.
- ——. 2014c. Harbin's Readiness for Innovative Financing Through PPP Arrangements. Prepared by P. Kelly (TA 8103-PRC). Manila.
- ———. 2014e. Local Public Finance Management in the PRC: Challenges and Opportunities. Synthesis paper (TA 7763-PRC). Manila.
- . 2014f. People's Republic of China: Managing Subnational Debt. Manila.
 - —. 2014g. Public-Private Partnerships in Urbanization in the People's Republic of China. Report of the workshop held on 22-23 August 2013 in Beijing. Manila.
- Ahmad, E. 2008. Taxation Reforms and the Sequencing of Intergovernmental Reforms in China: Preconditions for a Xiaokang Society. In Lou Jiwei and Shulin Wang, eds. *Fiscal Reforms in China*. Oxford University Press (for the World Bank).
 - —. 2012. Should China Revisit the 1994 Fiscal Reforms? Asia Research Centre Working Paper Series. No 52. London: Asia Research Center.
- Bahl, R. W., and C. Wallich. 1992. Intergovernmental fiscal relations in China. Policy Research Working Paper. No. WPS863. Washington, DC. February.
- Brixi, H. P., and Mody, A. (2002). Dealing with Government Fiscal Risk: An overview. In Government at Risk: Contingent Liabilities and Fiscal Risk. Hana Polackova Brixi and Allen Schick (Eds.) The World Bank, Washington.
- Brys, B., S. Matthews, R. Herd, and X. Wang. 2013. Tax Policy and Tax Reform in the People's Republic of China. *OECD Taxation Working Paper Series*. No. 18. OECD Publishing. Available at http://dx.doi.org/10.1787/5k40l4dlmnzw-en
- Burger, P., and I. Hawkesworth. 2013. *Capital Budgeting and Procurement Practices*. Paris: Organisation for Economic Co-operation and Development.
- Chan C., D. Forwood, H. Roper, and C. Sayers. 2009. *Public Infrastructure Financing: An International Perspective.* Canberra: Australian Productivity Commission.

- China Daily USA. 2013. The Decision on Major Issues Concerning Comprehensively Deepening Reforms. As reported at http://www.chinadaily.com.cn/china/2013cpctps/2013-11/16/ content_17109648.htm
- Commonwealth of Australia. 2006. International Comparisons of Australia's Taxes. Available at http://comparativetaxation.treasury.gov.au/content/report/html/05_Chapter_3.asp
- Communist Party of China (CPC) Central Committee. 2013. Decisions on Important Issues Concerning Comprehensive and Far-reaching Reform. Third Plenum of the 18th Central Committee of the Communist Party of China Available at http://www.chinadaily.com. cn/china/2013cpctps/2013-11/16/content_17109648.htm.
- European Investment Bank (EIB). 2004. The European Investment Bank's Role in PublicPrivate Partnerships (PPPs).
- Fan, G. 1998. Market-oriented Economic Reform and the Growth of Off-Budget Local Public Finance. In Donald Brean (ed.), *Taxation in Modern China*, New York: Routledge Press.
- Fitch Ratings. 2014. China's Shadow Bank Reforms Have a Long Way to Go. 17 January. Available at https://www.fitchratings.com/creditdesk/press_releases/detail.cfm?pr_id =815310&cm_sp=homepage-_-Featured_Content_Archive-_-China's%20Shadow %20Bank%20Reforms%20Have% 20a%20Long%20Way%20to%20Go
- Funke, K., T. Irwin, and I. Rial. 2013. Budgeting and Reporting for Public-Private Partnerships. International Monetary Fund Fiscal Affairs Department. OECD International Transport Forum Discussion Paper No. 2013-7.
- Government of the People's Republic of China (PRC). 2011. 12fth Five-Year Plan for National Economic and Social Development of the People's Republic of China, 2011–2015. Beijing.
- ———. 2014. Report on the Work of the Government. Delivered by Premier Li Keqiang at the Second Session of the 12th National People's Congress on 5 March 2014 and adopted on 13 March 2014 (available at http://www.wantchinatimes.com/ UploadFiles/0326_0314X_Full%20Text%20%20Report%20on%20the%20Work %20of%20the%20Government.pdf).
- Hou, X., and experts of the Ministry of Finance. 2011. Property Taxes as a Major Source of Local Finance Will Not Work. *Xinhua Network*. 26 December. http://news.xinhuanet. com/english/china/2014-02/07/c_133098352.htm
- HSBC Global Research. 2014. Balancing the Books: Debt, Assets, Fiscal Reform. Macro China Economics: Credit.
- International Council on Clean Transportation (ICCT). 2013. Notice on "Upgrading the Quality of Oil Prices: Informed Policy Advice" and the International Council of Clean Transport. Available at http://www.theicct.org/blogs/staff/contextualizing-chinas -fuel-pricing-announcement
- International Monetary Fund (IMF). 2013a. Fiscal Adjustment in an Uncertain World. Fiscal Monitor: World Economic and Financial Surveys. Washington, DC. April.
 - ——. 2013b. Energy Subsidy Reform: Lessons and Implications. Prepared by B. Clements et al. Washington, DC.

—. 2013c. Staff Guidance Note for Public Debt Sustainability Analysis In Market-Access Countries. Washington, DC.

—. 2014. People's Republic of China: Staff Report for the 2014 Article IV Consultation. Washington, DC (July).

- Irwin, T. and T. Mokdad. Managing Contingent Liabilities in Public-Private Partnerships-Practice in Australia, Chile and South Africa. Washington, DC.
- Jie, X. 2012. Continue to Promote the Reform of VAT System: Perfect and in Favor of the Structural Adjustment of the Tax System. *Economic Daily.* 30 March.
- Liu, L., and B. Qiao. 2013. Transition from Direct Central Government Onlending to Subnational Market Access in the PRC. In Otaviano Canuto and Lili Liu, eds., Until Debt Do Us Part: Subnational Debt, Insolvency and Markets. Chapter 10: 378–410. Washington, DC: World Bank.
- Lou, J., and S. Wang. 2002. *Public Finance in China: Reform and Growth for a Harmonious Society.* Washington, DC: World Bank.
- Ma, H. 2009. A Tentative Study on Green Tax Reform and Perfection in China. *Research on Development* (6): 143–146.
- Martinez-Vazquez, J. 2011. Taxation in Asia. Asian Development Bank, Manila.
- Martinez-Vazquez, J., B. Qiao, and L. Zhang. 2008. The Role of Provincial Policies in Fiscal Equalization Outcomes in China. *China Review*. 8(2): 135–167.
- Ministry of Finance (MOF), People's Republic of China (PRC). 2014a. National Fiscal Accounts. Available at: http://yss.mof.gov.cn/2013qgczjs/
- Ministry of Finance (MOF). 2014b. Lou Jiwei: A clear timetable for reform in 2020 to establish a basic modern financial system. Available at http://www.mof.gov.cn/zhengwuxinxi/ caijingshidian/xinhuanet/201407/t20140704_1108535.html
 - —. 2014c. Notice on Issues Related to the Promotion of Public Private Partnerships. No. 76 [2014]. Available at http://jrs.mof.gov.cn/zhengwuxinxi/zhengcefabu/201409/ t20140924_1143760.html
 - —. 2014d. National Treasury Department officials answers reporters' questions on the 2014 pilot local government bonds. Available at http://gks.mof.gov.cn/zhengfuxinxi/ zhengcejiedu/201405/t20140522_1082931.html
- Moody's Investors Service. 2013. Moody's Affirms China's Aa3 Rating, Changes Outlook to Stable. 16 April. Available at https://www.moodys.com/research/Moodys-affirms -Chinas-Aa3-rating-changes-outlook-to-stable--PR_270986
- National Audit Office (NAO), People's Republic of China (PRC). 2011. Audit Findings on China's Local Government Debts (No. 35, General Serial No. 104). Beijing. Available at: http://www.cnao.gov.cn/main/articleshow_ArtID_1154.htm
- ——. 2013a. Results of Audit on Debt of 36 Local Governments (No. 24, General Serial No. 166). Beijing.
- ——. 2013b. National Government Debt Audit Results. Available at http://www.audit.gov. cn/n1992130/n1992150/n1992500/n3432077.files/n3432112.pdf

- National Bureau of Statistics (NBS), People's Republic of China (PRC). 2013. China Statistical Yearbook (2013) (Zhongguo Tongji Nianjian-2013). Beijing: China Statistics Press. http://www.stats.gov.cn/tjsj/ndsj/2013/ indexeh.htm
- National People's Congress (NPC), People's Republic of China (PRC). 2014. Report on the Work of the Standing Committee of the National People's Congress. Delivered by Chairman of the Standing Committee Zhang Dejiang at the Second Session of the 12th National People's Congress on 9 March 2014. Available at http://www.cctb.net/bygz/ wxfy/201403/W020140318573462442318.pdf
- Organisation for Economic Co-operation and Development (OECD). 2012. Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships. OECD Publishing. May.
- People Daily Online. 2014. Growth in Chinese local government debt slows. Available at http:// english.people.com.cn/business/n/2014/0625/c90778-8745961.html
- Qiao, B., J. Martinez-Vazquez, and Y. Xu. 2008. The Tradeoff between Growth and Equity in Decentralization Policy: China's Experience. *Journal of Development Economics*. 86(1): 112–128.
- State Council. 2014. Strengthening Local Government Debt Management. No. 43. Available at http://www.gov.cn/zhengce/content/2014-10/02/content_9111.htm
- Uchimura, H., and J. Jütting. 2007. Fiscal Decentralization, Chinese Style: Good for Health Outcomes? *Working Paper* 264. Paris: OECD Development Centre.
- United Kingdom (UK) Treasury. 2012. UK Private Finance Initiative Projects: Summary Data as at March 2012.
- Wang, B. 2014. Public Private Partnerships. Speech by the Vice Minister of Finance to the Ministry of Finance's PPP Training, Beijing, 17–18 March 2014. Available at http://jrs. mof.gov.cn/zhengwuxinxi/lingdaojianghua/201403/t20140320_1057693.html
- Wang, X., and R. Herd. 2013. The System of Revenue Sharing and Fiscal Transfers in China. OECD Economics Department Working Paper. No. 1030. Paris: OECD.
- Wong, C. 1998. Fiscal Dualism in China: Gradualist Reform and the Growth of Off-Budget Finance. In Donald Brean (ed.). *Taxation in Modern China*. New York: Routledge Press.
 - ——. 2013. Paying for Urbanization: Challenges for China's Municipal Finance in the 21st Century. In R. Bahl, J. Linn, and D. Wetzel, eds. *Metropolitan Government Finances in Developing Countries*. Cambridge, MA: Lincoln Institute for Land Policy.
- World Bank. 2013. Private Participation in Infrastructure Projects Database. World Bank Group (available at http://ppi.worldbank.org).
- World Bank and the Development Research Center of the State Council (DRC), People's Republic of China (PRC). 2013. *China 2030: Building a Modern, Harmonious, and Creative Society.* Washington, DC.
 - ——. 2014. Urban China: Toward Efficient, Inclusive, and Sustainable Urbanization. Washington, DC.

- Xinhua. 2014a. *China revises law to better manage government money*. Available at http://news. xinhuanet.com/english/china/2014-08/31/c_133609499.htm
 - —. 2014b. Guangdong leads China's municipal bond issuing pilot. Available at http:// english.sina.com/2014/0624/712301.html
 - ——. 2014c. Growth in Chinese local government debt slows. Available at http://english. people.com.cn/business/n/2014/0625/c90778-8745961.html
- Xu, S., D. Wang, and Y. Huang. 2011. VAT Administration and Revenue-Sharing in China. In Ehtisham Ahmad, ed. *Options for Revenue-sharing*. Dubai Economic Council.
- Zhang, Y. S., and S. Barnett. 2014. Fiscal Vulnerabilities and Risks from Local Government Finance in China. *IMF Working Paper*. No. 14/4. Washington, DC. January.

Money Matters

Local Government Finance in the People's Republic of China

The Third Plenum of the 18th Central Committee of the Communist Party of China in November 2013 reinforced the importance of public finance reform. Drawing on recent technical assistance from the Asian Development Bank (ADB), special reports, and the work of ADB staff, the publication offers observation and suggestion on how to pursue public finance reform. The publication also outlines practical actions that can be taken to improve budgeting, taxation, and the system of fiscal decentralization in the People's Republic of China. Special attention is given to the management of local government debt, the most pressing fiscal issue facing the People's Republic of China. The potential contribution of of public–private partnerships is also introduced.

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