# ECON4033 Money and Finance in China

## Week 5: Public Finance in China - Relationship between the Central and Local Governments[1]

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[1] These lecture notes are largely based on the materials prepared by Prof. Siu Kee Wong for the same topic.

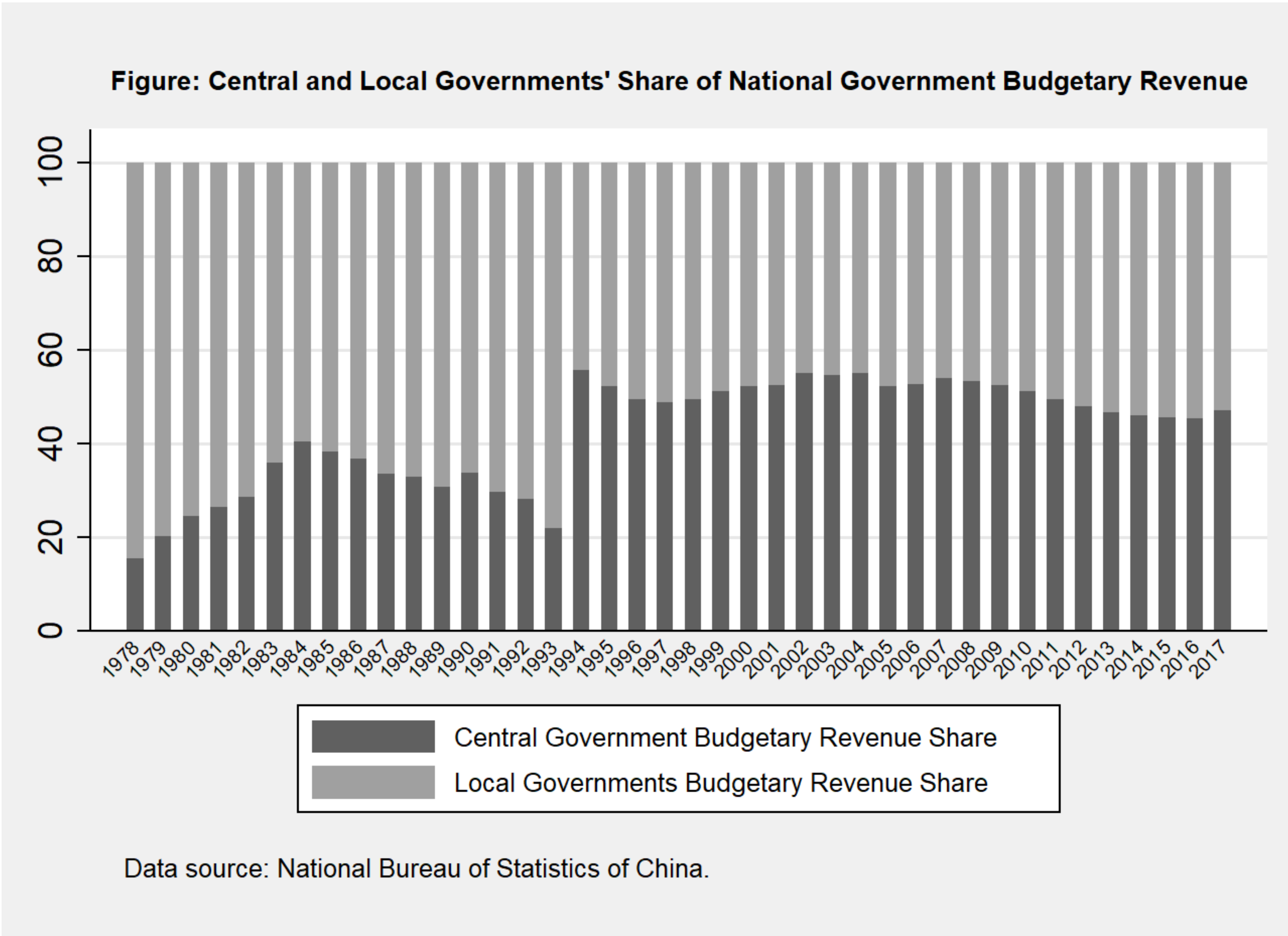
## Table of Contents

# I. The Fiscal Reforms in China

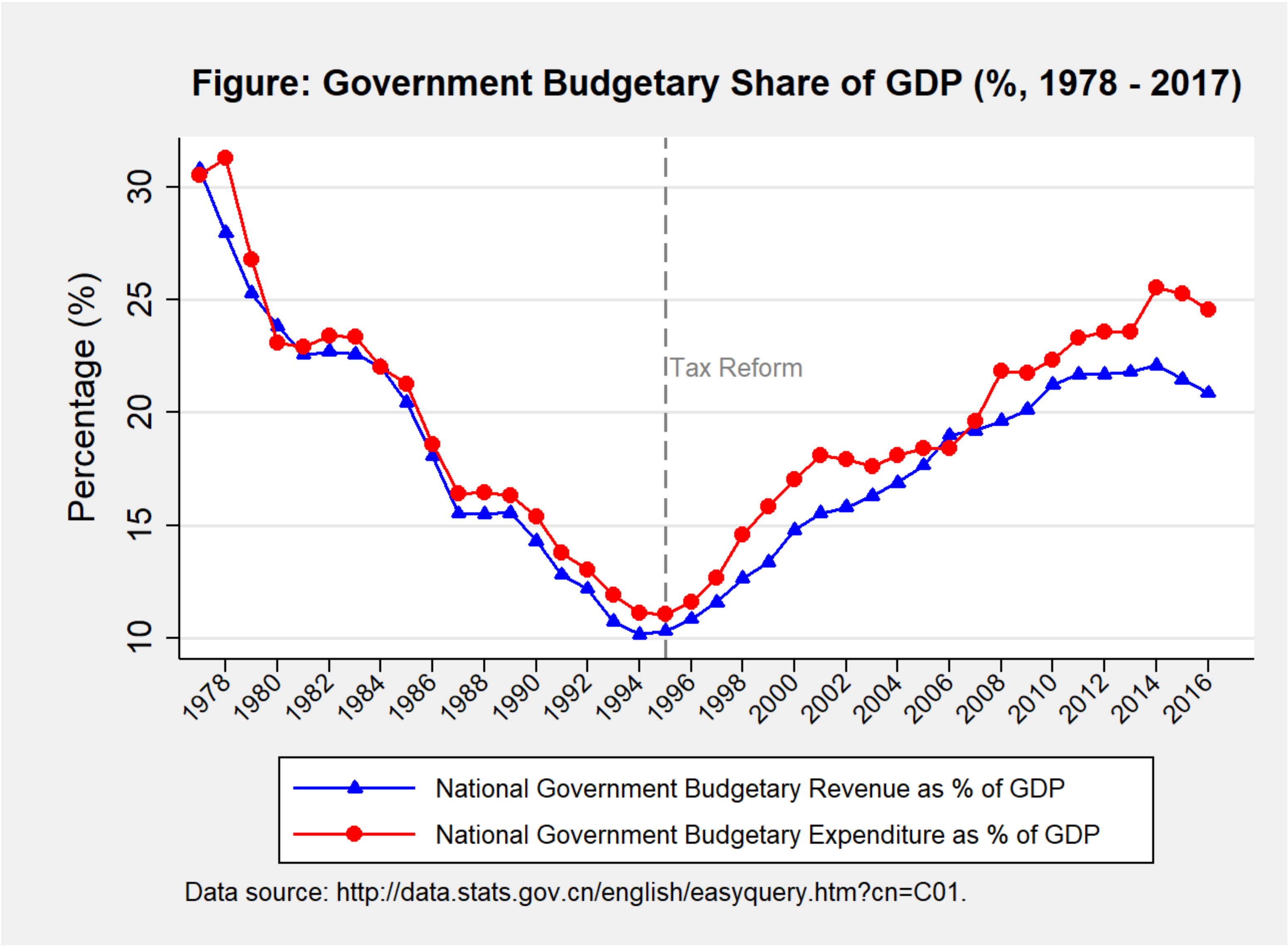
- Before 1978
    - Before 1978, China's fiscal system was basically characterized by "unified collection of revenues, unified distribution of spending" (統收統支).
    - There were no personal and enterprise income taxes. The government raised revenue through profit remittances from SOEs.
    - Local government's revenues and spending are not necessarily related under this approach, which eventually hurts the local economy (and hence government revenues) due to local governments lack of motivation.

- Reforms after 1979
    - In the 1978 – 1993 period, China tried to break down its highly-centralized fiscal system with various fiscal contracting system (财政包干).
    - The government introduced various profit-retention system in order to give enterprises better incentives.
    - The system is complex and the budgetary authorities negotiated the tax rates with SOEs on case-by-case basis.
    - Each provincial government target a long-term sharing rule tailored to that province's economic conditions. Weak provinces were allowed to retain more revenues.
    - The outcome does not meet the expectation. While the reform did provide some incentives for local governments, the contracted financial responsibility also led to local protectionism and vicious competition. Barriers created by the local governments prevented interprovincial trade and transactions, which lowered the overall efficiency of the economy. The fraction of central government budgetary revenue in the national budgetary revenue kept decreasing as well. See the next two pages for data.

- The fraction of central government budgetary revenue in the national budgetary revenue decreased from 40.5% in 1984 to 22% in 1993.



- From 1978 onward, fiscal revenues declined steadily. In 1994, national budgetary revenue reached a minimum at 10.8% of GDP. Such tax erosion eventually triggered the fiscal reform in 1995.



- Tax Reform in 1994
  - The reform largely replaced the traditional revenue remittance system with a tax system that resembles the western system.
  - The 1994 tax reform has three crucial elements: new taxes, a tax assignment and sharing system, and a new central government taxation agency.

    1) New Taxes
       - The most important of the new taxes was the VAT (value added tax) levied on most manufactured goods at the uniform rate of 17%.
       - A 33% of profit tax was introduced, with uniform rates for state, collective and private enterprises.
       - The system of personal income taxes was unified and a consumption tax on cigarettes, alcohol and luxuries is introduced.
       - Leveled Playing Field
         - — Enterprise profits, which had been treated differently depending on their ownership and on the enterprise's contracts, were unified into a uniform profit tax regime.
         - — The movement of the VAT to the central government level also improves geographical equities.

2) Tax Sharing

- The central government had complete claim on the consumption tax, customs duties, and most direct and indirect taxes on central government-controlled sectors (e.g. railroads).
- Local governments had control over direct taxes on local enterprises, estate and property taxes, and pollution and resources fees, urban land use tax, agriculture tax, tax on contracts, tax on the use arable land, vehicle purchasing tax.
- The VAT revenues were shared income (75% going to the central government), business tax (3%), stamp tax on security trading (97%), personal income tax (60%), and company income tax (60%).
- See China Statistical Year Book 2018 for the latest decompositions of tax revenue (Table 7-4) and main items of general public budget revenue of the central and local governments (Table 7-2):

  http://www.stats.gov.cn/tjsj/ndsj/2018/indexeh.htm

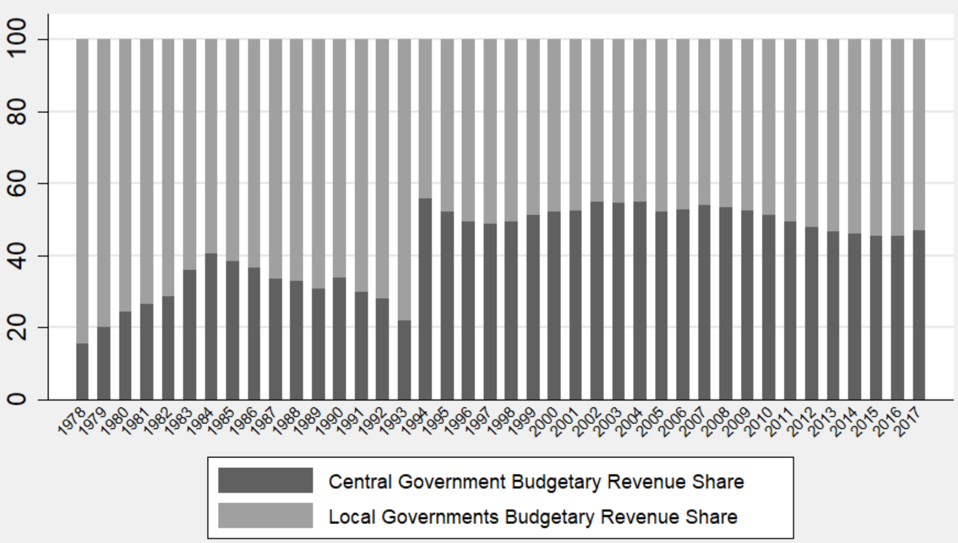
3) A New Central Government Taxation Agency

- A new central government taxation authority was created.
- Under the old system, taxes were collected by local government tax bureaus.
- Under the new system, the central government collected the bulk of revenue and then shared them with the provinces.
- The 1994 tax reform reversed fiscal erosion. By 2005, budgetary revenues were 17.5% of GDP. Expenditure were 18.6% of GDP.

# II. Restructuring Central-Local Relation

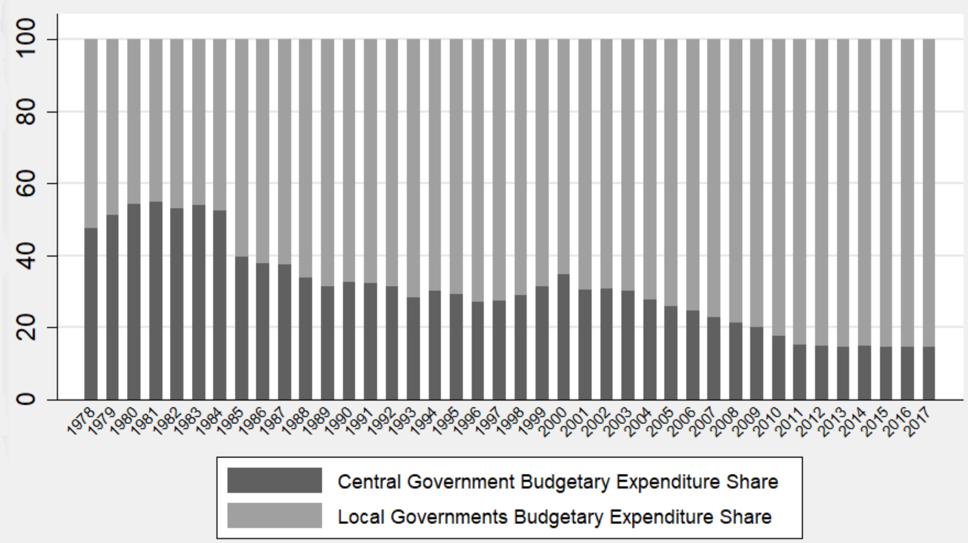
- The 1994 reform boosted the central government's share of revenue collected. During the period of 1985 – 1993, the central government spending and revenue shares are roughly the same at about 30%.
- After the tax reform, the central government take in over 50% of the revenue and spend directly about 30% of all expenditures.
- This enhance the central government's finance and bargaining position vis-à-vis local governments.

Figure: Central and Local Governments' Share of National Government Budgetary Revenue




Data source: National Bureau of Statistics of China.

Figure: Central and Local Governments' Share of National Government Budgetary Expenditure




Data source: National Bureau of Statistics of China.

- While tax collection is centralized, budgetary expenditures are relatively decentralized.
- In 2005, local government expenditures were 85.4% of total public spending while central government expenditures were only 14.6%.
- The tax reform largely resolved the fiscal dilemma of the central government, but the fiscal problems at the local level remained.
- The Chinese government relies mainly on VAT and sales taxes for the bulk of its revenue owing to the administrative ease of tax collection at the company level.
- Property taxes and personal income tax are main income sources in the U.S. but not in China. Various fees related to the use of property in China, however are an important revenue source for local government.
- The fact that localities in China lack an assured source of revenues has led many localities to rely on various user fees related to the use of properties and the sale of land use rights (land usufruct) to the private sector.

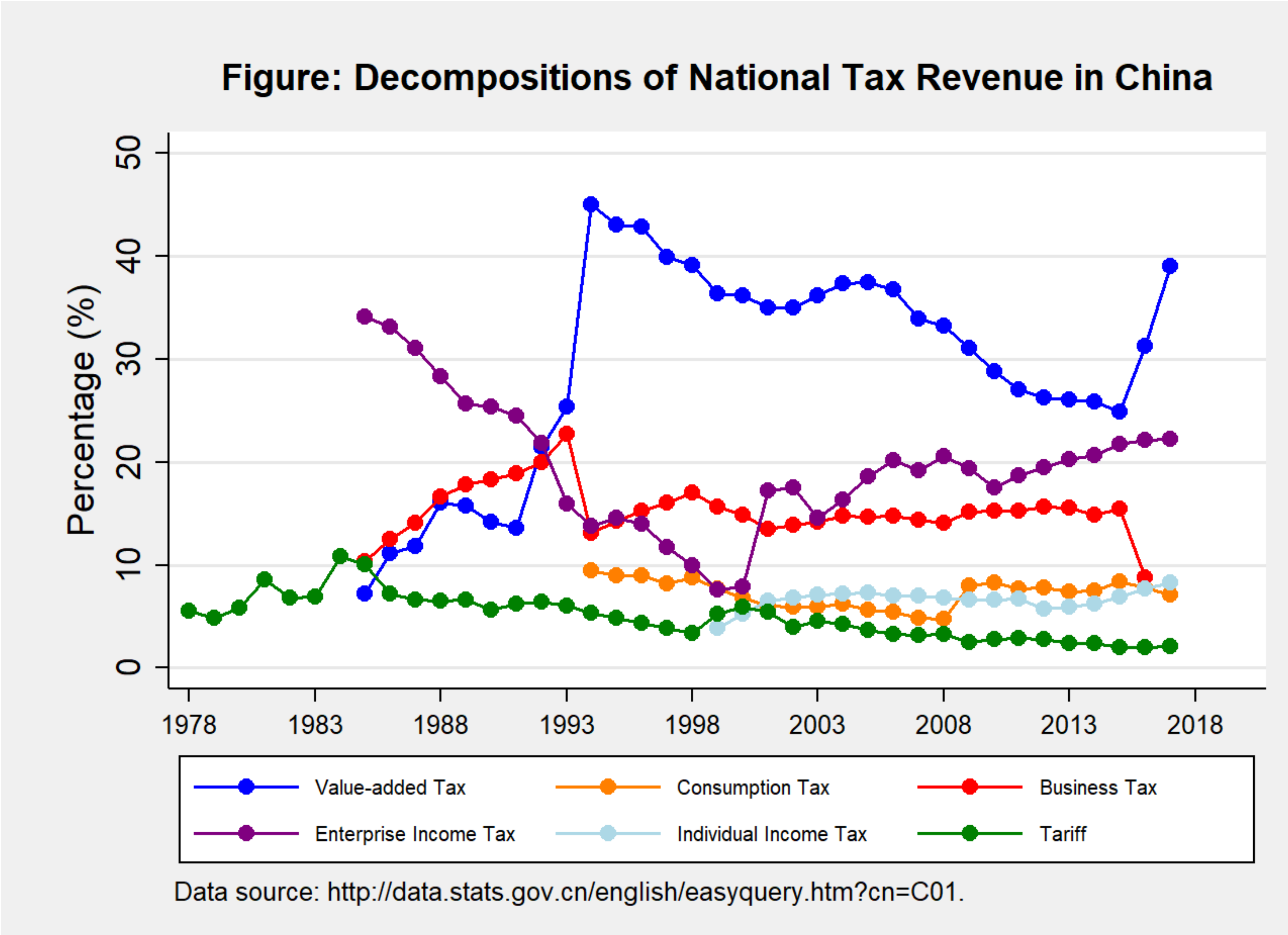


Figure: Decompositions of National Tax Revenue in China
Percentage (%)
0
10
20
30
40
50
1978
1983
1988
1993
1998
2003
2008
2013
2018
Value-added Tax
Consumption Tax
Business Tax
Enterprise Income Tax
Individual Income Tax
Tariff
Data source: http://data.stats.gov.cn/english/easyquery.htm?cn=C01.

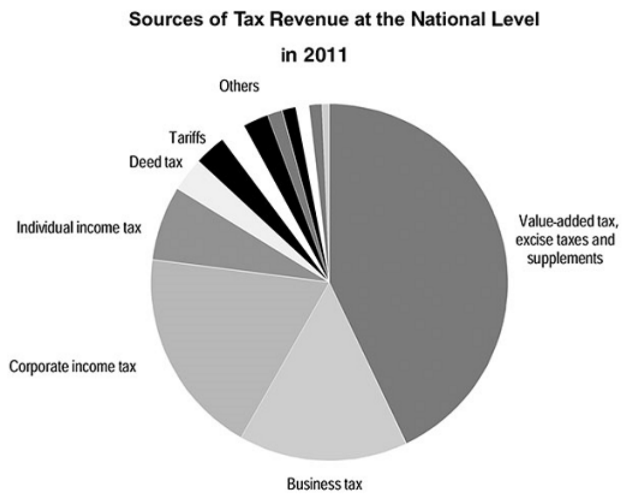



*Figure 10.3* At the national level in China, the Value Added Tax (VAT) remains the largest source of revenue. Source: Wang and Herd, 2013.

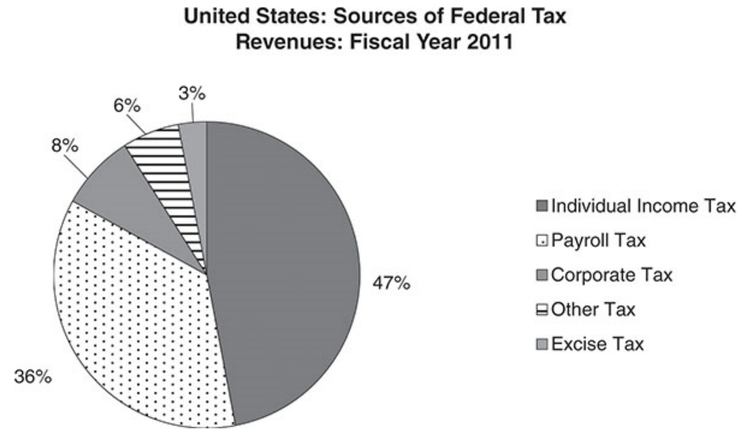



*Figure 10.6* Unlike China, the personal income tax (not the VAT) is the major source of government revenue at the federal level. Source: Budget of the United States Government, Fiscal Year 2012, Historical Tables: Table 2.1.

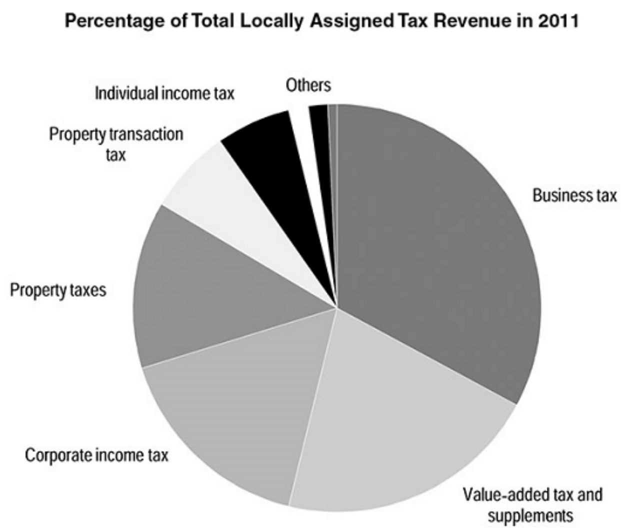



*Figure 10.4* The sharing formula for collected taxes gives localities a significant share of business and VAT revenue Source: China Statistical Yearbook and Wang and Herd, 2013.

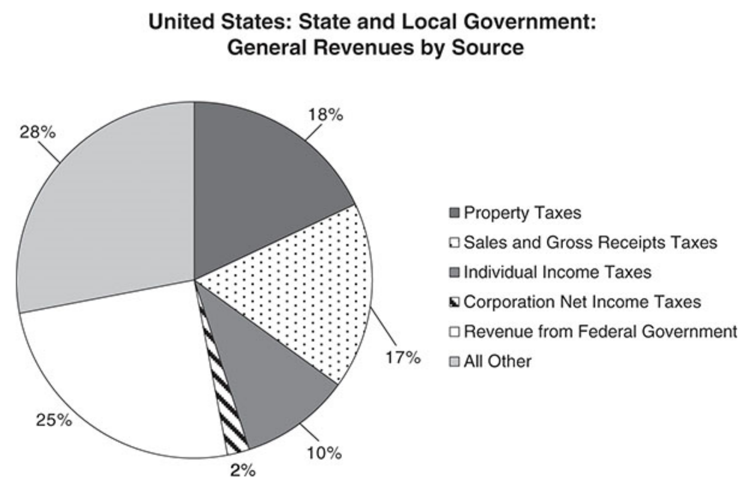



*Figure 10.7* Property taxes and revenue from the federal government are major sources of revenue for localities in the United States. Source: Budget of the United States Government, Fiscal Year 2012, Historical Tables: Table 2.1.

Source: Schramm (2015).

- A calculation reported in Schramm (2015) shows that shared tax revenues alone cover less than half of the local expenditures. Various other non-tax revenues are also implemented (covering about 21% of expenditure). Local governments also sell land use rights (11%). The remaining gap is financed by transfers or grants.
- About 15% of national tax revenue is earmarked when the central government transfers fund to localities.
- Non-earmarked grants are available for general local government uses. They are based on a formula measuring the shortfall between expenditure and revenues and aim to reduce regional inequality.

**Table: Local government revenues and other finance as a share of expenditures in 2011**

| | RMB 100 Million | % |
|---|---|---|
| **Taxes (revenue sharing)** | 41,107 | 44% |
| **Non-tax revenues** | 19,388 | 21% |
| **Land sales** | 9,931 | 11% |
| **Grants from central government** | 23,097 | 25% |
| **Statistical discrepancy** | −789 | −1% |
| **Total** | 92,734 | 100% |

Source: Schramm (2015).

- Four important factors have together placed tremendous financial stress on localities:

  1) Inability to raise taxes locally.

  2) Central government mandates that local government many expenditure categories.

  3) Reward system from the central government for local officials who achieve growth targets.

  4) Assumption that central government tax revenue sharing efficiently trickle down to the lowest levels of government: the townships and village.

- China's system of a heavy reliance on hierarchical funding (from central to local governments) leads to a great-deal of negotiation and administration cost.

- In response to the weak rural fiscal system, local governments finance their spending through extra-budgetary funds (预算外资金) (e.g. contribution to social insurance fund) and irregular fees.

- These funds are usually earmarked for specific uses.

- The central government has used its financial resources to fund a steadily increasing array of transfer to local levels mainly in the form of tax rebate.
- About 49% of these transfers are discretionary ad hoc payment from the central government. Many of these payments are earmarked for specific purposes like education or social security.
- As these payments are not rule based, they have perverse incentive effect. Local government officials have strong incentive to be seen as needy by the central government, leading to "common pool" problem and "race to the bottom" issue.

## III. Land Sales and Local Government Revenue

- More recently, many local municipal governments rely heavily on land sales.

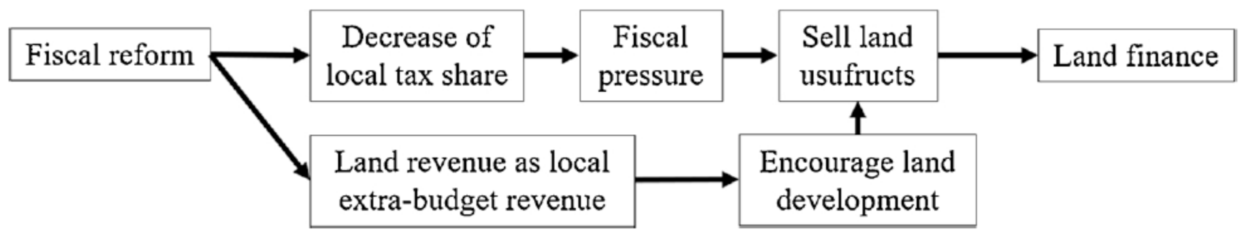
- Land sales have been instrumental in buoying provincial GDP growth. In 2013, local governments received CNY 3.9 trillion by leasing state-owned land to developers and industries. This accounted for 35% of their total fiscal revenue.

- According to a national audit report, 23 of the 29 provinces and municipalities in China relied on revenue from land sales to finance between 20% to 66% of their debts.

- Problems: excessive sales of farm land for urban development; corruption.

- Land Finance (土地财政) in China
  - Was the 1994 tax-sharing reform really a cause of land finance in China?

**Figure: Sub-mechanisms of the fiscal pressure theory**




Source: Xu (2019).

  - Note that land revenue is accounted for outside of formal fiscal revenue. Before 2006, land revenue was listed as non-budget income; since 2006, it is one of the governmental funds.
  - Fiscal pressure theory had been used in the literature to explain the cause of land finance in China. The theory emphasizes the change of the central government's strategy from "assisting-oriented" to "grabbing-oriented" during the tax reform.
  - Data presented in the next few pages might suggest a different story. The 1994 tax-sharing reform might only explain partially the current land finance phenomenon in China.

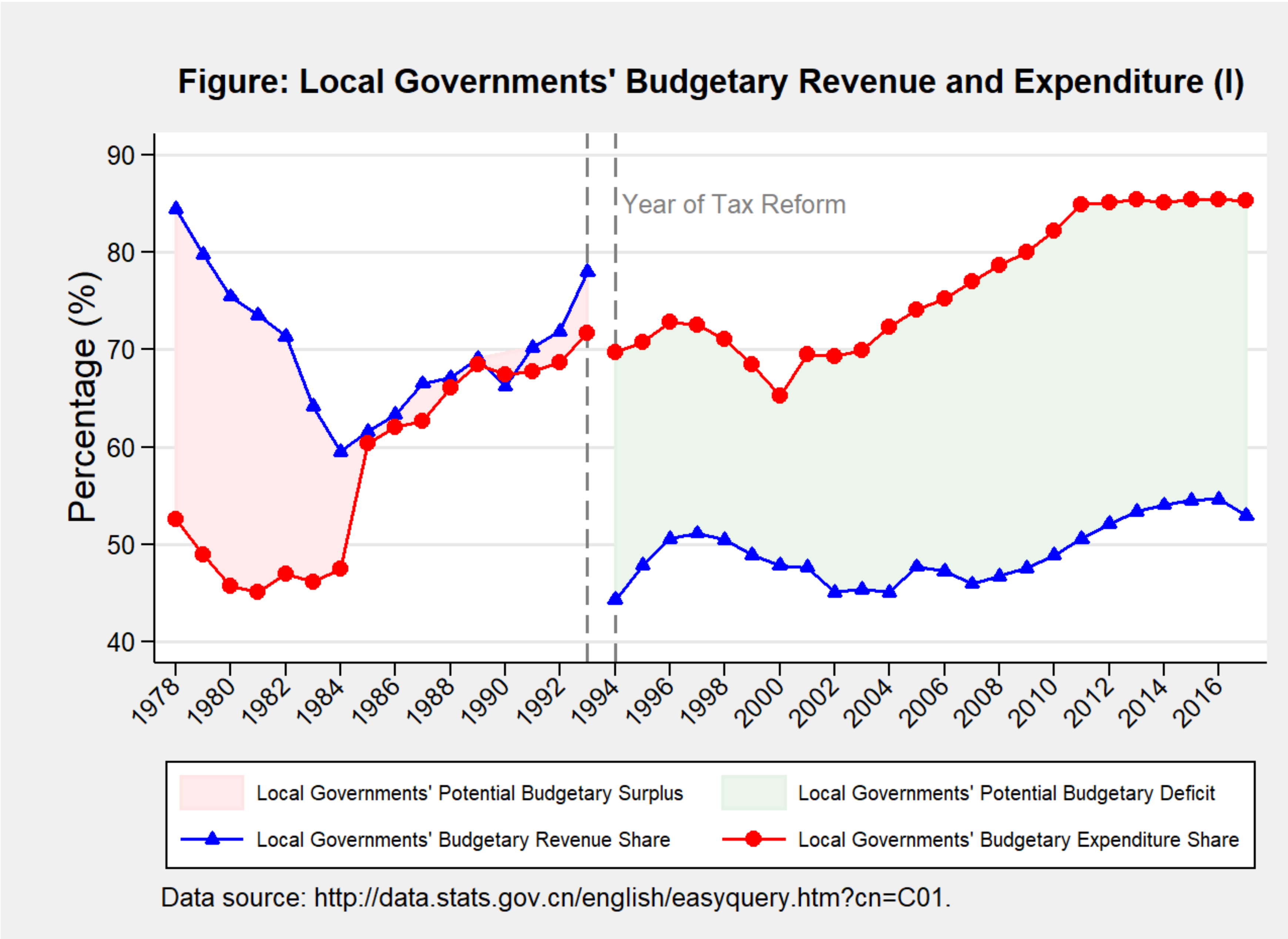
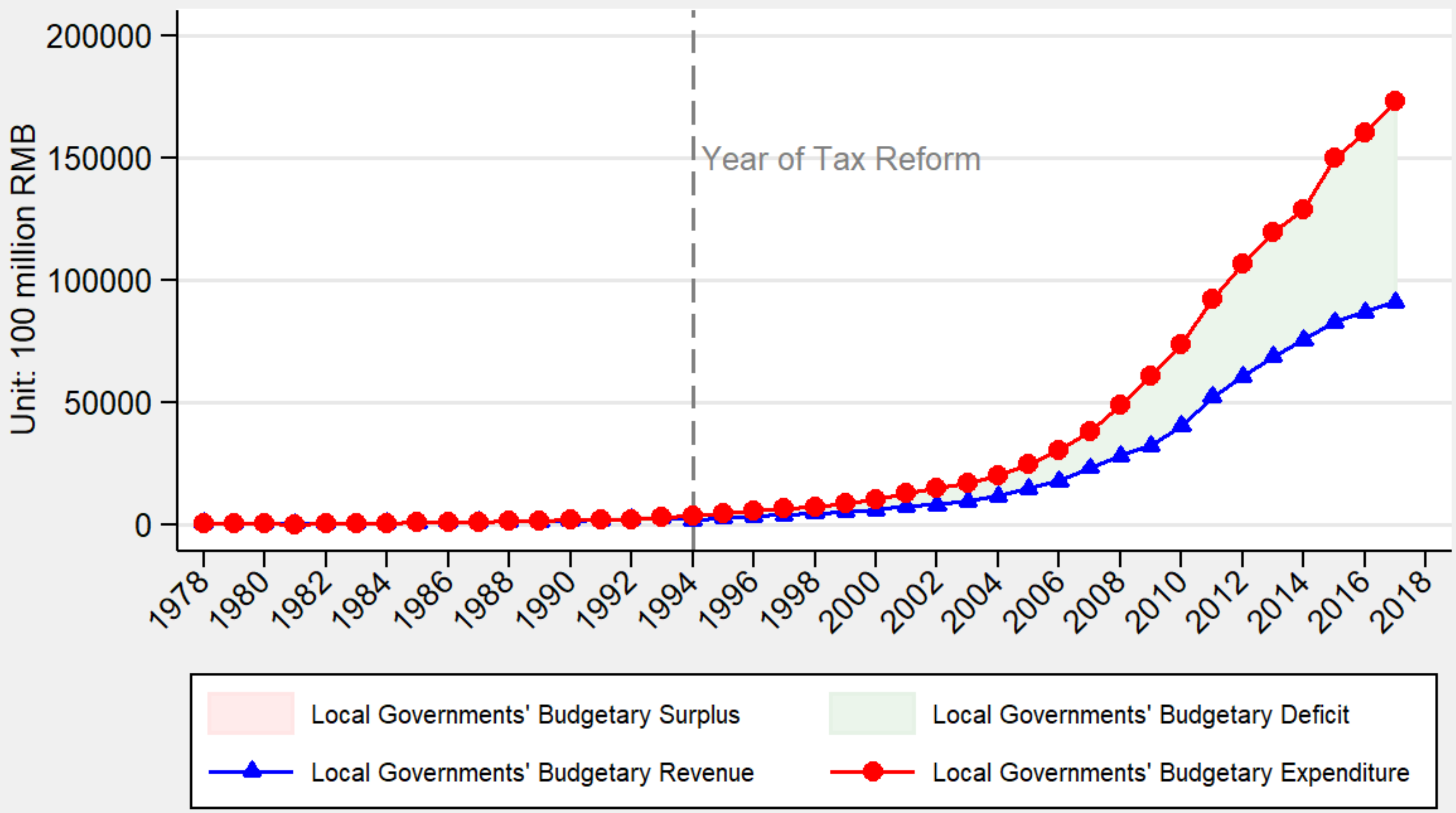


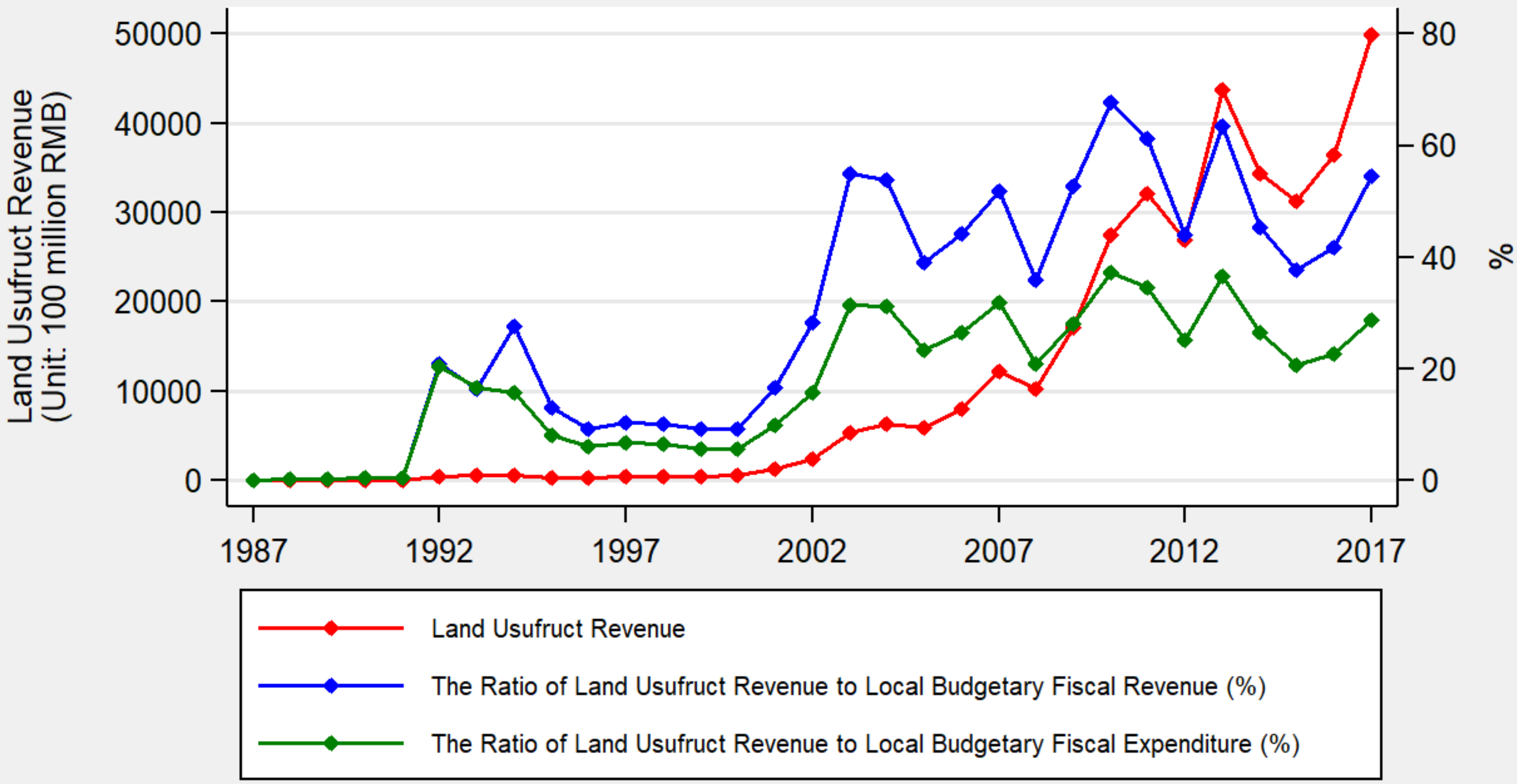
Figure: Local Governments' Budgetary Revenue and Expenditure (I)
Percentage (%)
90
80
70
60
50
40
Year of Tax Reform
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
Local Governments' Potential Budgetary Surplus
Local Governments' Potential Budgetary Deficit
Local Governments' Budgetary Revenue Share
Local Governments' Budgetary Expenditure Share
Data source: http://data.stats.gov.cn/english/easyquery.htm?cn=C01.

**Figure: Local Governments' Budgetary Revenue and Expenditure (II)**



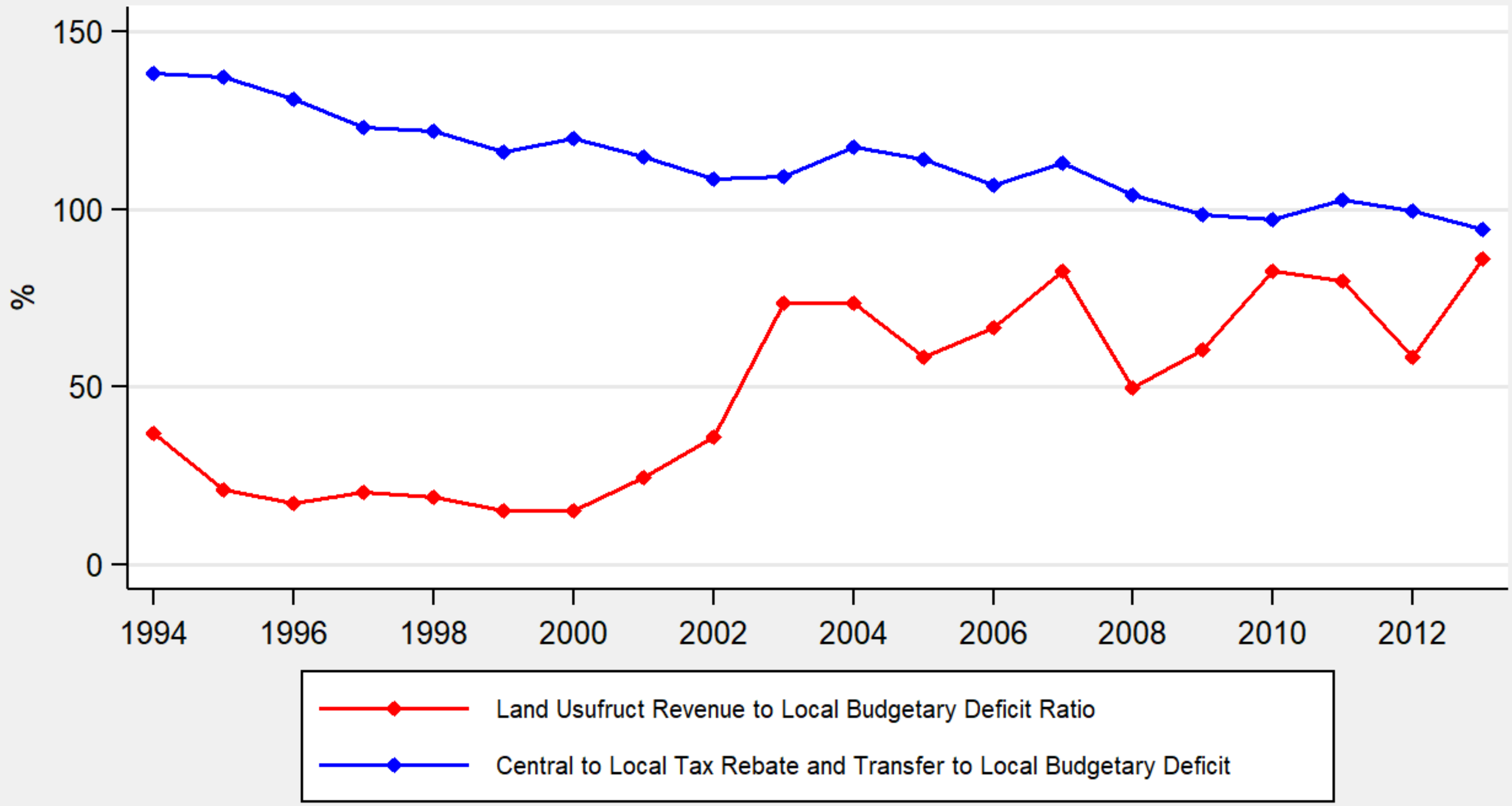

Data source: http://data.stats.gov.cn/english/easyquery.htm?cn=C01.

Figure: Land Usufruct Revenue in China




Data source:
Various issues of *China Statistical Year Book*, *China Fiscal Yearbook*, and *China Land Resource Yearbook*.

Figure: Solutions for Local Governments' Budgetary Deficit after 1994




Data source:
Various issues of *China Statistical Year Book*, *China Fiscal Yearbook*, and *China Land Resource Yearbook*

## IV. Is China's Tax Burden (稅負) Too Heavy?

- In the 1980s, the fiscal revenue/GDP ratio continued to decline. The 1994 reform was introduced to raise more revenues.

- However, there have been complaints that the tax burden has become too high. New taxes were introduced and tax rates were raised, while fees and levies for the government's extra-budgetary funds and extra-system funds remains high.

- In addition to the general budgetary revenue, the "tax burden" should include revenues of government funds, extra-budgetary revenues, land revenues and social security taxes/contributions.

- International Comparison
    - The “tax burden” in China rose from 20.4% to 32.2% of GDP during the 1998 – 2009 period.
    - This is not particularly high compared with most industrialized countries. For instance, the OECD average was 42.9% in 2007, 10 percentage points higher than that of China.
    - China relies much more on non-tax revenues than other countries do. As a % of GDP, China’s non-tax revenues constituted over 10%, while average of OECD countries was only 5.4%.
    - The social security taxes/contributions are very small. The figure of China was 4.2% in 2009, which was far less than the 10.9% of European countries and the 6.8% of non-European countries in 2007.

| Table: Government revenues of major countries | | | | |
|---|---|---|---|---|
| **(As % share of GDP)** | | | | |
| **Countries** | Year | Non-tax revenues | Tax revenues (including social security tax) | Total |
| **Canada** | 2007 | 6.8 | 33.3 | 40.1 |
| **USA** | 2000 | 7.1 | 29.9 | 37 |
| **Australia** | 2007 | 6.4 | 30.8 | 37.2 |
| **New Zealand** | 2007 | 6.4 | 35.7 | 42.1 |
| **France** | 2007 | 4.8 | 43.5 | 48.3 |
| **Germany** | 2007 | 3.3 | 36.2 | 39.5 |
| **UK** | 2007 | 4 | 36.1 | 40.1 |
| **Iceland** | 2007 | 7.1 | 40.9 | 48 |
| **Switzerland** | 2005 | 8.1 | 29.2 | 37.3 |
| **Sweden** | 2005 | 7.3 | 49.5 | 56.8 |
| **South Korea** | 2007 | 4.3 | 26.5 | 30.8 |
| **OECD (simple) average** | 2007 | 5.4 | 37.5 | 42.9 |
| **China** | 2009 | 10.2 | 22 | 32.2 |

## V. Government Expenditure

- An important tenet of public finance is that the devotion of public services to localities is a desirable goal. The idea stems from the notion that localities are better able understand and meet the needs of citizens at the ground level.

- However, empowering local governments to fund local public services will result in unequal distribution of funding, because some localities are richer than others.

- China has devolved a great of responsibility to localities in terms of the provision of public services; the tradeoff may be greater inequality across regions.

- Localities are responsible for close to 85% of all public budgets and collect less than 50% of revenue.

- China appears to use one of the most decentralized systems to provide public services. However, many local expenditures in China are mandated by the central government and that localities have little control over tax rates and revenues.

- Expendіture Structure
    - Before 1978, one of the major functions of public finance was to implement economic plans. For instance, if the government has decided to invest in an industry, fiscal resources will be allocated accordingly.
    - Social welfares were provided by administrative units and enterprises. The expenditures in this regard were “absorbed” by the work units. They were not reflected in the budget.
    - For example, the item “economic constructions” (經濟建設) constituted 64% of the total expenditure in 1978, while other social welfare functions constituted a very small share.
    - However, the expenditure item “economic construction” declined to 27% of the total expenditure in 2006, while the share of social functions is increasing.

| Table: Expenditure Structure - Main items of National Government Expenditure | | | | | | |
|---|---|---|---|---|---|---|
| Unit: 100 million RMB | | | | | | |
| Year | Total Expenditure<br>支出合计 | Economic Constructions<br>经济建设费 | Social, Cultural and Education<br>社会文教费 | National Defense<br>国防费 | Administrative Expenditure<br>行政管理费 | Others<br>其他支出 |
| 1978 | 1122.09 | 718.98 | 146.96 | 167.84 | 52.90 | 35.41 |
| 1990 | 3083.59 | 1368.01 | 737.61 | 290.31 | 414.56 | 273.10 |
| 2000 | 15886.50 | 5748.36 | 4384.51 | 1207.54 | 2768.22 | 1777.87 |
| 2004 | 28486.89 | 7933.25 | 7490.51 | 2200.01 | 5521.98 | 5341.14 |
| 2005 | 33930.28 | 9316.96 | 8953.36 | 2474.96 | 6512.34 | 6672.66 |
| 2006 | 40422.73 | 10734.63 | 10846.20 | 2979.38 | 7571.05 | 8291.47 |

For the most recent data of government expenditure: http://data.stats.gov.cn/easyquery.htm?cn=C01 >>> Finance >>> Main items of National Government Expenditure.

| Table: China's public expenditure in 2011 | | | |
|---|---|---|---|
| | Central Govt | Local Govt | Total |
| Education | 999 (6%) | 15498 (17%) | 16497 (15%) |
| Social safety net and employment | 502 (3%) | 10607(11%) | 11109 (10%) |
| General Administration | 903 (5%) | 10085 (11%) | 10988 (10%) |
| Health and medical | 71 (0%) | 6358 (7%) | 6430 (6%) |
| Public security | 1037 (6%) | 5267 (6%) | 6304 (6%) |
| National defense | 5830 (35%) | 198 (0%) | 6028 (6%) |
| Others | | | |
| Total | 16514 (100%) | 92734 (100%) | 109248 (100%) |

For the most recent data of government expenditure:
http://data.stats.gov.cn/easyquery.htm?cn=C01 >>> Finance >>> Main items of National Government Expenditure.

- International Comparison
    - A large part of China's fiscal budget is "general administration" and "education" (in order of magnitude). In contrast, OECD countries spend more on "social welfare", "health care" and "education".
    - China is spending a relatively small portion of the budget on health care, registering only 6% of the budget in 2011, much lower than the OECD countries.
    - Conclusion – The Chinese government has been spending a lot on investment (e.g. infrastructure construction) at the expense of consumption (e.g. health care).

## VI. New Budget Law in 2014

- Problems of the Current Fiscal Framework in China
  - The budget classification is inadequate. Current classification of government expenditures – which is based more on functions and administration than on economic concepts – does not allow proper identification of programs or a clear-cut distinction between current and capital expenditures.
  - The budget classification is not consistent across the various levels of government. Differences in expenditure and revenue classifications undermine coordination of budget formulation and implementation.
  - There is insufficient monitoring and lack of accountability. Although the central government provides funding for most spending via transfers, serving as an instrument to control and influence spending, monitoring mechanisms and accountability are lacking.
  - Political economy constraints are likely to play a role. The model of development implemented in China has rewarded local authorities, promoting fixed capital investment at the expense of other types of spending. The planned shift in spending may actually meet with some resistance.

- New Budget Law in 2014
    - The 2014 budget law aimed to improve the budgeting process and the transparency and accountability of local government financing.
    - The new law requires the adoption of a multiyear budget and specifies the conditions for managing annual deficits in the medium run. Moving beyond annual budgeting can improve planning and management of fiscal policy across economic cycles.
    - The new law allows provincial governments to issue bonds to finance capital expenditure for the first time, subject to approval by the National People's Congress. It also prohibits off-budget financing of local governments.
    - The 2014 budget law also consolidates all existing government budgets (e.g. social insurance fund, capital investment fund) into the general government budget and require publication of budgets and outturns within 20 days after approval by the People's Congress.
    - Finally, the law requires conditional transfers to gradually be replaced by general transfers to support basic public service delivery and reduce regional disparities.
    - However, it does not address the fundamental misalignment of expenditure responsibilities and taxing powers and the large vertical imbalance between the central and local governments.

- New Tax Sharing Arrangement
  - In 2016, the business tax was abolished and replaced by VAT. The local governments' share of the revenue of VAT also rose from 25% to 50%.

**Table 1. Tax Sharing Arrangement between Central and Local Governments, 2015**

| | Central | Local | Share of total taxes | Share of GDP |
|---|---|---|---|---|
| **Central taxes** | | | **9.8** | **2.3** |
| Consumption tax | 100 | 0 | 6.6 | 1.5 |
| Vehicle purchase tax | 100 | 0 | 1.8 | 0.4 |
| Tariffs | 100 | 0 | 1.6 | 0.4 |
| Cargo tax | 100 | 0 | 0.0 | 0.0 |
| Intl trade-related consumption tax and VAT | 100 | 0 | -0.2 | 0.0 |
| **Shared taxes** | | | **55.9** | **12.9** |
| Domestic VAT[a] | 50 | 50 | 31.8 | 7.3 |
| Corporate income tax | 60 | 40 | 17.1 | 3.9 |
| Personal income tax | 60 | 40 | 5.4 | 1.3 |
| Stamp tax on securities | 97 | 3 | 1.6 | 0.4 |
| **Sub-national taxes** | | | **34.3** | **7.9** |
| Social security contributions | 0 | 100 | 21.3 | 4.9 |
| Tax on deeds | 0 | 100 | 2.5 | 0.6 |
| Urban maintenance and development tax | 0 | 100 | 2.4 | 0.6 |
| Land appreciation tax | 0 | 100 | 2.4 | 0.6 |
| Urban land use tax | 0 | 100 | 1.3 | 0.3 |
| Tax on the use of arable land | 0 | 100 | 1.3 | 0.3 |
| House property tax | 0 | 100 | 1.3 | 0.3 |
| Resource tax | 0 | 100 | 0.7 | 0.2 |
| Stamp tax on property | 0 | 100 | 0.6 | 0.1 |
| Tax on vehicles and boat operation | 0 | 100 | 0.4 | 0.1 |
| Tobacco tax | 0 | 100 | 0.1 | 0.0 |

[a] Includes receipts from the Business Tax, which was replaced by the VAT in May 2016.
Sources: CEIC; de Mooij, Lam and Wingender 2017.

**Table 2. Planned and Current Estimated Spending Assignments**

| Planned | Actual | | |
|---|---|---|---|
| | Total | Central | Local |
| **Central mandate** | **13.1** | **5.8** | **7.3** |
| National defense | 4.3 | 4.2 | 0.1 |
| Foreign affairs | 0.2 | 0.2 | 0.0 |
| Management of rivers and lakes in border areas | 2.1 | 0.1 | 2.0 |
| National transportation infrastructure | 1.5 | 0.1 | 1.4 |
| Use and protection of strategic natural resources | 5.1 | 1.2 | 3.9 |
| **Joint mandate** | **62.4** | **3.1** | **59.3** |
| Compulsory and higher education | 12.4 | 0.6 | 11.8 |
| Arts, science, research and development | 4.2 | 1.3 | 2.9 |
| Basic pension insurance | 13.2 | 0.0 | 13.2 |
| Primary medical care and public sanitation | 5.7 | 0.0 | 5.6 |
| Medical insurance | 4.9 | 0.0 | 4.9 |
| Unemployment insurance | 0.3 | 0.0 | 0.3 |
| Social Safety Net, employment and housing | 11.7 | 0.5 | 11.2 |
| Major infrastructure projects across provinces | 1.5 | 0.1 | 1.4 |
| Environment protection and governance | 8.4 | 0.5 | 8.0 |
| **Local mandate** | **24.5** | **1.9** | **22.6** |
| Public service delivery | 7.7 | 0.7 | 7.0 |
| Law and order | 4.4 | 0.7 | 3.7 |
| Municipal and rural transportation | 2.9 | 0.2 | 2.7 |
| Construction and management of public facilities | 7.6 | 0.0 | 7.6 |
| Other | 1.8 | 0.2 | 1.6 |

Note: The numbers are estimated shares for 2015, in percent of budgetary general government spending.
Sources: CEIC; IMF staff estimates.

**Reference:**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