

IMF 2013 Article IV Slides

China 2030 Slides

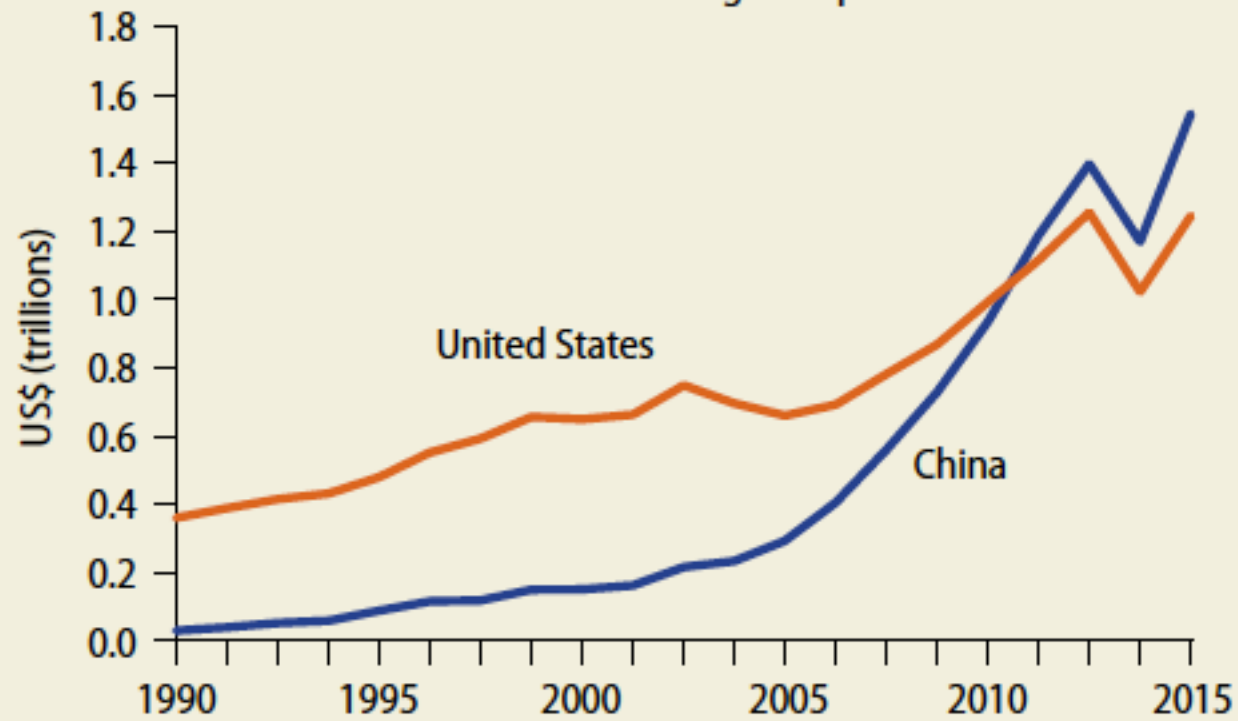
Economics 274

Winter 2014

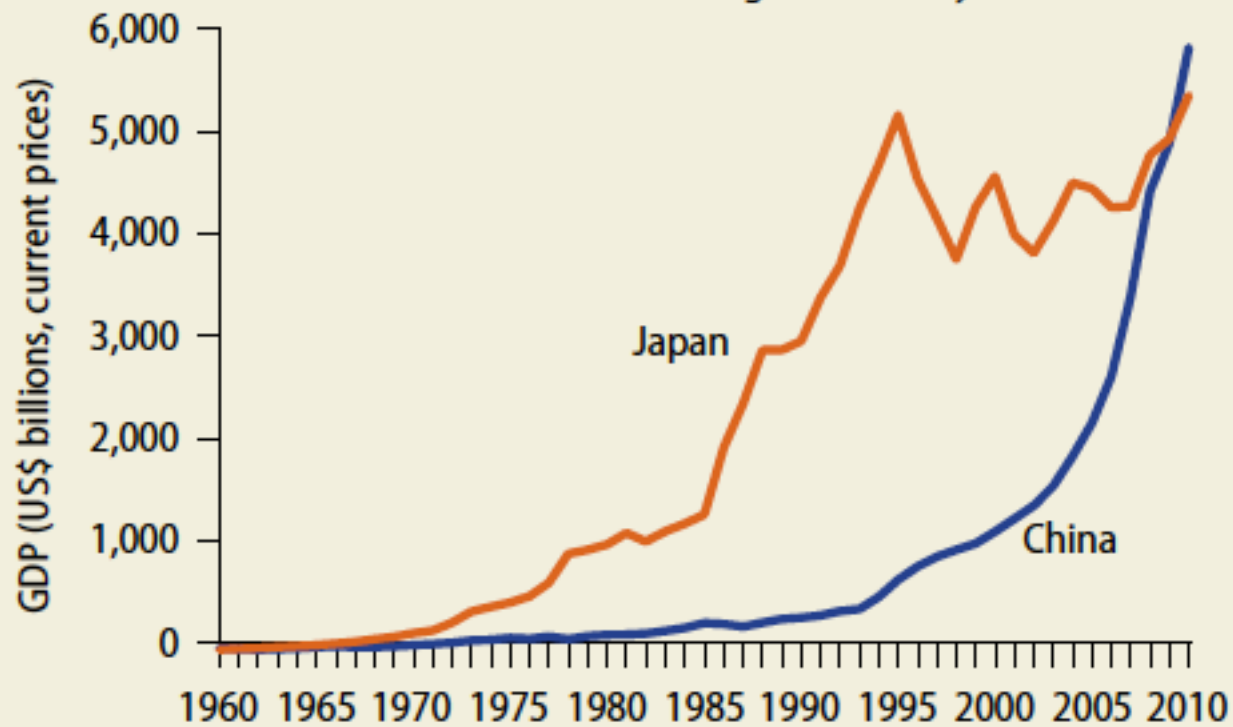
Trade Data

- not shown in class
 - growth as world trader
 - relative economic size
 - high domestic savings
 - low consumption
 - high investment

c. ... the world's largest exporter ...



b. ... has made it the second-largest economy in the world ...

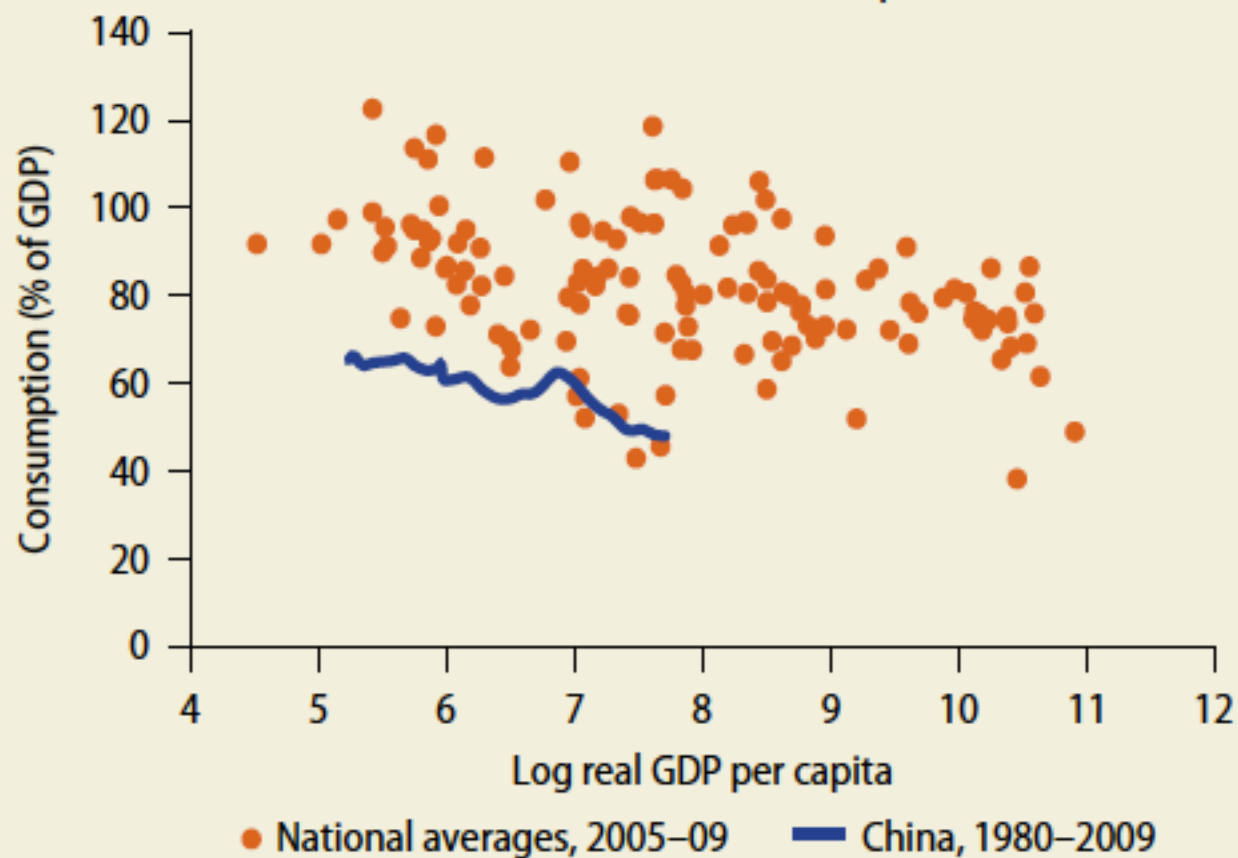


Source: NBSC 2010; World Bank 2011b.

a. High savings will continue to be key to
China's rapid growth ...

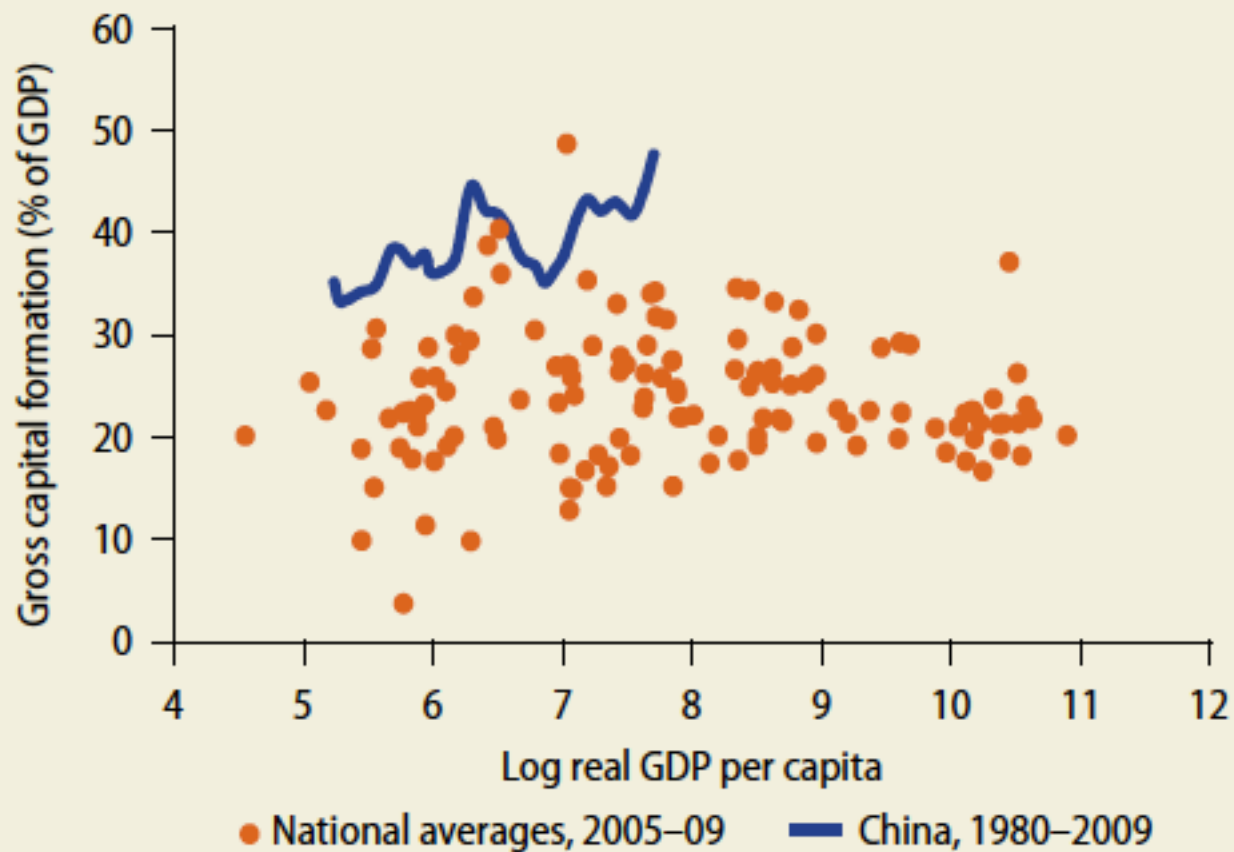


a. China is an outlier in consumption ...



Source: World Bank 2011b; NBSC 2010; World Bank calculations.

b. ... and investment



Source: World Bank 2011b; NBSC 2010; World Bank calculations.

International Finance

- Not shown in class
 - p 370- intl trade finance from China 2030
 - developing countries large share today, were not significant 20 years ago
 - China a large market for developed country industrial exports
 - large bilateral surpluses and (Korea) deficits

FIGURE 5.2 Growing share of developing countries in global growth (five-year moving average)

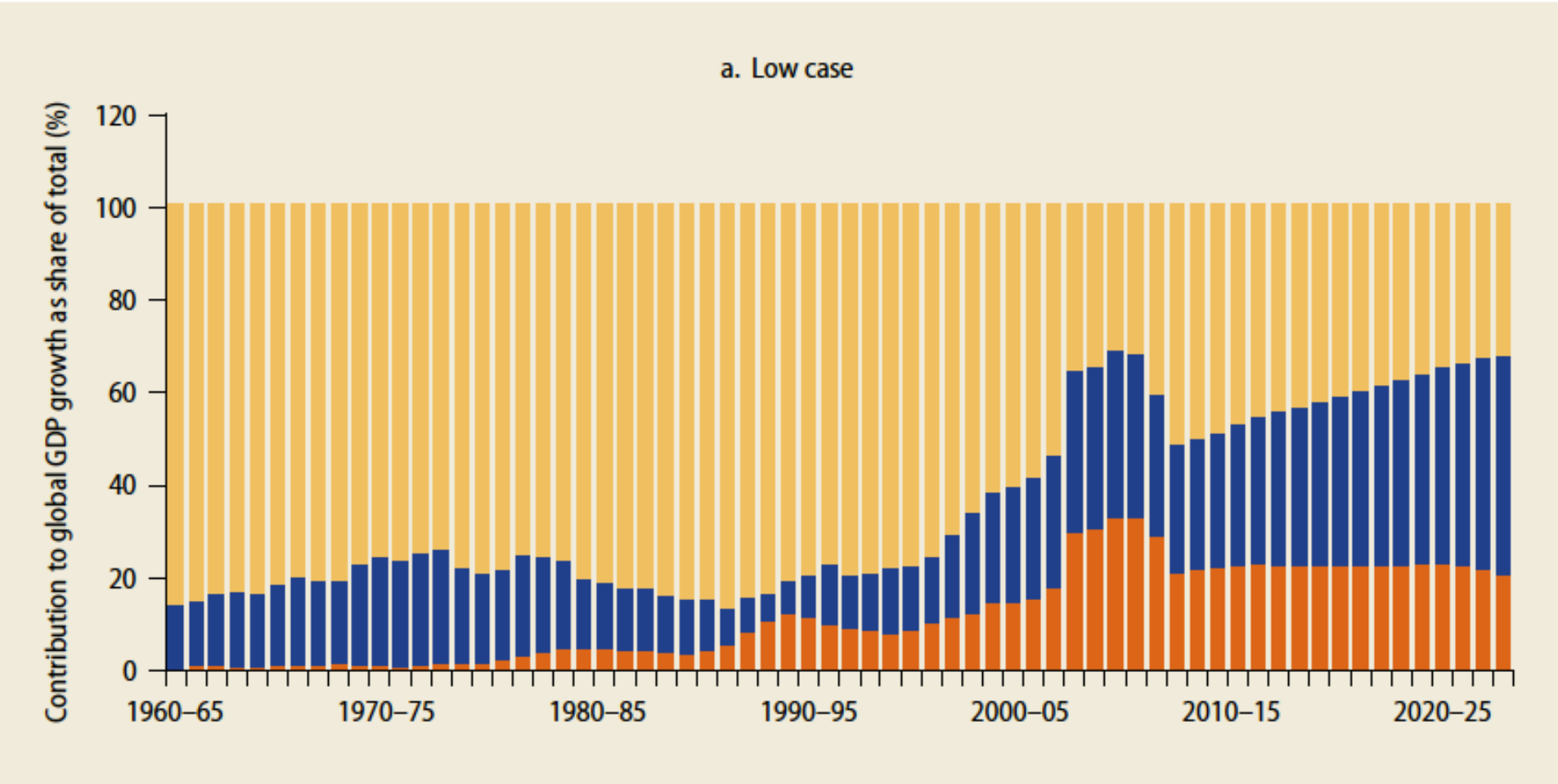


FIGURE 5.8 China's share in industrial imports of the world's 10 largest importers has increased

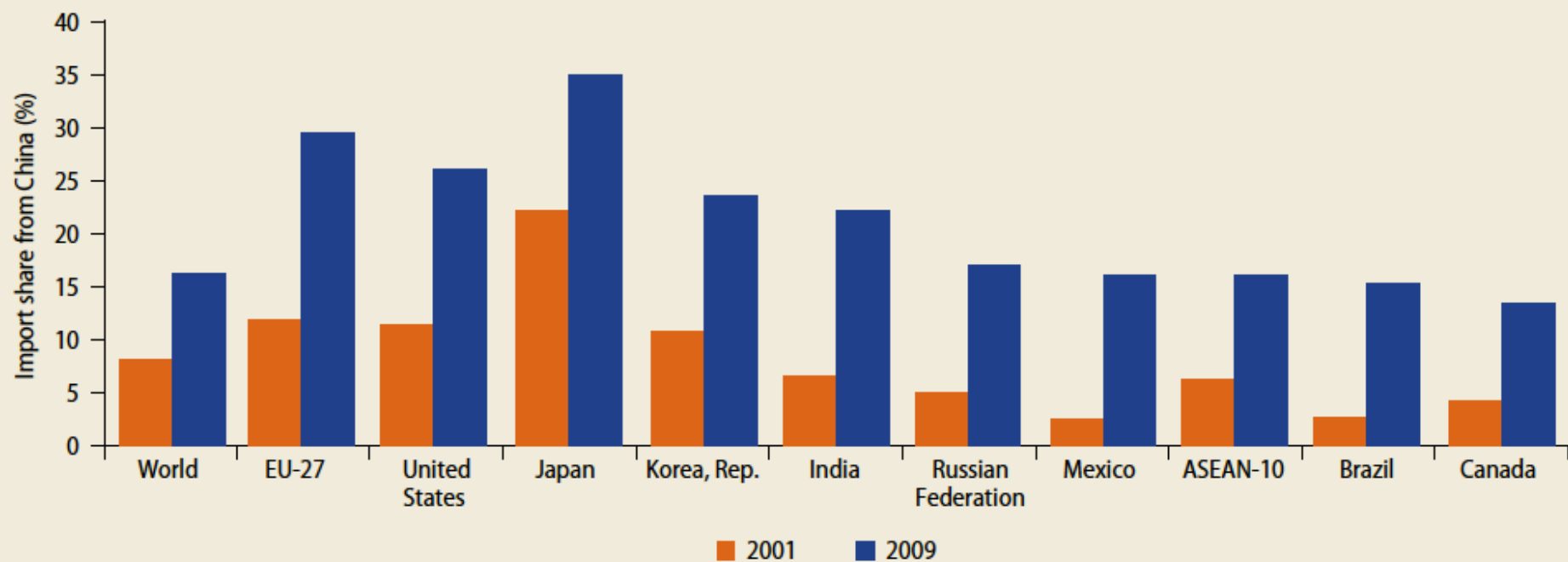
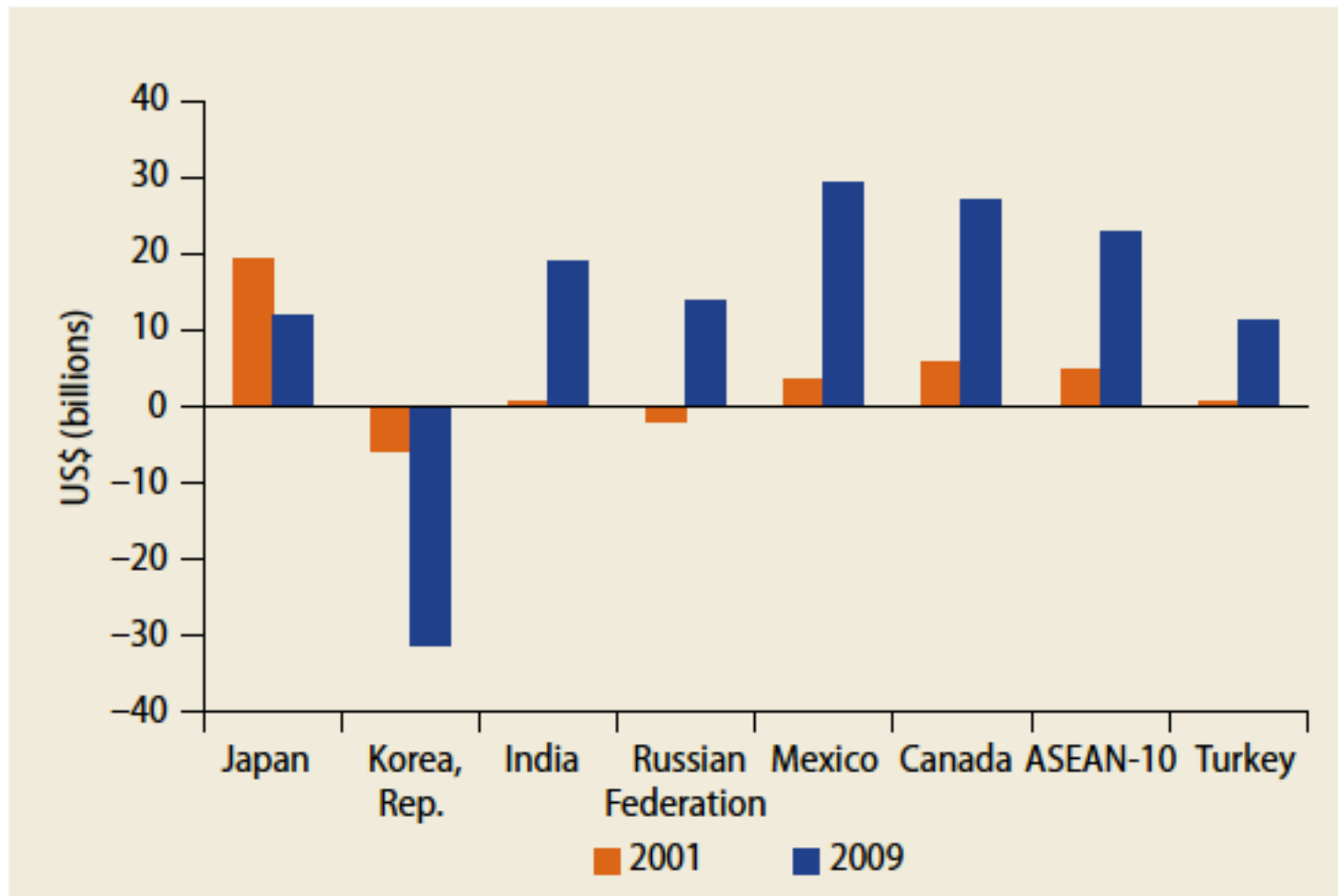


FIGURE 5.10b China has a large trade surplus in industrial goods with major trading partners

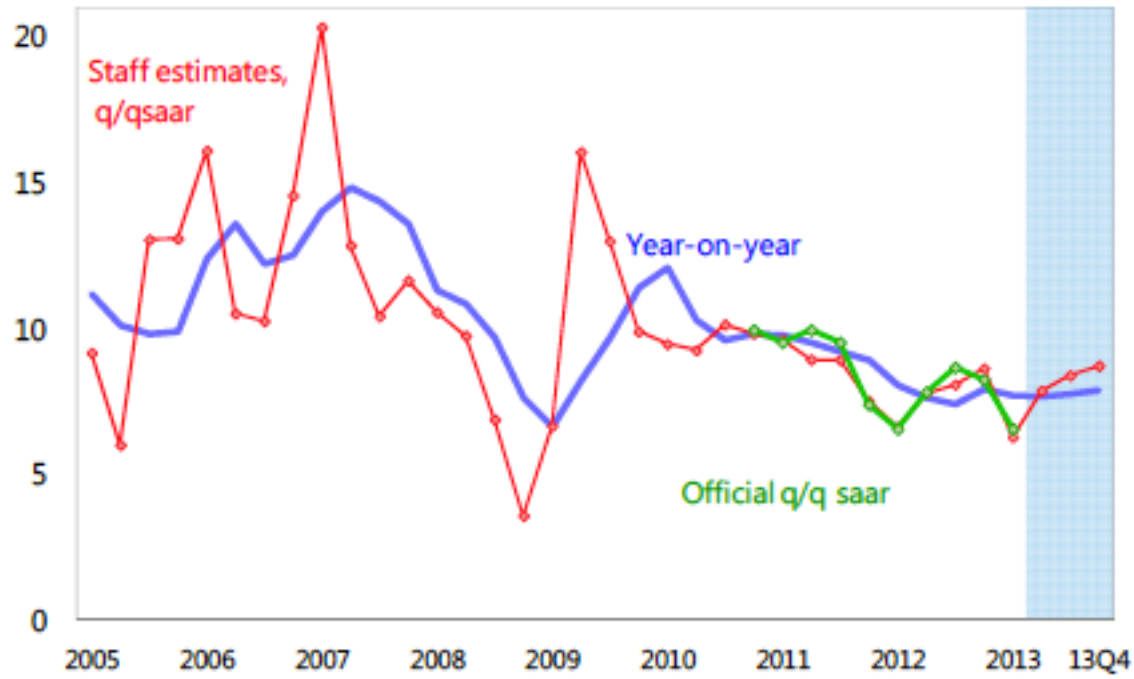


Macro Issues

- Source is 2013 IMF Article IV review of China
 - available annually for most countries
 - a good go-to for a quick overview of short-run issues
 - emphasis is short-run macro and intl finance
 - we thus need to keep in mind the long-term macro issues that we've emphasized this term, fertility and demographic dividends
- big downturn in 2009 with global crisis
 - but quick recovery: WHY?

China: Real GDP Growth

(In percent)

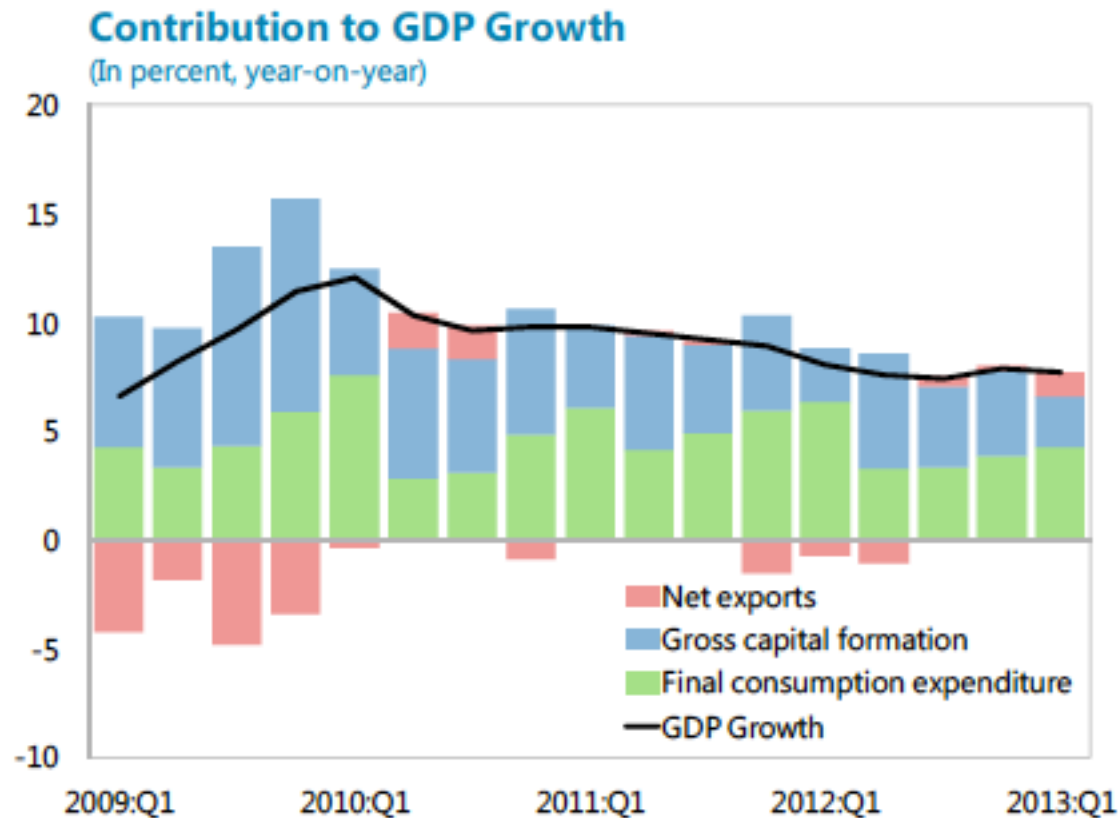


Sources: CEIC; and IMF staff estimates.

Links to rest of world

- Intl Capital controls and financial institutions are overwhelmingly domestic
 - so no financial spillover
- rather trade: exports collapsed
 - and not by a little: slowed growth by 5 percentage points, a huge hit [the US doesn't grow 5%....!]
- but GDP growth back over 10% before start of CY2010
 - while EU, US were mired deep in recession

Growth in the first quarter was sluggish, with a strong contribution from consumption and weak capital formation...



Answer?

- We'd use monetary policy
 - but financial system still “shallow”
 - business investment uses direct finance
 - (borrowing from friends, retained earnings)
 - not financial intermediaries [= banks]
 - so monetary policy doesn't reach
 - can't make borrowing cheaper if businesses don't borrow from banks!!

How about fiscal policy?

- But we've seen the short reach of Beijing on issue after issue
- Meanwhile
 - Local governments have no revenue sources
 - Fiscal transfers big but ... not used here
- So how work?

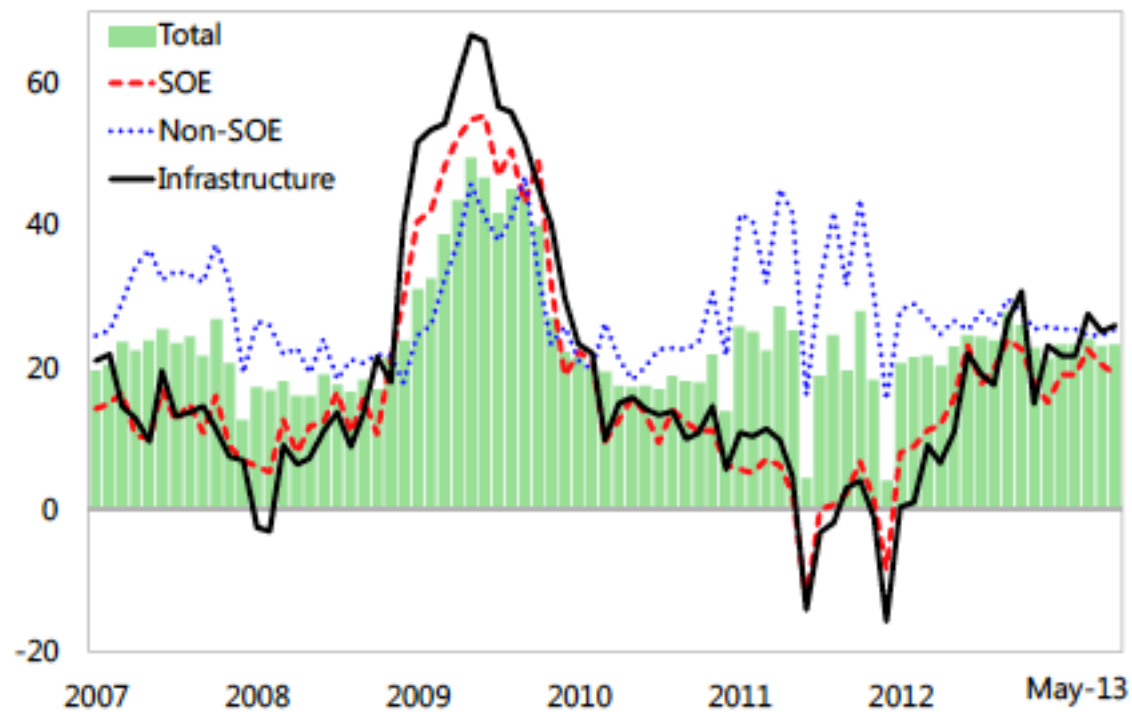
LGFVs

- Local government financial vehicles
 - investment funds tied to local government
 - in normal times land sales to finance concrete investments [pun intended]
- had access to financial institutions
 - so in 2008-9 could and did borrow
 - leading to the investment boom
 - and via the multiplier, overall macroeconomic growth:
 $Y \uparrow \uparrow$ [a lot]
- See data below

...while fixed asset investment (FAI), buoyed by infrastructure spending, has continued to grow at over 20 percent...

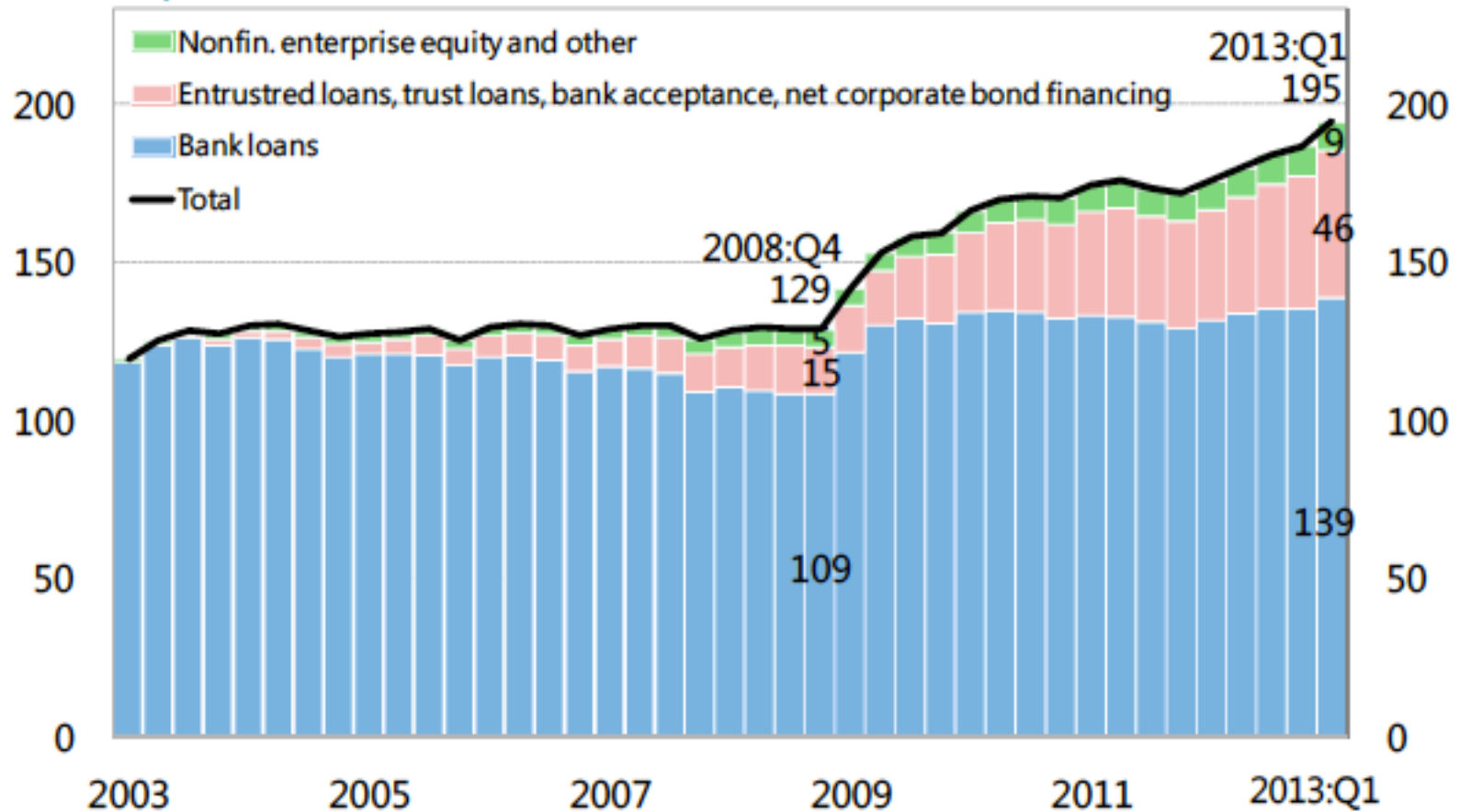
Real Fixed Asset Investment

(In percent, year-on-year)



China: Social Financing Stock

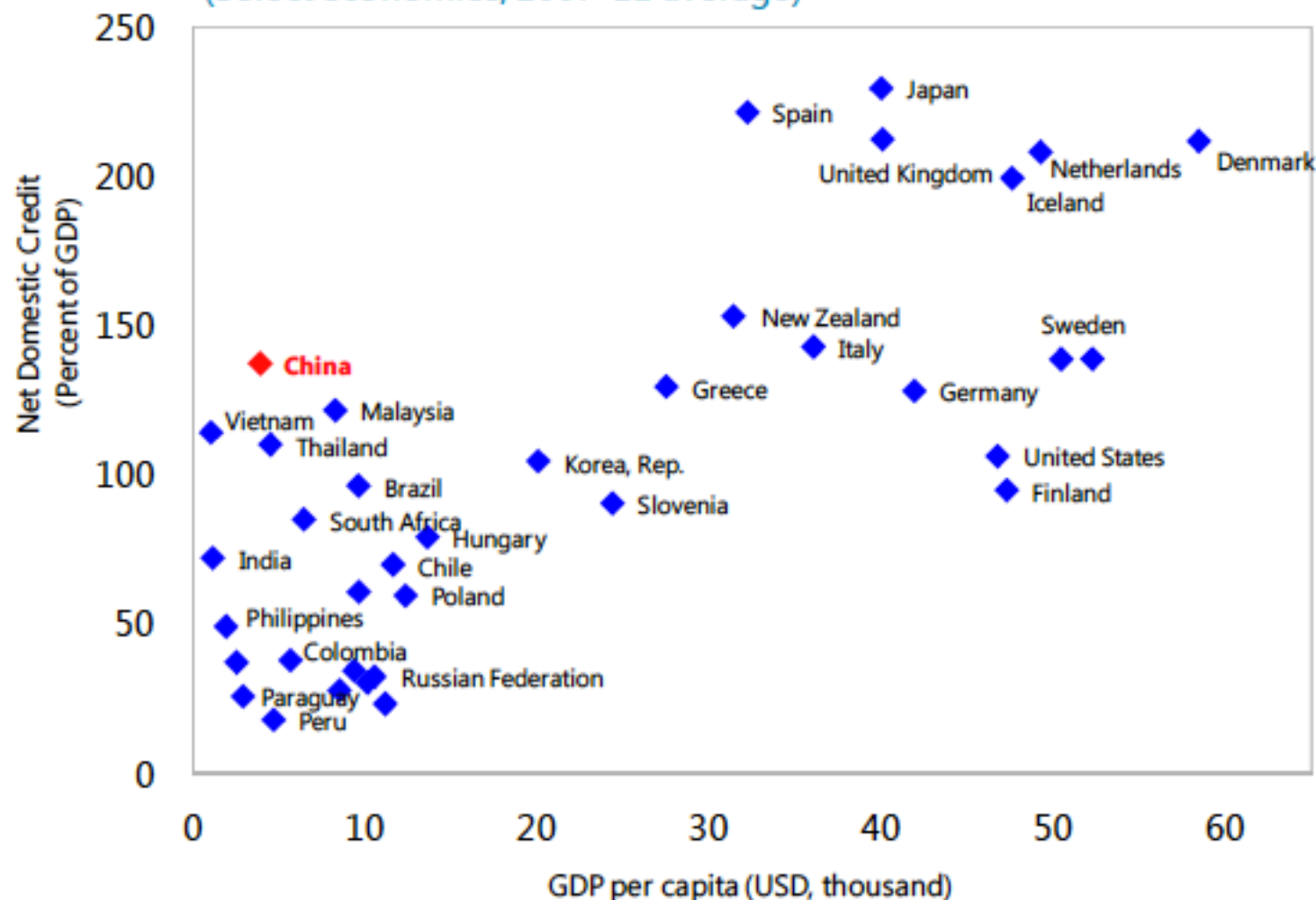
(In percent of GDP)¹



China's stock of credit is among the highest in the world at its level of income...

Net Domestic Credit and GDP per Capita

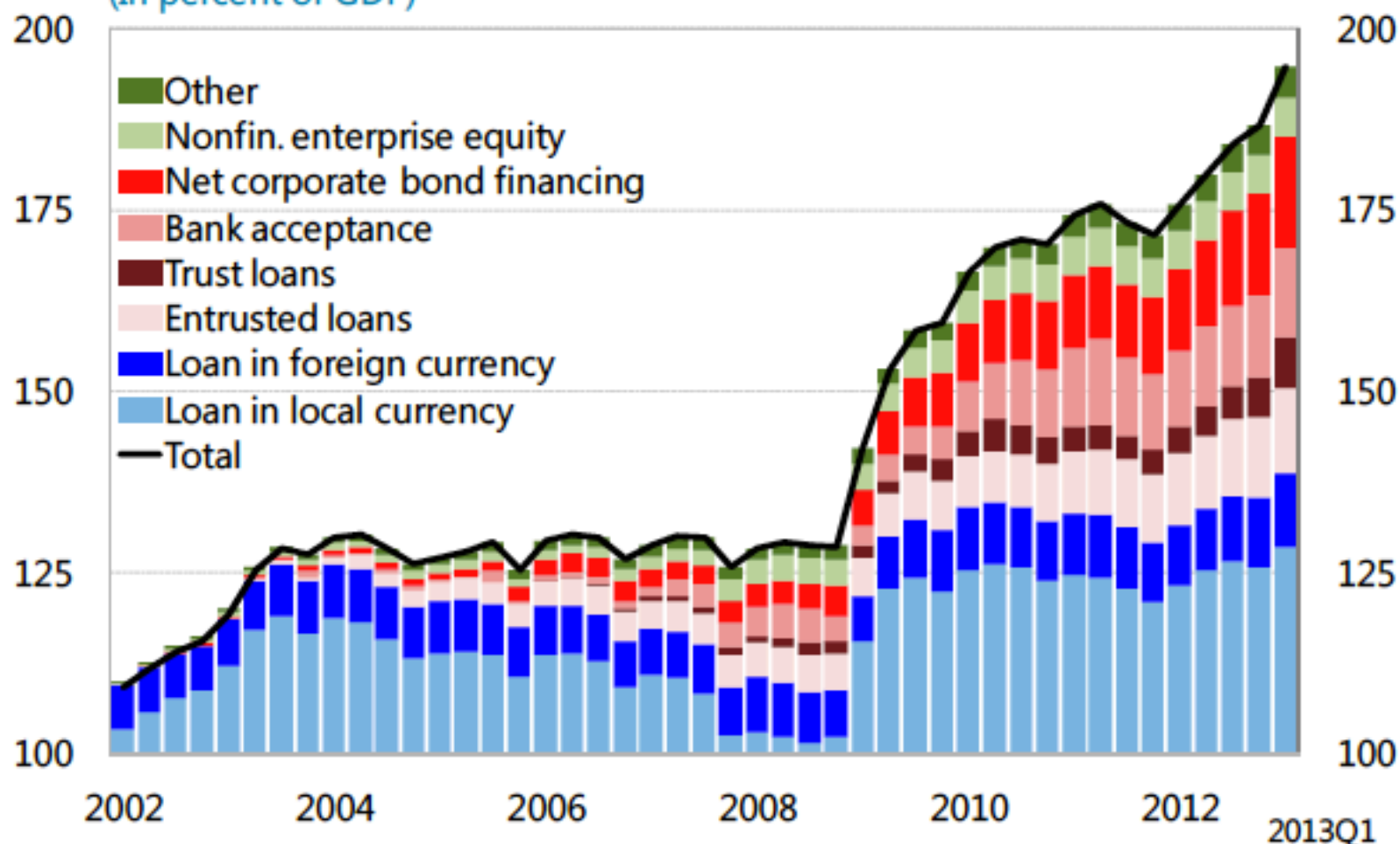
(Select economies, 2007-11 average)



..and is growing fast.

China: Social Financing Outstanding

(In percent of GDP)¹

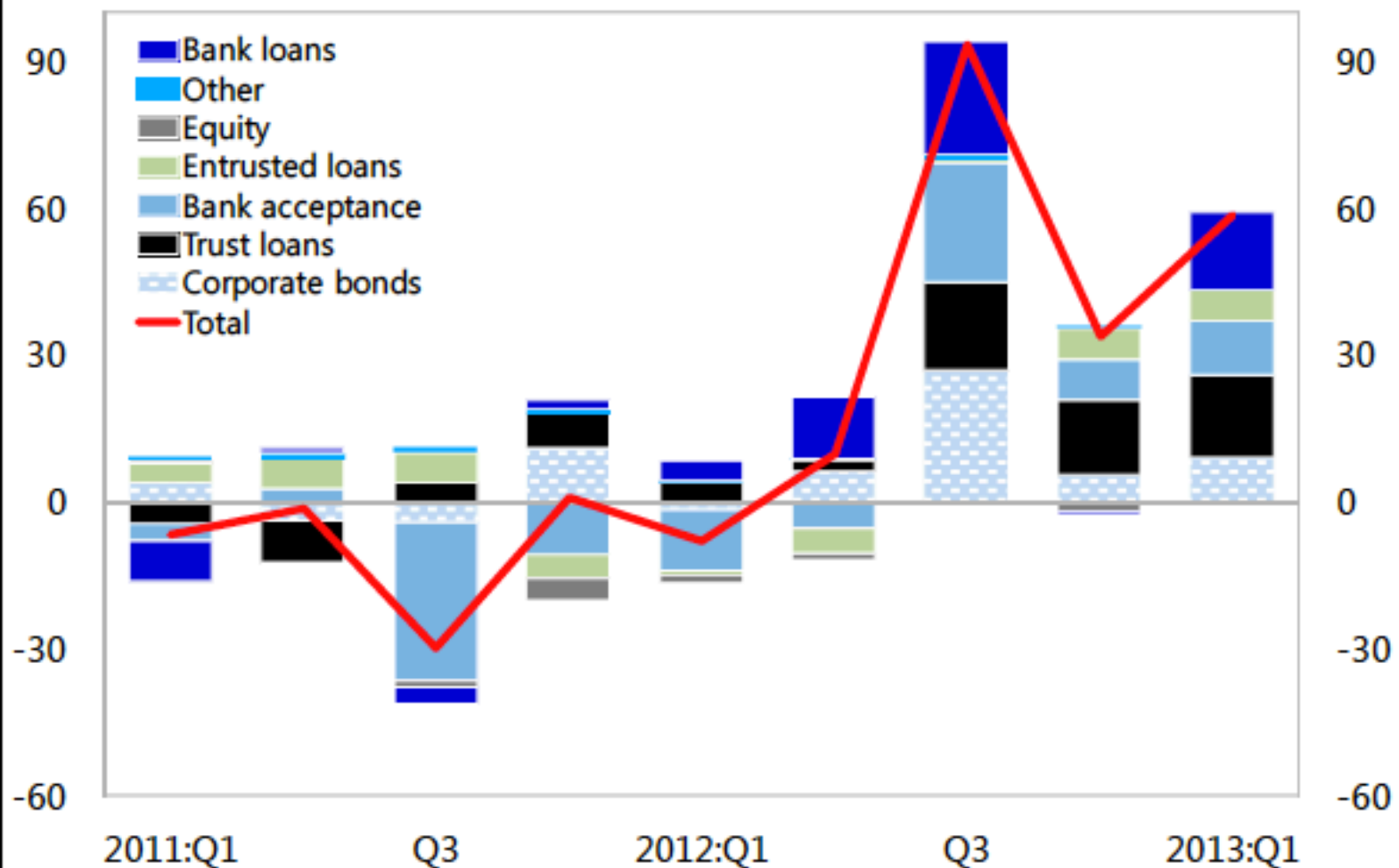


¹ In percent of 4Q rolling sum of quarterly GDP.

Nonbank intermediation has grown particularly rapidly, albeit from a small base...

Growth in Social Financing Flows

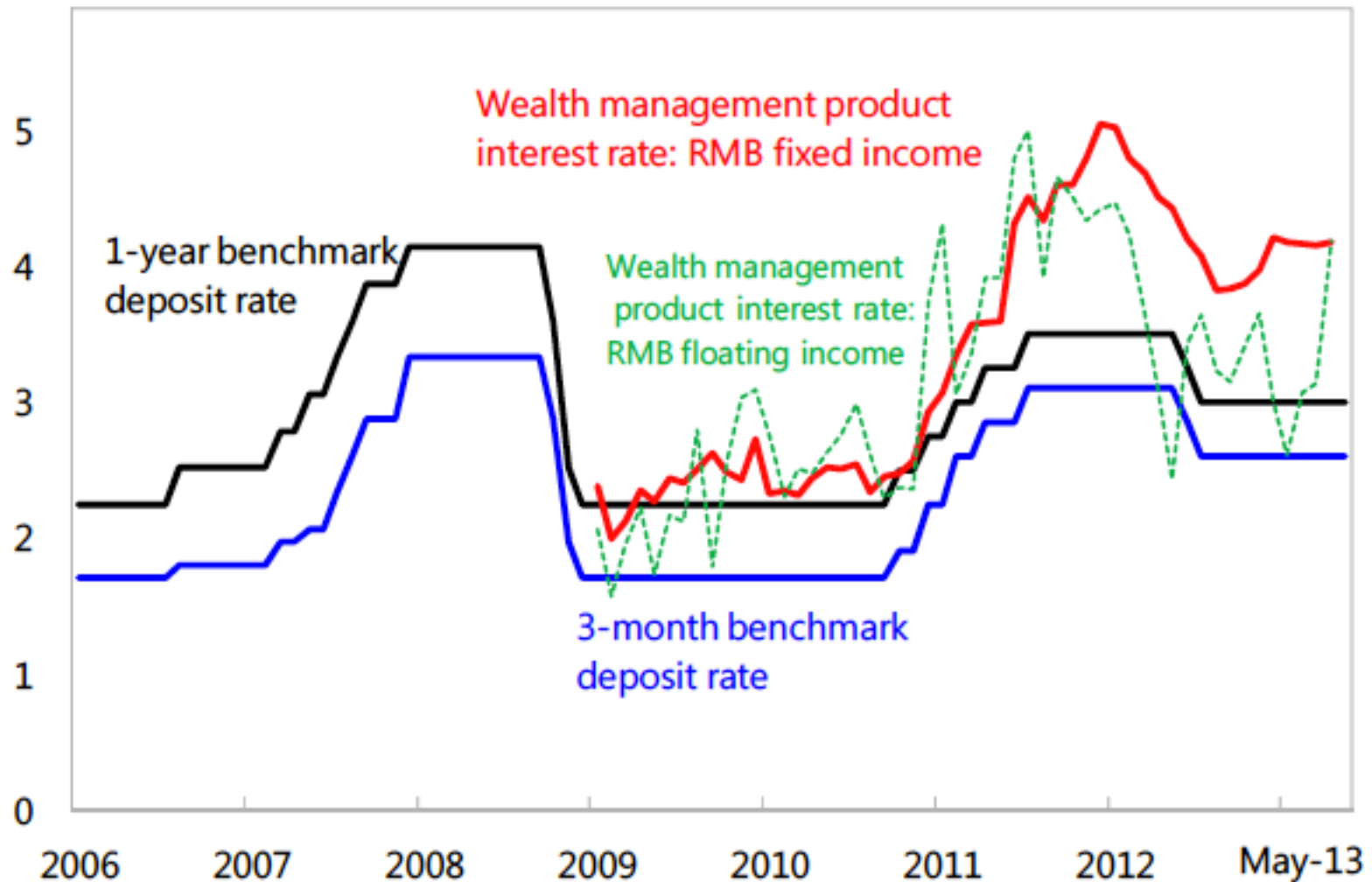
(In percent, yoy contribution)



...as alternative investment products offer more attractive yields, compared to traditional bank deposits.

Interest Rates

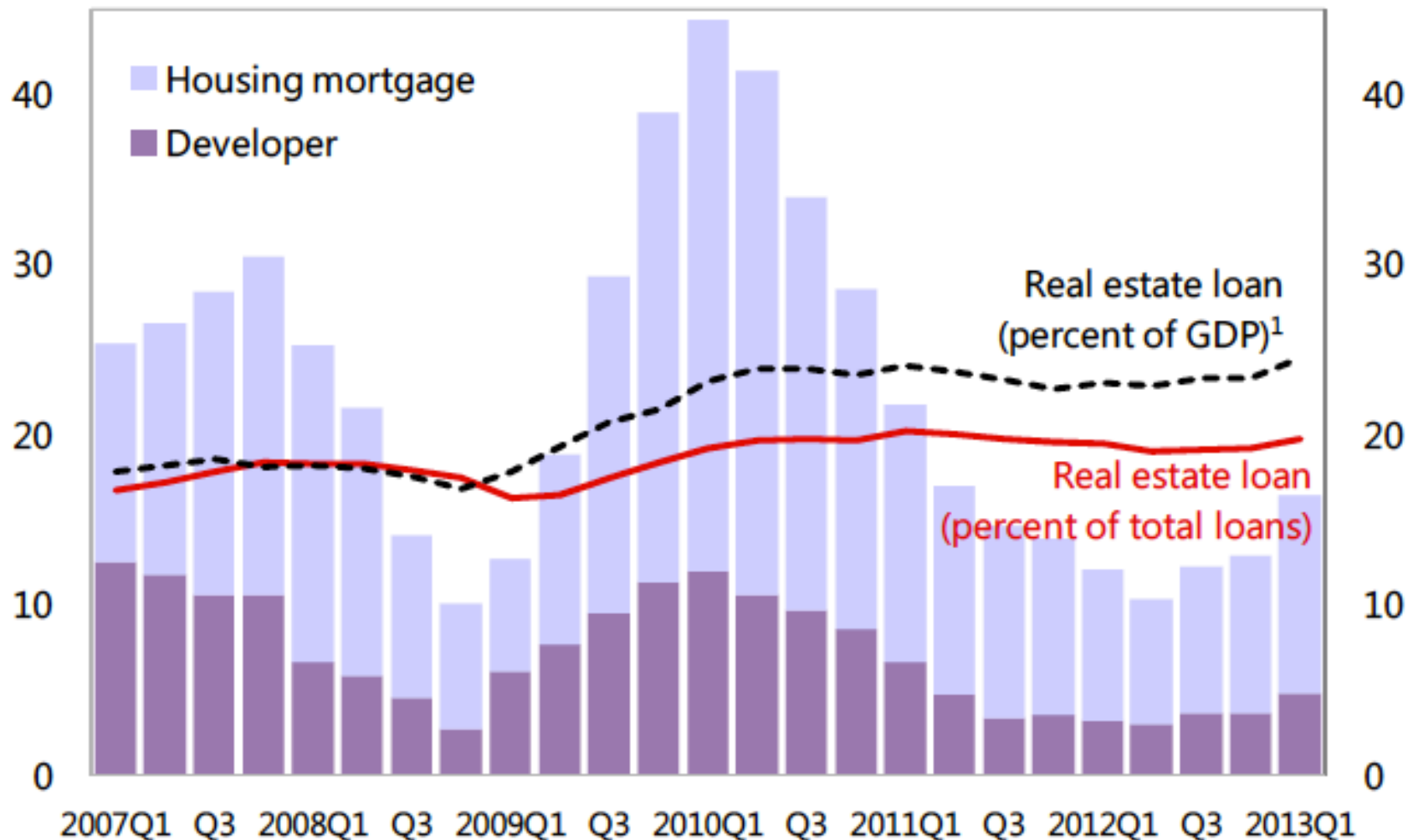
(In percent)



Lending to real estate is primarily for household mortgages and has slowed recently.

Contribution to Real Estate Loan Growth

(In percentage points, year-on-year)



¹ In percent of 4Q rolling sum of quarterly GDP.

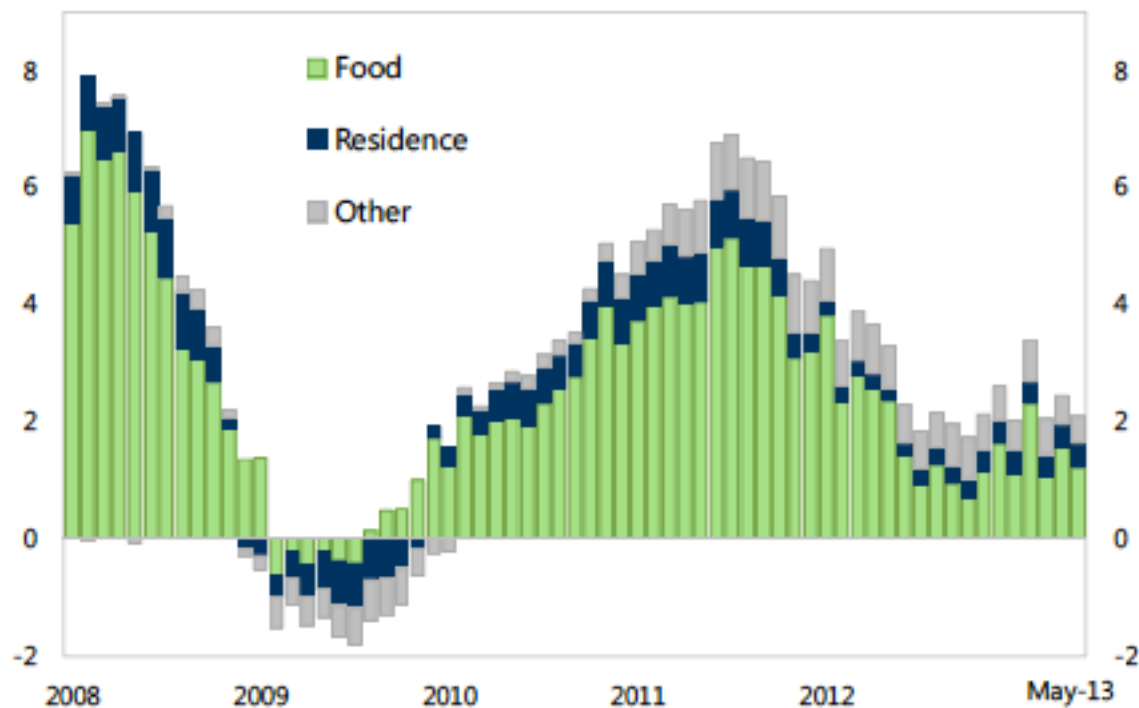
Other macro issues

- Inflation moderate, didn't undermine
- but tendency to be higher than in US
 - agriculture
 - and food matters more in a poor country
 - service sector prices
 - productivity growth slow
 - but wages reflect overall economy
 - so when wages rise, so do service prices
 - : Balassa-Baumol effect
- issue common across developing economies

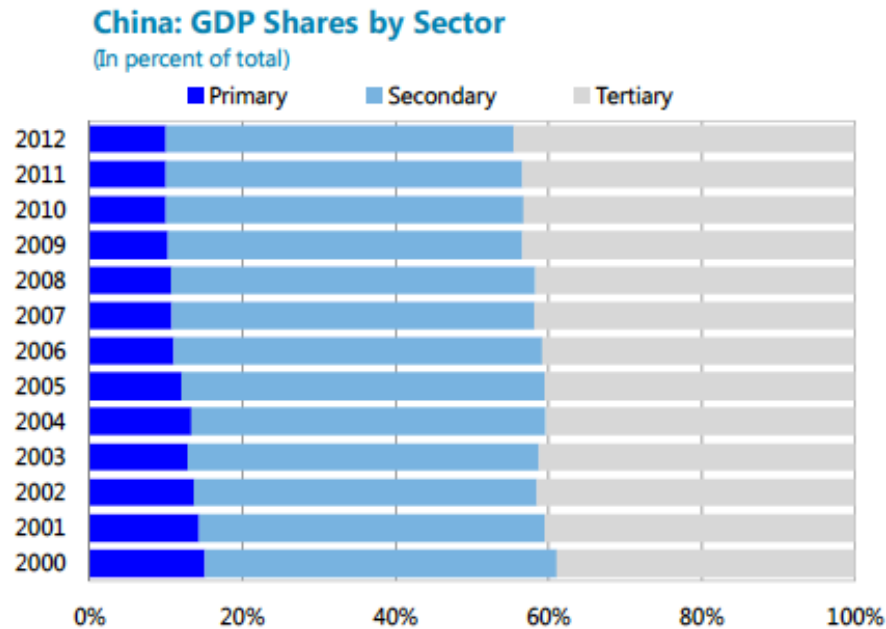
Inflation is moderate, while volatility has been driven primarily by agricultural supply shocks effecting food prices.

Contribution to Inflation

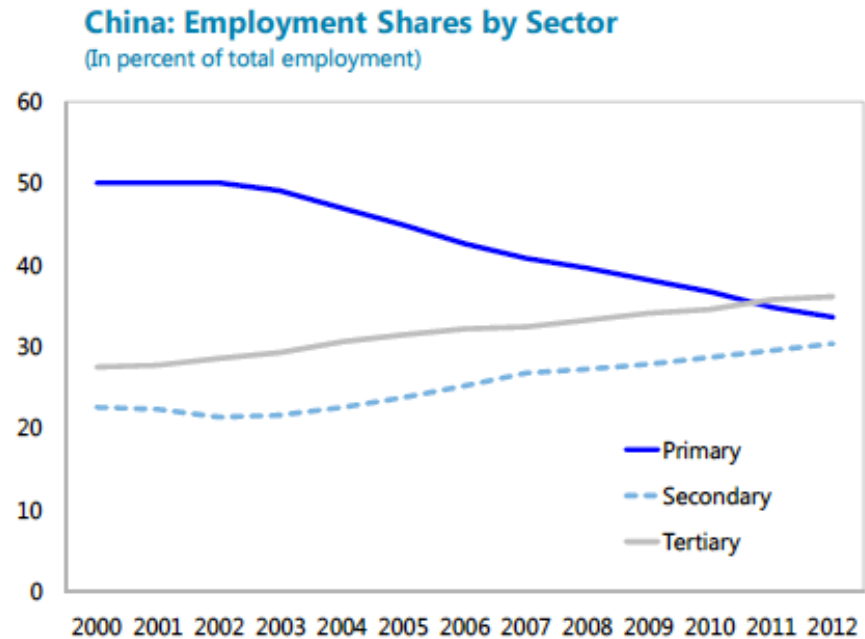
(In percent, year-on-year)



...and there has been only a modest increase in services share of GDP...



...although the tertiary share of employment has now inched up past the primary.



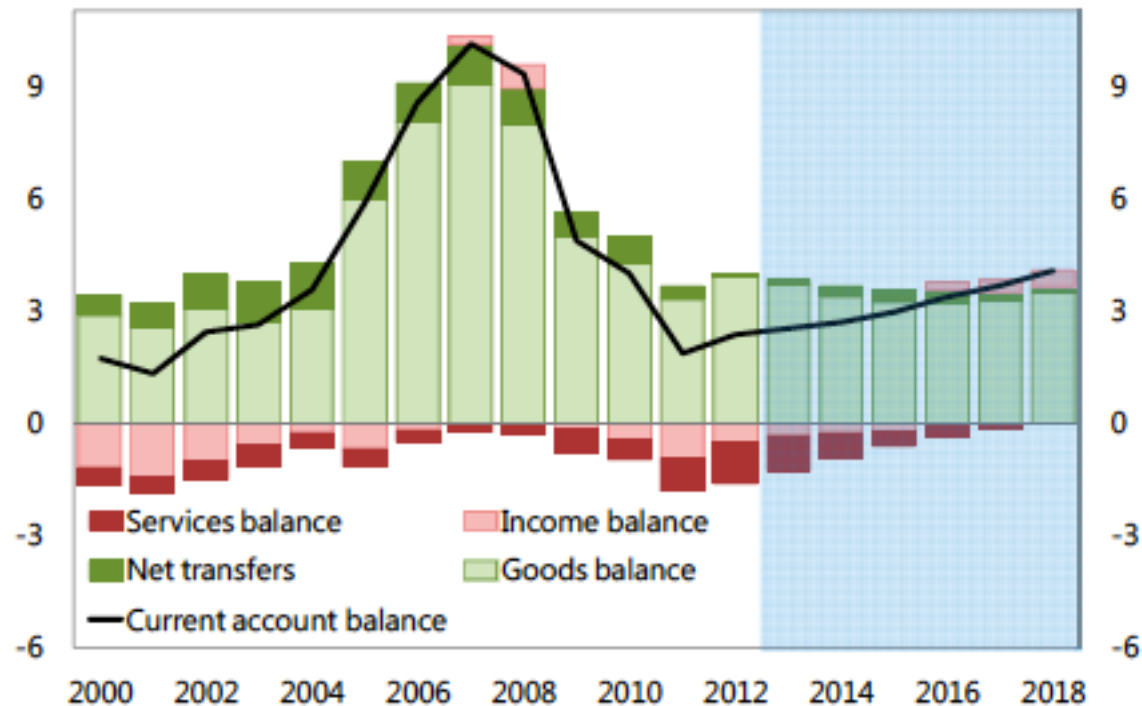
short-run data

- trade surplus inching up
 - helped by piecemeal recovery in US
- so is the household savings rate
 - remember $(S-I) + (T-G) = (X-M)$
- house prices are rising steeply
 - end of finance boom hasn't affected
 - a bubble?

The current account surplus edged-up last year and staff forecast a gradual rise over the medium term.

Current Account and Components

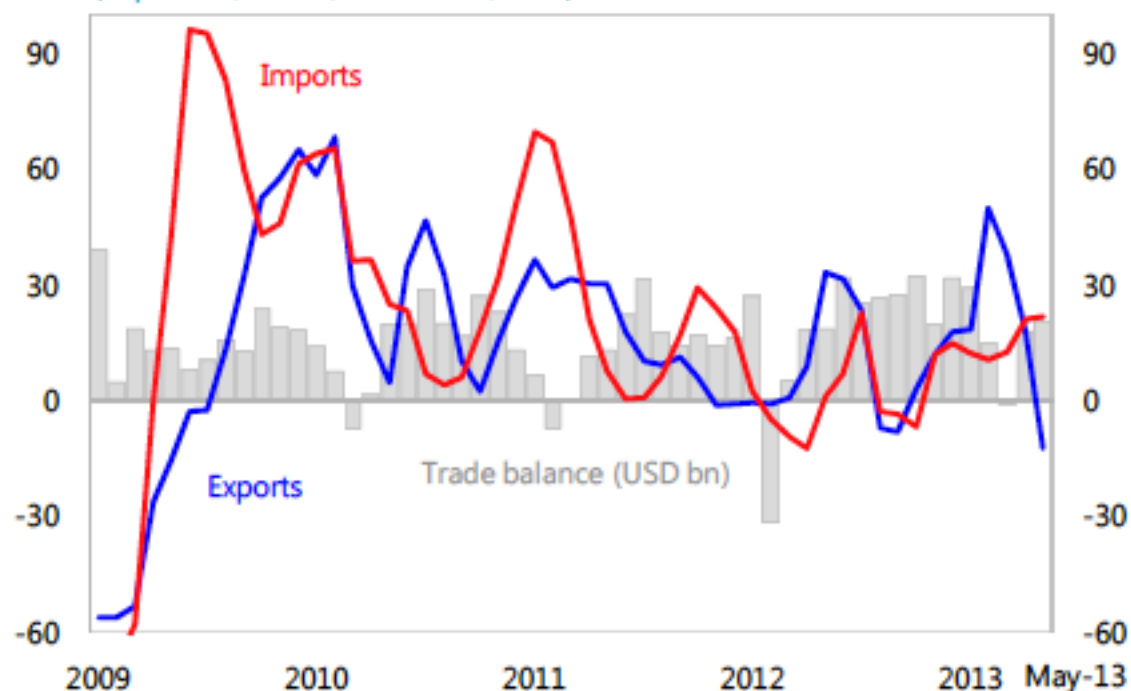
(In percent of GDP)



Exports had accelerated strongly, raising questions about whether this is capturing hidden capital inflows.

Trade Balance

(In percent, 3mma, 3m-on-3m, saar¹)

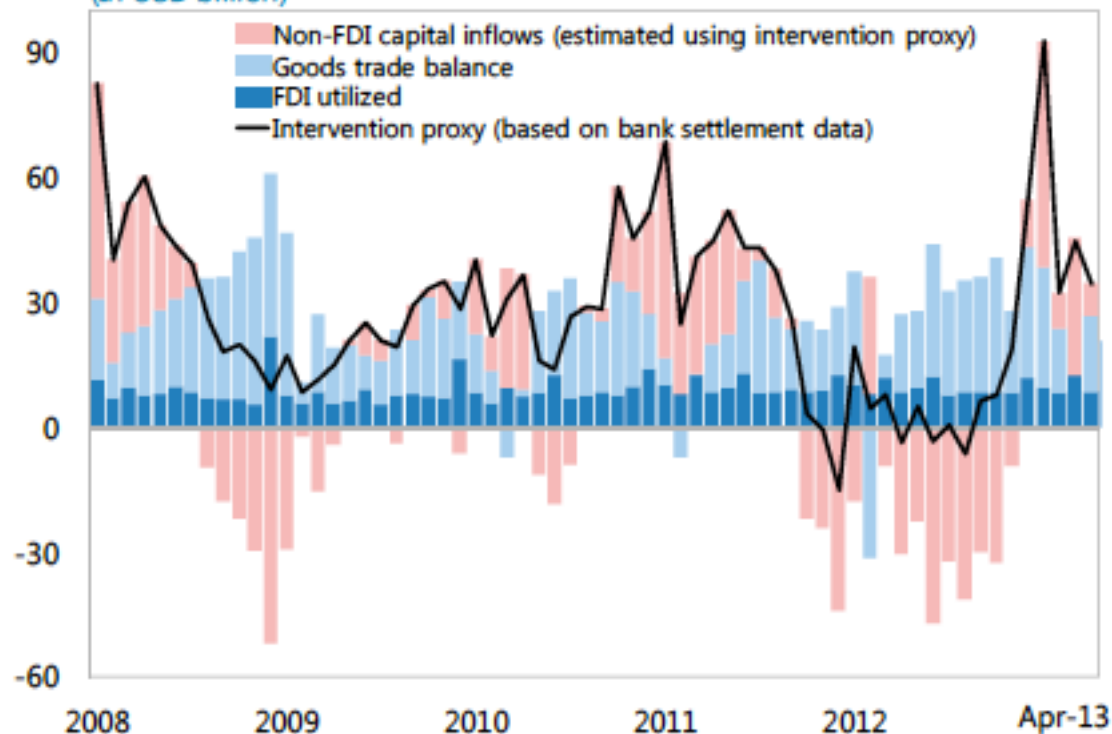


1/ Seasonally adjusted using X12 after averaging January and February data.

As non-FDI capital inflows have resumed recently, after registering net capital outflows last year...

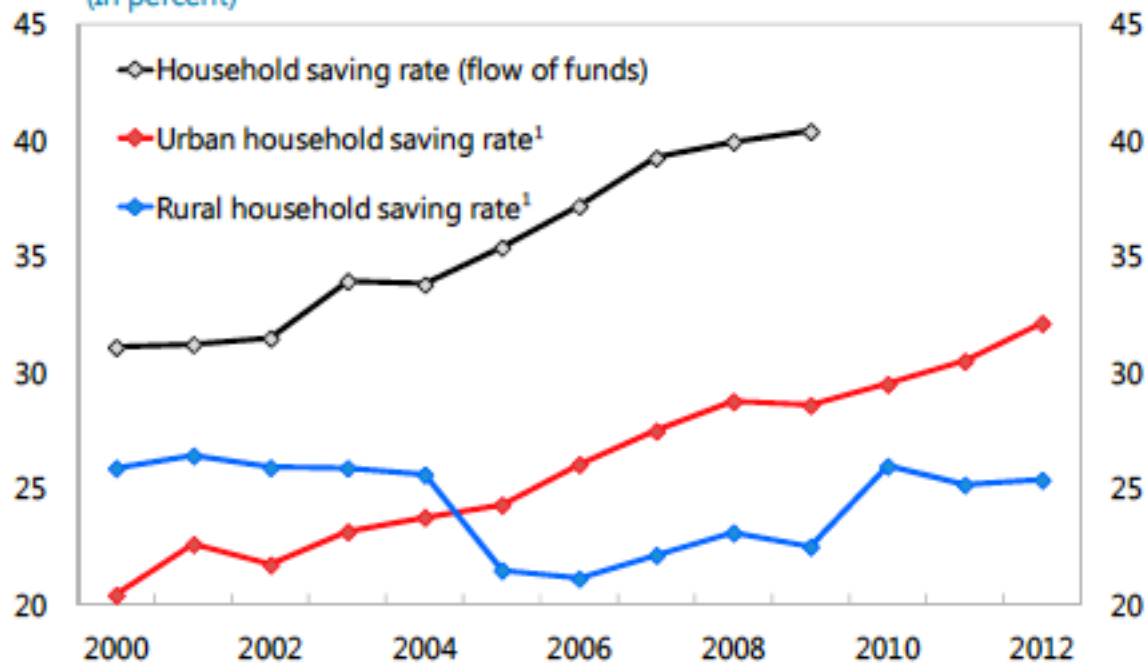
Trade, FDI, and Foreign Exchange Intervention

(In USD billion)



Household Saving Rate

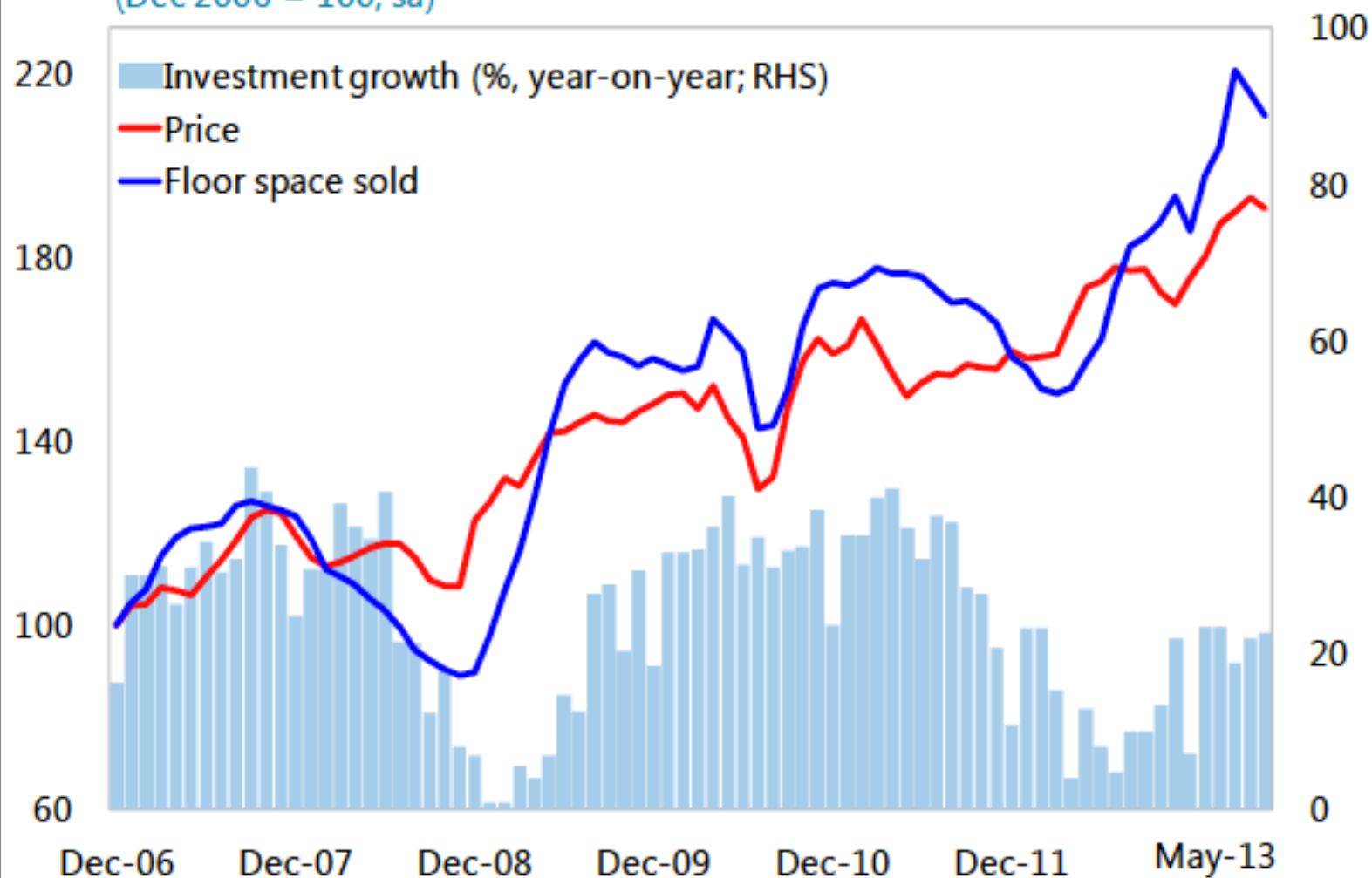
(In percent)



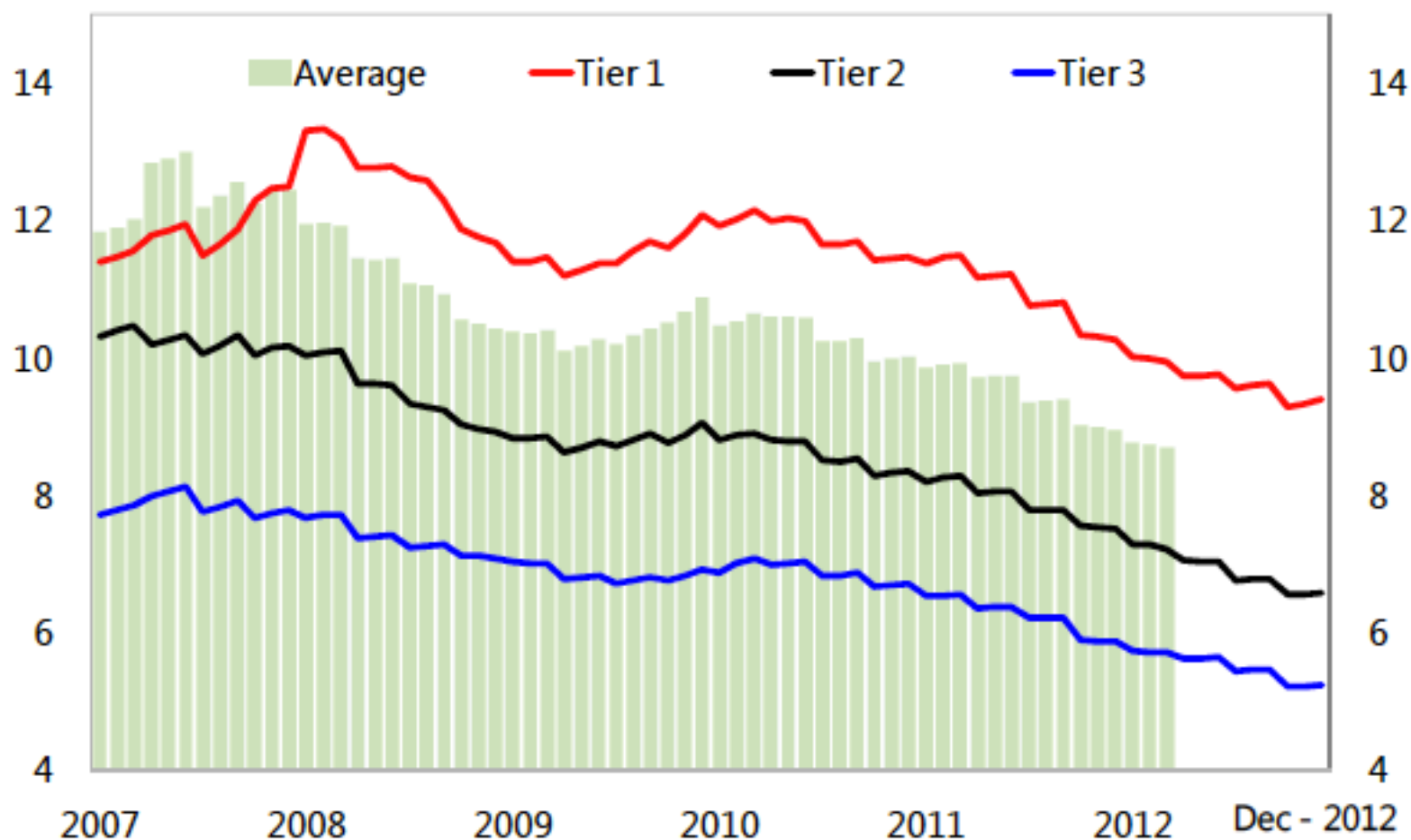
¹ Rural household saving rate = (net income - living expenditure)/net income, percent; urban household saving rate = (disposable income - consumption)/disposable income, percent; household survey.

Residential Housing

(Dec 2006 = 100, sa)



Residential Property Price to Household Disposable Income (SA, per 90 Sq. m. apartment)



RMB appreciating lately

- $.15/6.0$ so about 2%
- in background are capital outflows under financial liberalization

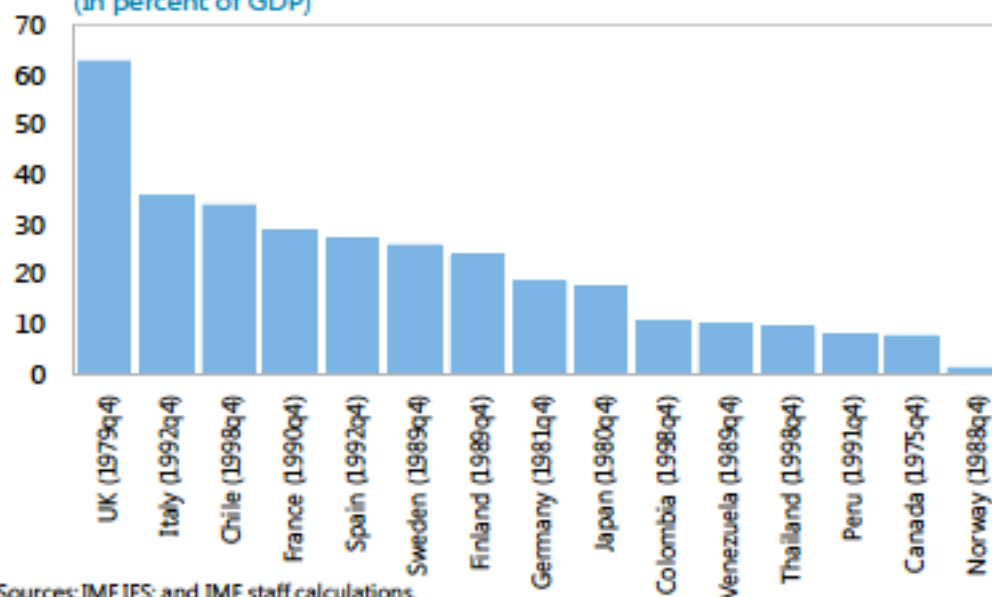
USD/CNY
■ USDCNY=X

Apr 02, 2014



Increase in Gross International Assets During Five Years Following Capital Account Liberalization¹

(In percent of GDP)



Sources: IMF IFS; and IMF staff calculations.

¹ Data for the United Kingdom available only for year after capital account liberalization.

Predicted Change in Portfolio Investment (Percent of GDP)

| | Assets | Liabilities | Net Assets |
|-----------------------------------|-----------|-------------|------------|
| Ohnsorge (2013) | 15.4–24.9 | 1.7–9.9 | 10.7–18.1 |
| He and others (2012) | 21 | 16 | 5 |
| Sedik and Sun (2011) ¹ | 3.25 | 2 | 1.25 |

Sources: Bayoumi and Ohnsorge (forthcoming), "Capital Account Liberalization in China" IMF Working Paper; He, Cheung, and Zhang, and Wu (2012), "How Would Capital Account Liberalization Affect China's Capital Flows and the Renminbi Real Exchange Rate?" HKIMR Working Paper No. 09/2012; Sedik and Sun (2012), "Effects of Capital Flow Liberalization—What is the Evidence from Recent Experiences of Emerging Market Economies?" IMF Working Paper No. 12/275.

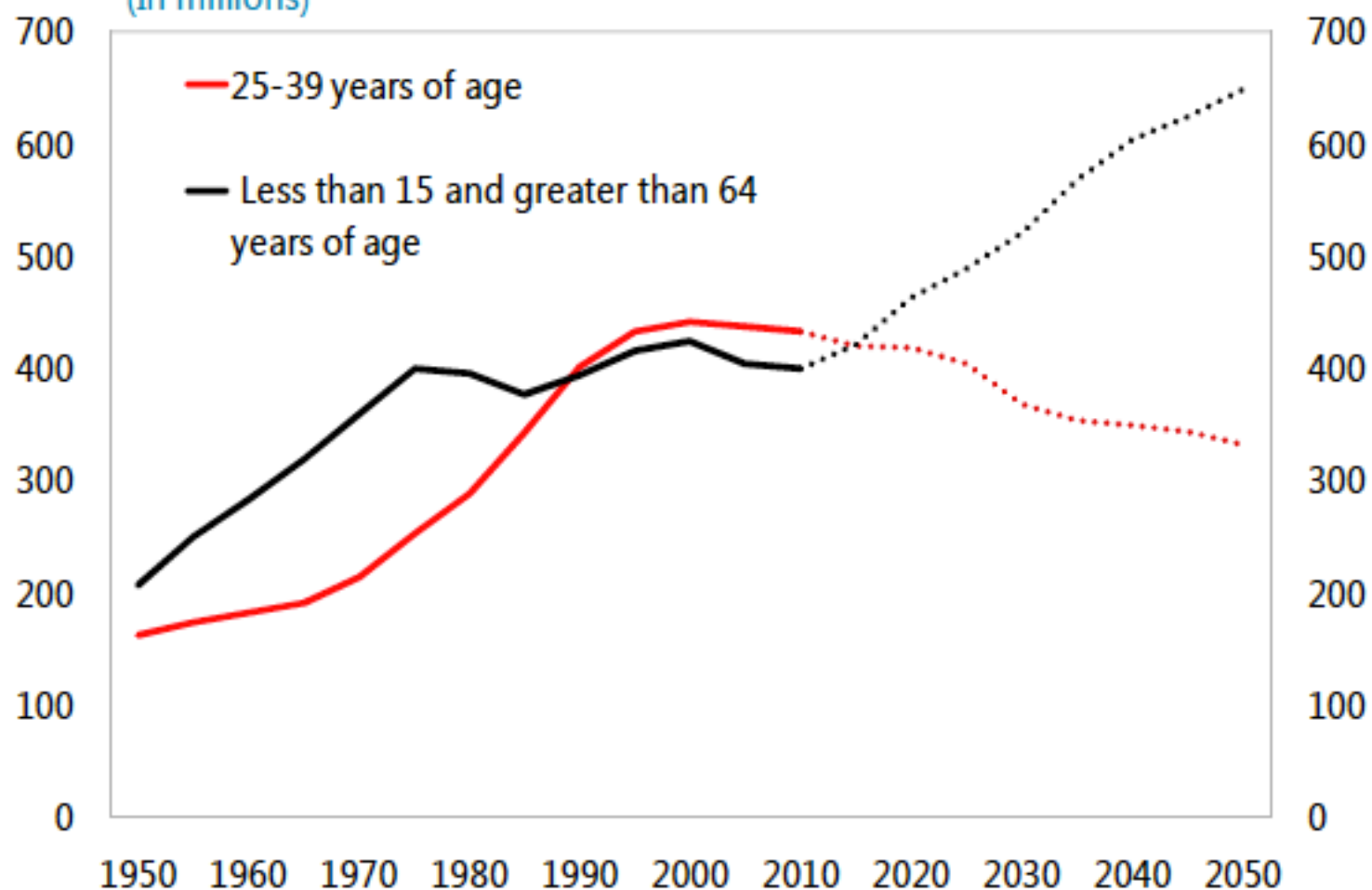
¹ Estimate applies to the aggregate of FDI, portfolio, and other investment flows.

LR issues

- As noted, China currently benefits from demographic dividends
 - but will then face a rapidly aging population
- fiscal system reforms needed
 - land sales large, unsustainable as remaining land less desirable with urban sprawl
 - but debt large and not transparent
- how clean up? reflects antirecession policies
 - inevitable Beijing must buy a lot of it

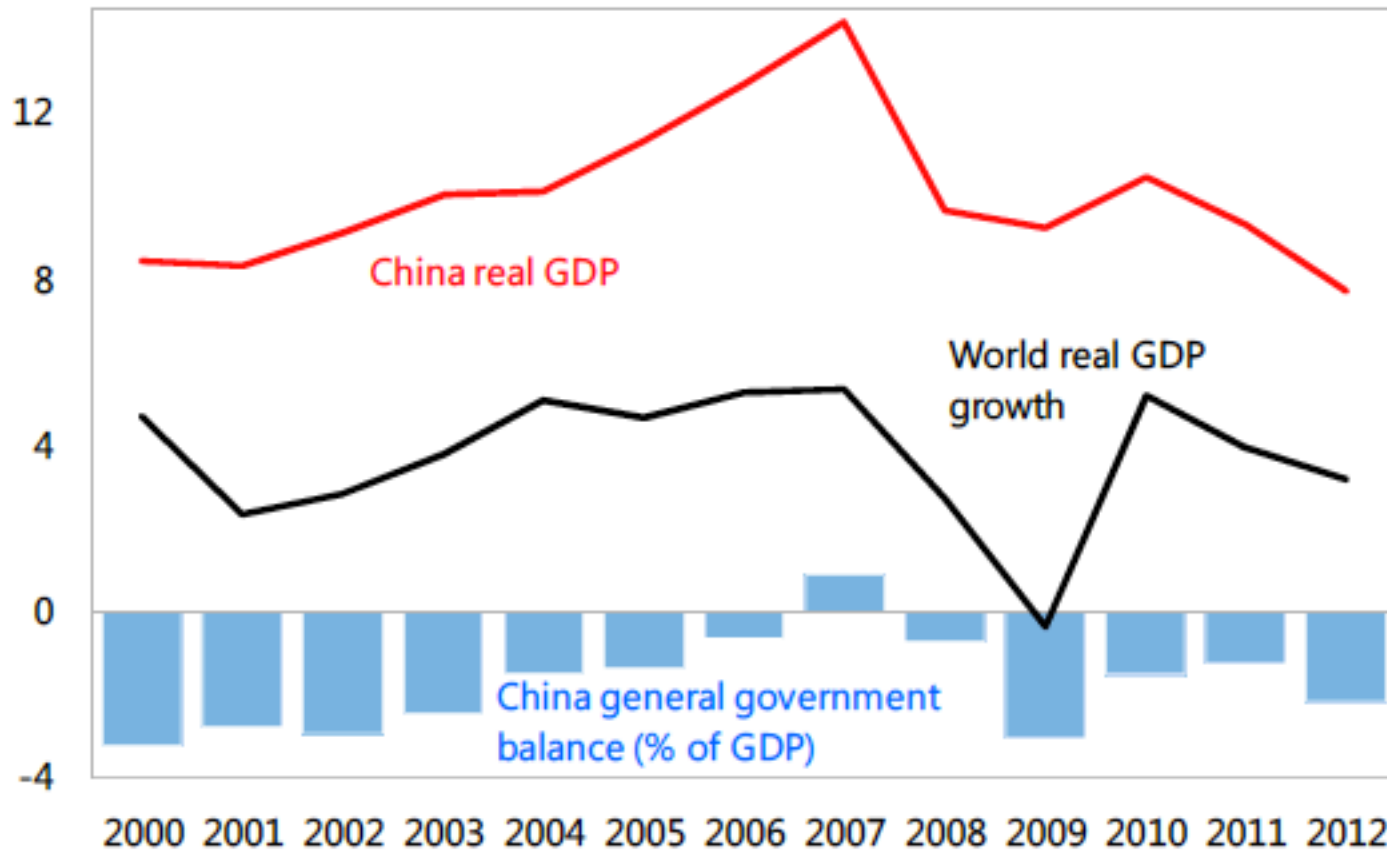
Demographic Pressures

(In millions)



Real GDP Growth and General Government Balance

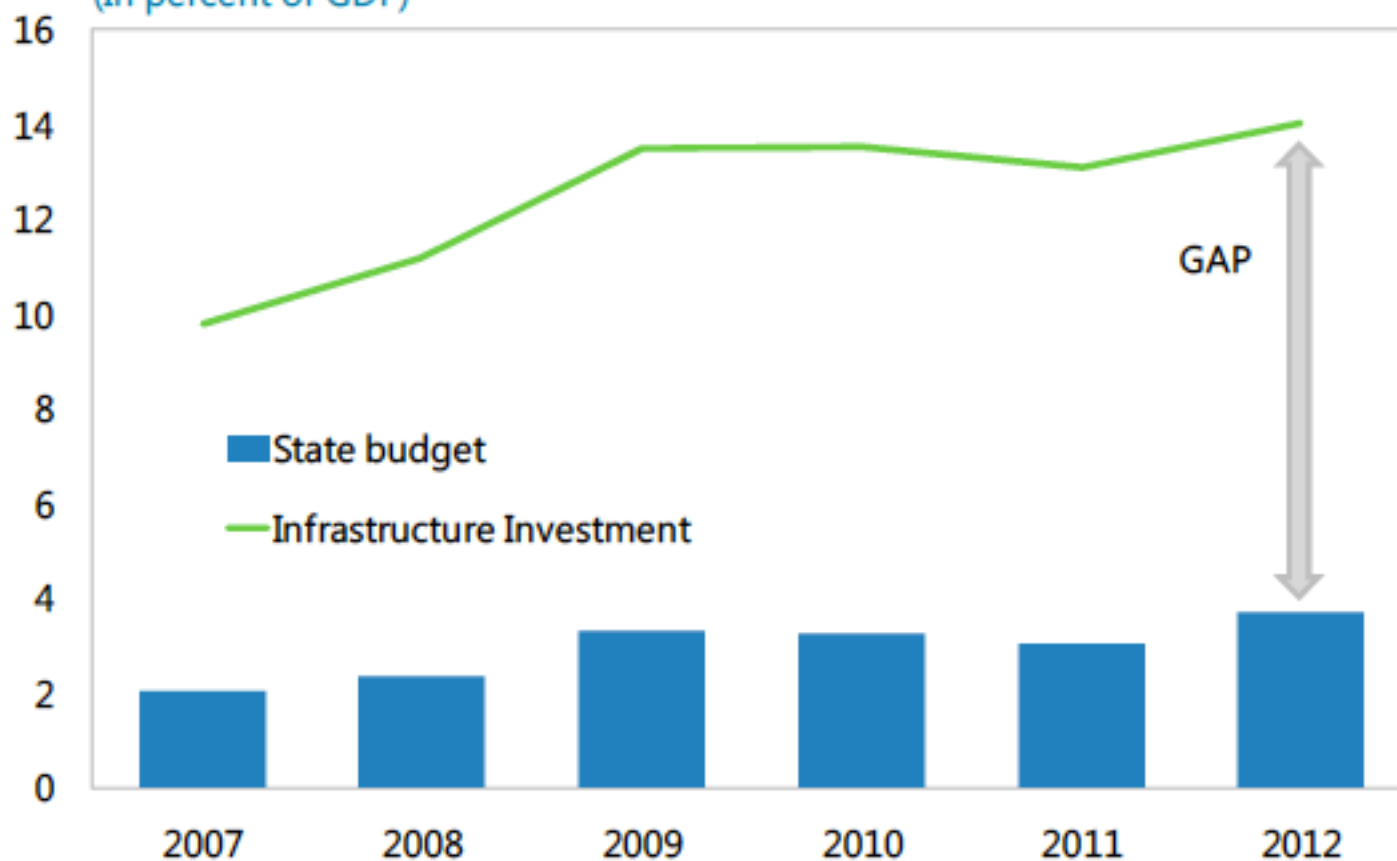
(In percent)



Sources: IMF, World Economic Outlook; and IMF staff estimates.

Financing Gap for Infrastructure Investment

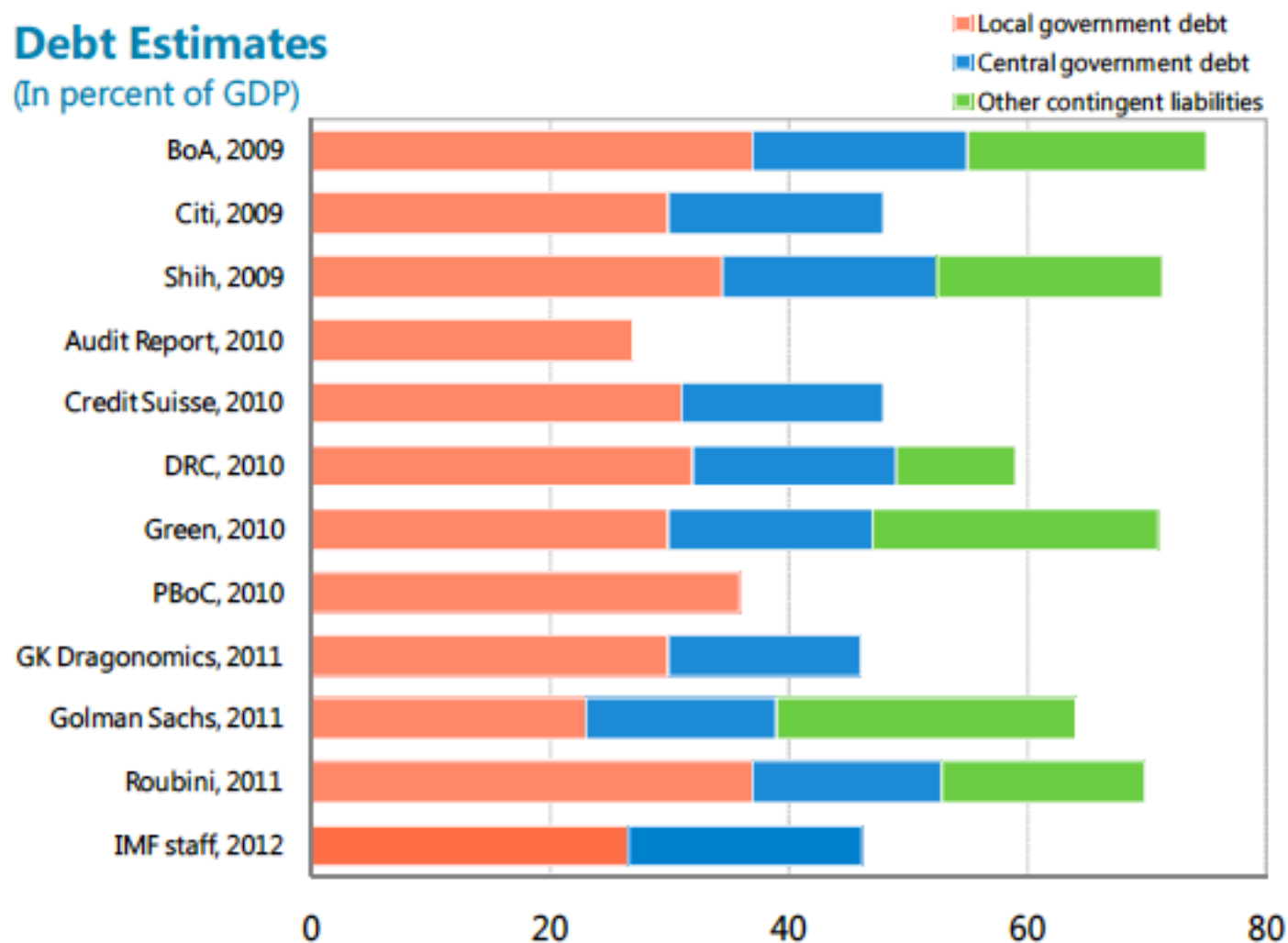
(In percent of GDP)



Source: CEIC; and IMF staff estimates.

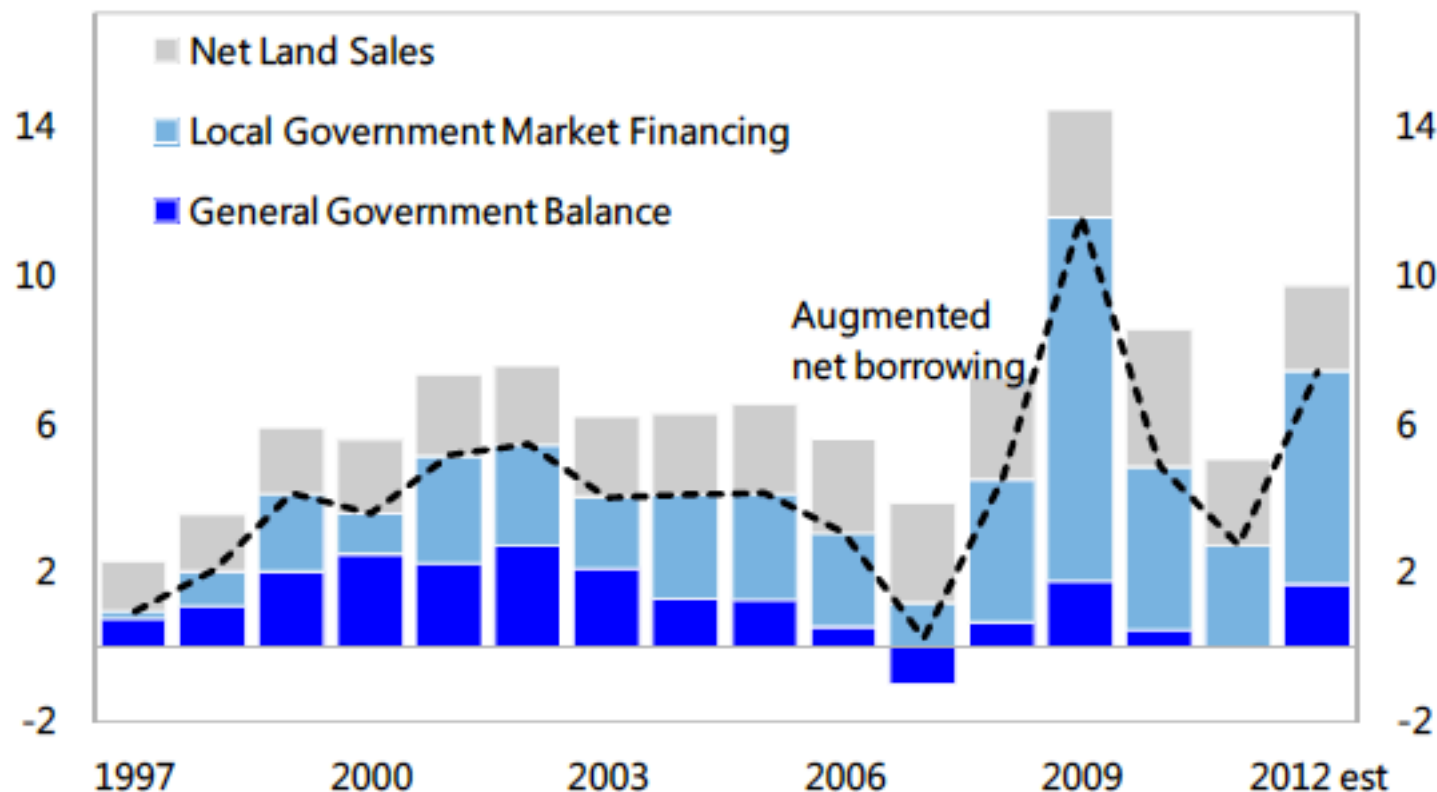
Debt Estimates

(In percent of GDP)



Augmented Net Borrowing and Fiscal Deficit

(In percent of GDP)



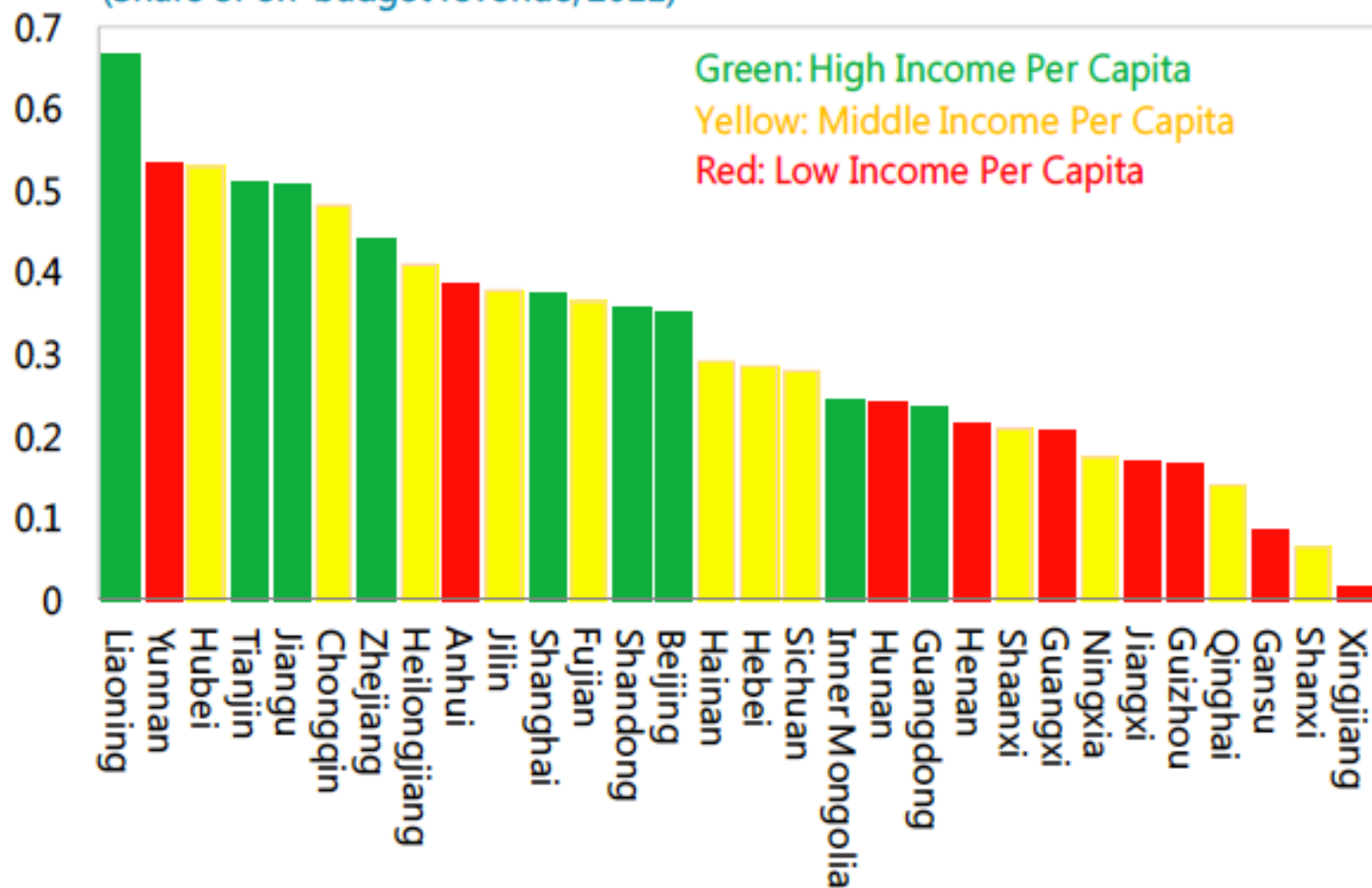
Sources: CEIC, Chinabond, EUROSTAT, China Citic Press, China Trustee Association, NAO, and the Ministry of Finance; and IMF staff estimates.

Land sales have been relatively more important for higher income provinces, which may have exacerbated regional inequality.

zhang 12

Land Sales

(Share of on-budget revenue; 2011)

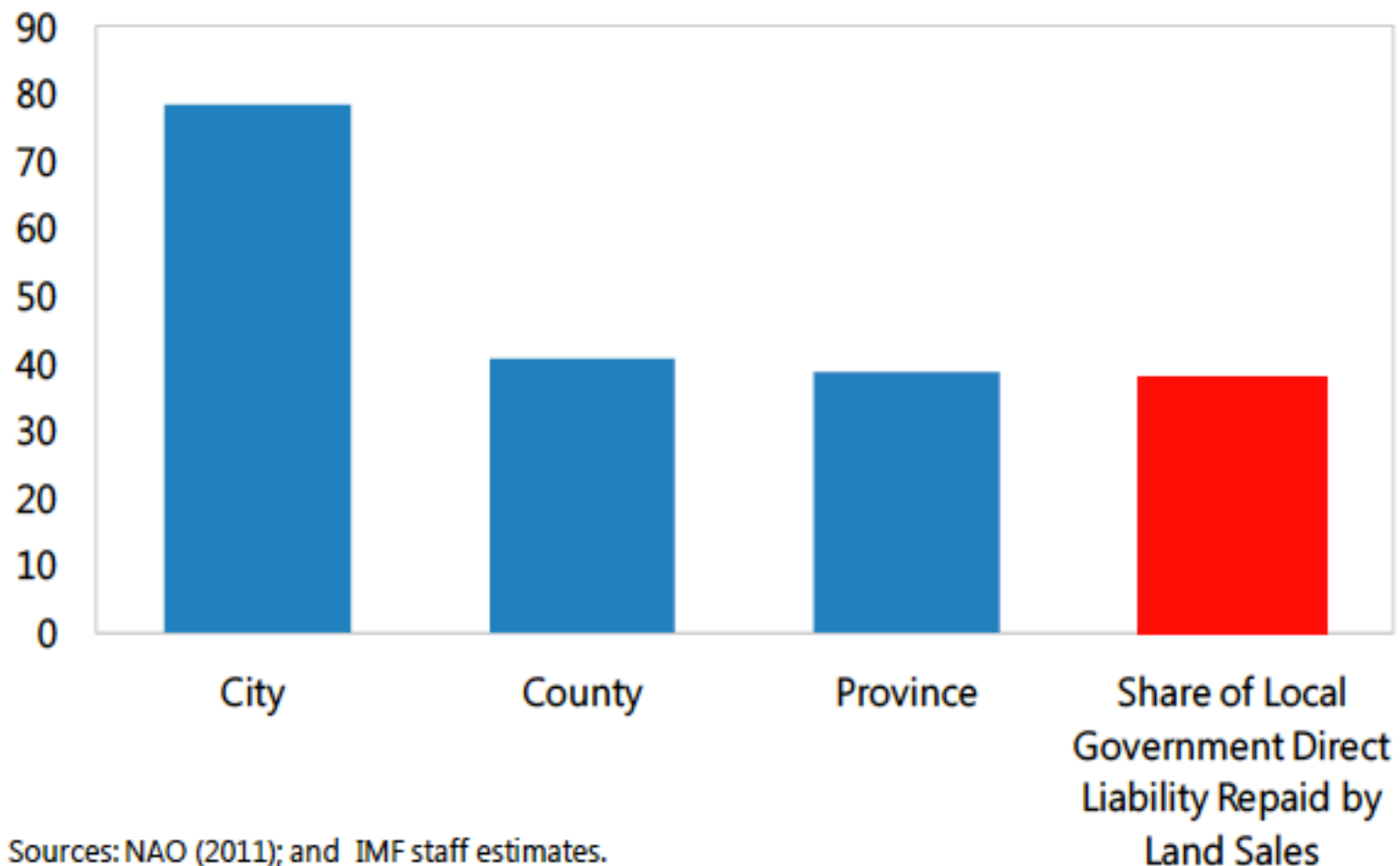


Sources: Soufun; CEIC; and IMF staff estimates.

...and land sales are an important source of revenue for servicing debt for many local governments.

Counties and Provinces Promising to Repay Local Government Liability by Land Sales

(Share of cities)

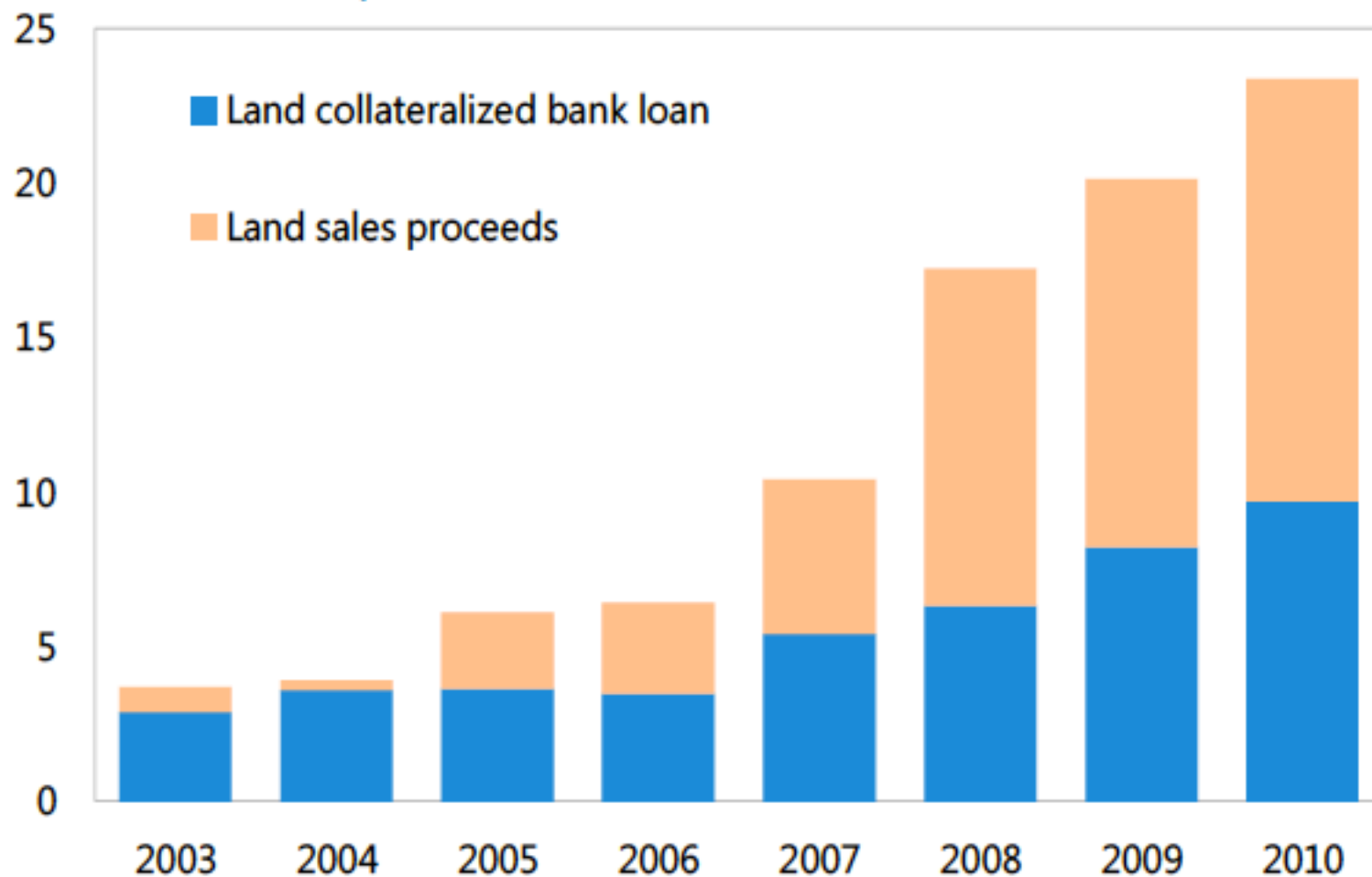


Sources: NAO (2011); and IMF staff estimates.

Land values have risen considerably over time...

Land Value

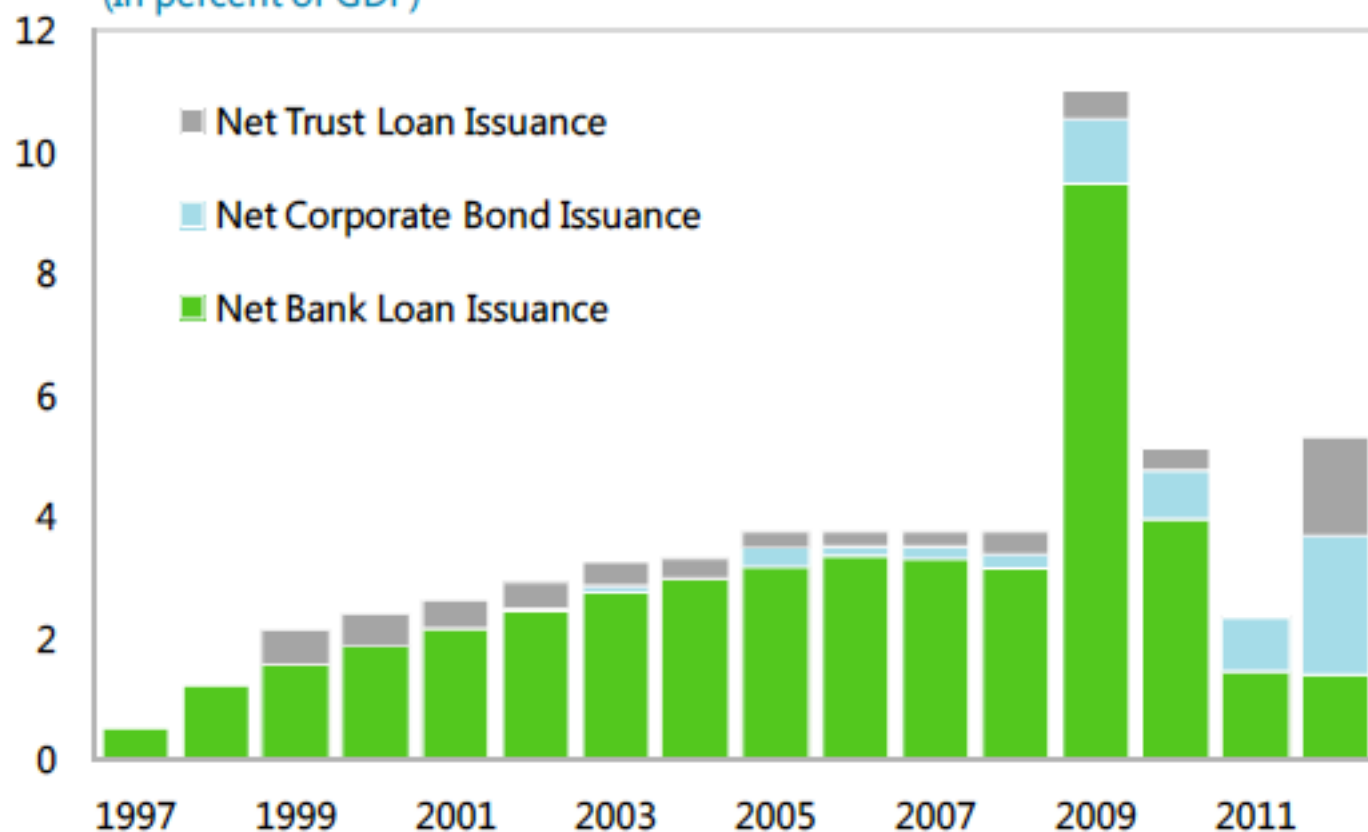
(In RMB million per hectare)



Sources: Liu, Shao and Zhou (2012); and IMF staff estimates.

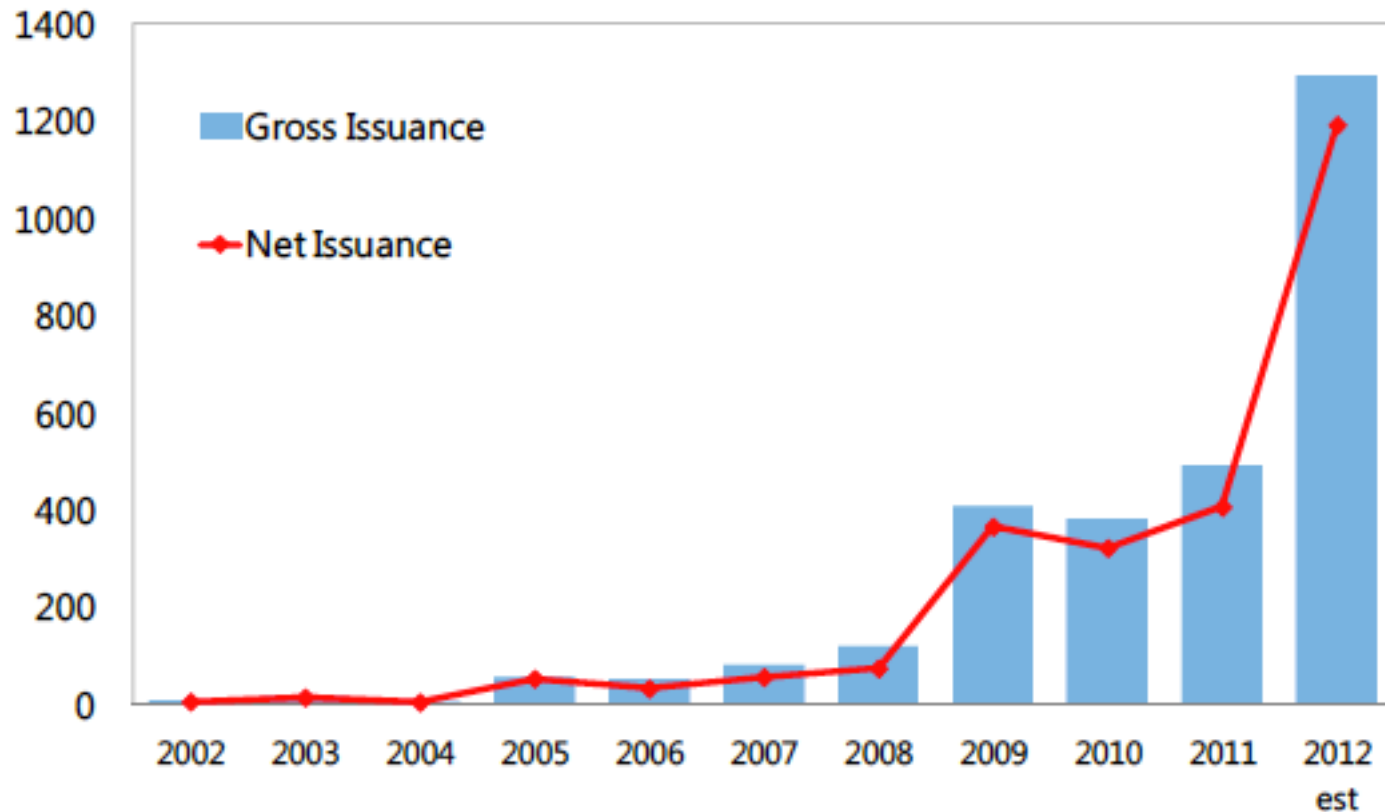
Local Government Market Financing

(In percent of GDP)



Sources: CEIC, Chinabond, EUROSTAT, China Citic Press, China Trustee Association, NAO, and the Ministry of Finance; and IAC staff estimates.

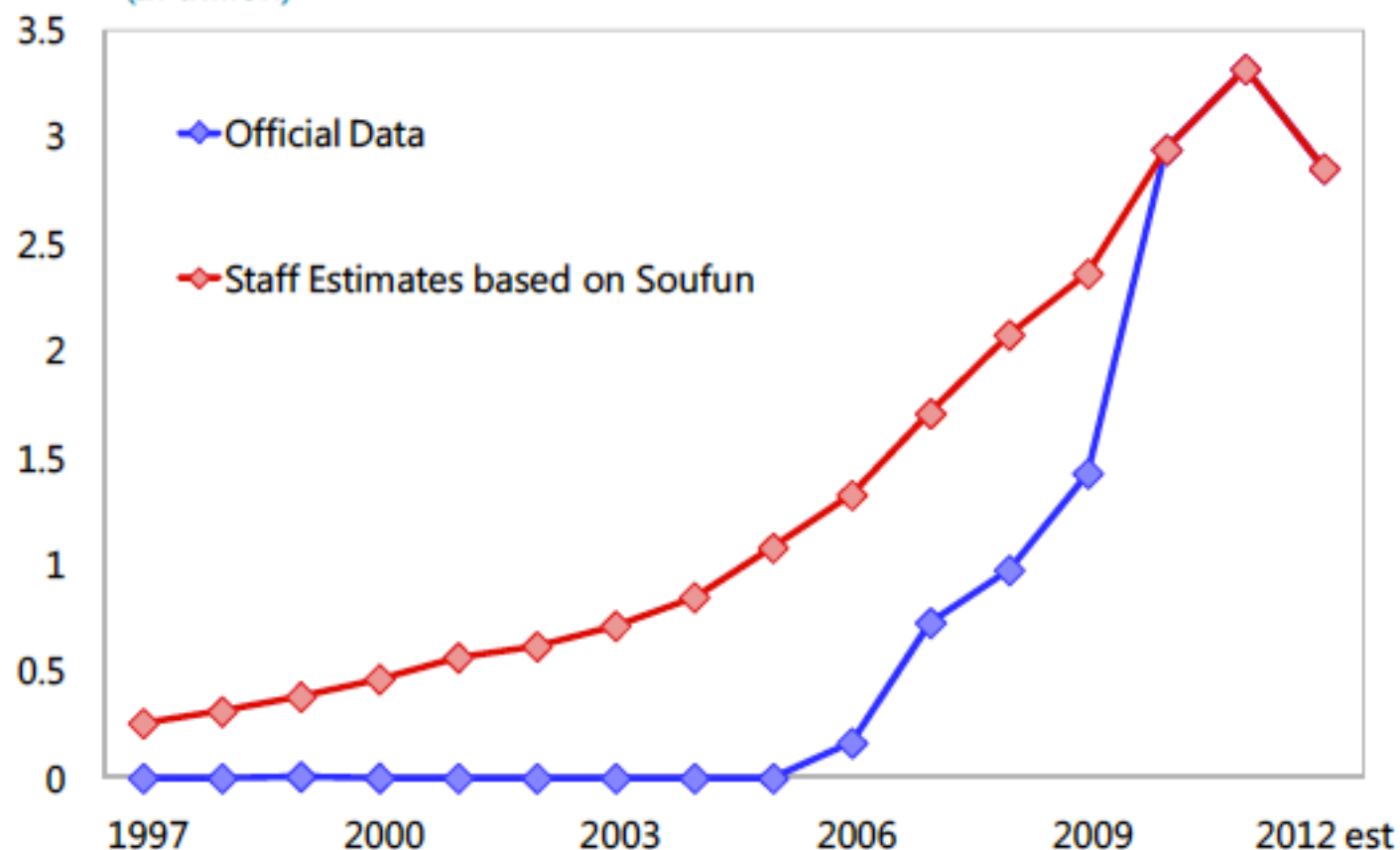
Gross Issuance and Amortization of Corporate Bond by LGFVs¹ (In RMB bn)



¹LGFVs are urban construction investment companies, which were set up by local governments to finance their infrastructure and public entities projects. Source: Wind; and MF staff estimates.

Official and Staff Estimates of Land Sales Revenue

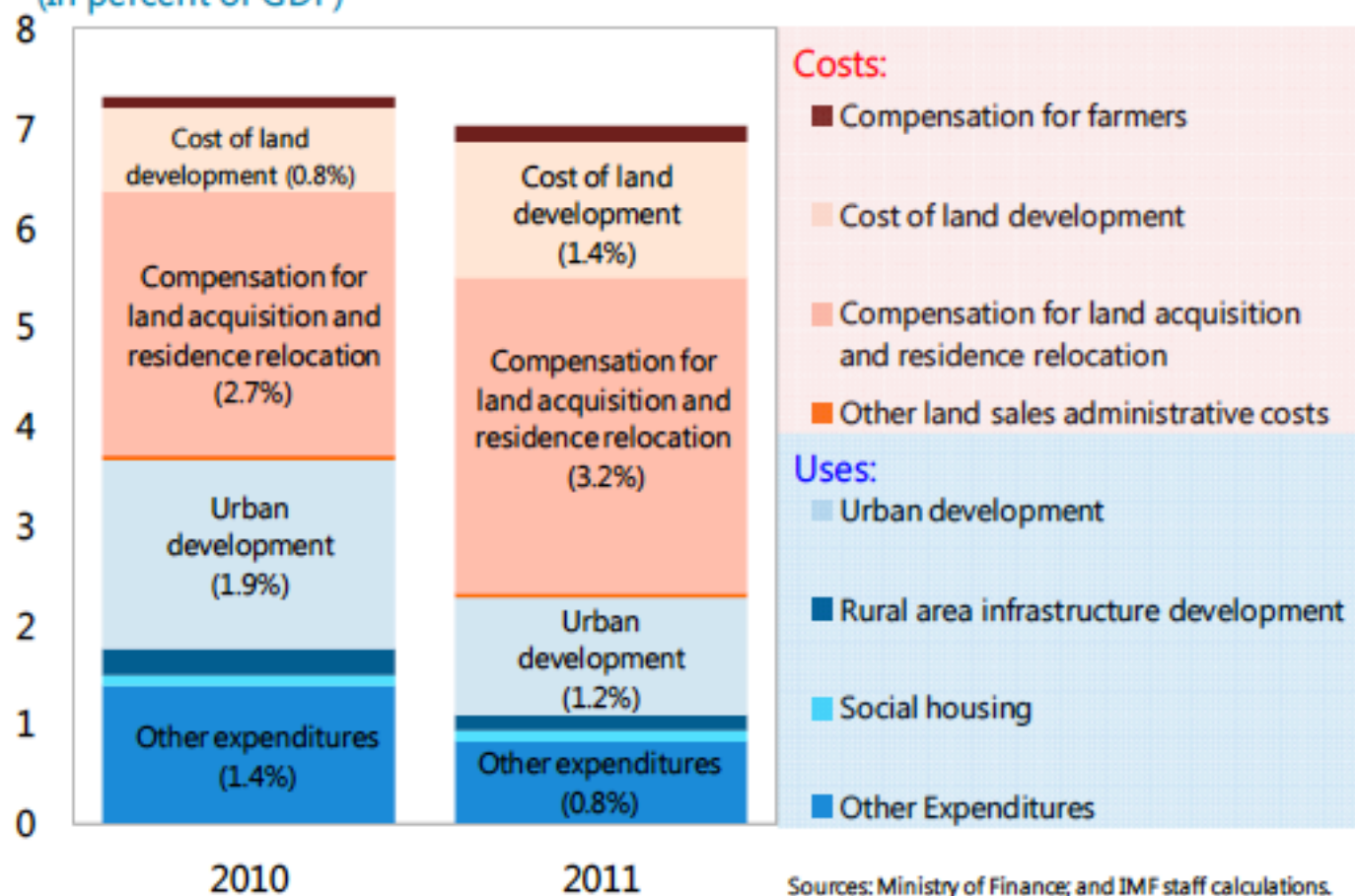
(In trillion)



Sources: CEIC; the Ministry of Finance; Soufun; and IMF staff estimates.

Decomposition of Gross Land Sales Proceeds: Costs and Uses

(In percent of GDP)

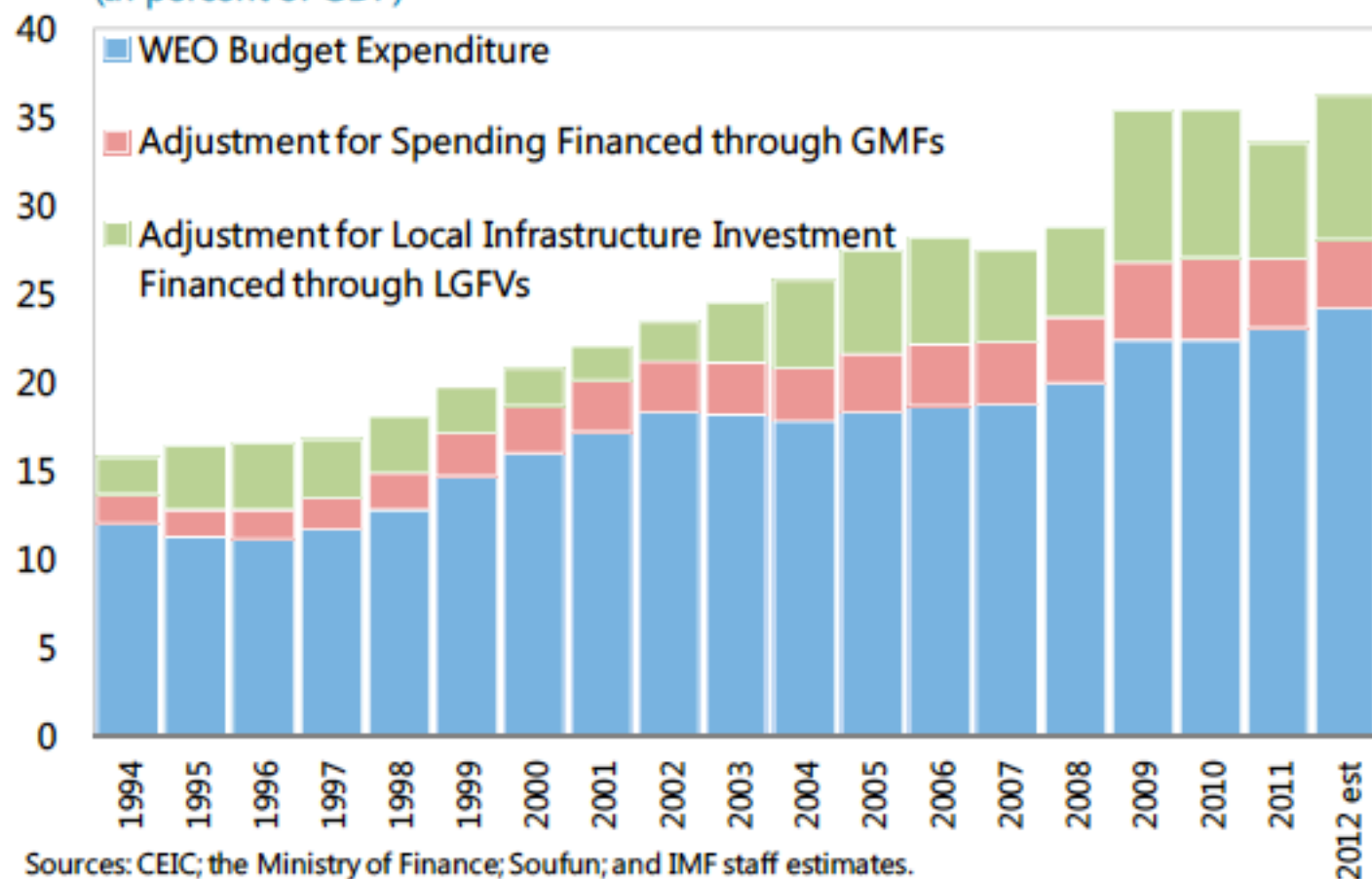


So how measure fiscal position?

- Well, here are a few attempts
 - 30% level is hardly a burden in a rapidly growing economy
 - most LGFV debt not short-term
 - but only about 3 years' breathing space
- meanwhile in LR need to
 - increase revenue to cover aging of Mao's children
 - construct tax system to fund local government
 - deepen financial markets

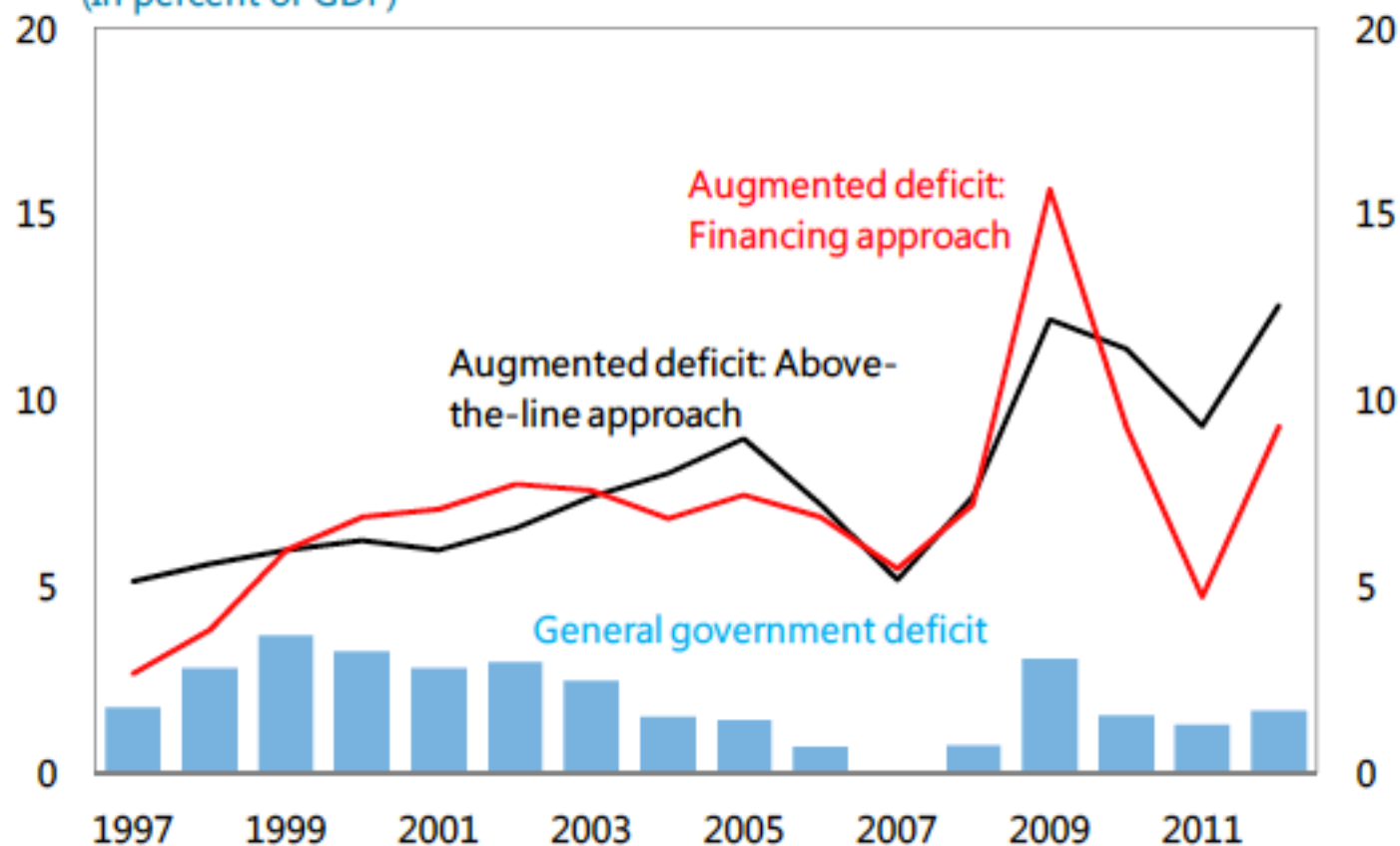
Augmented Expenditure

(In percent of GDP)



Augmented Fiscal Deficit

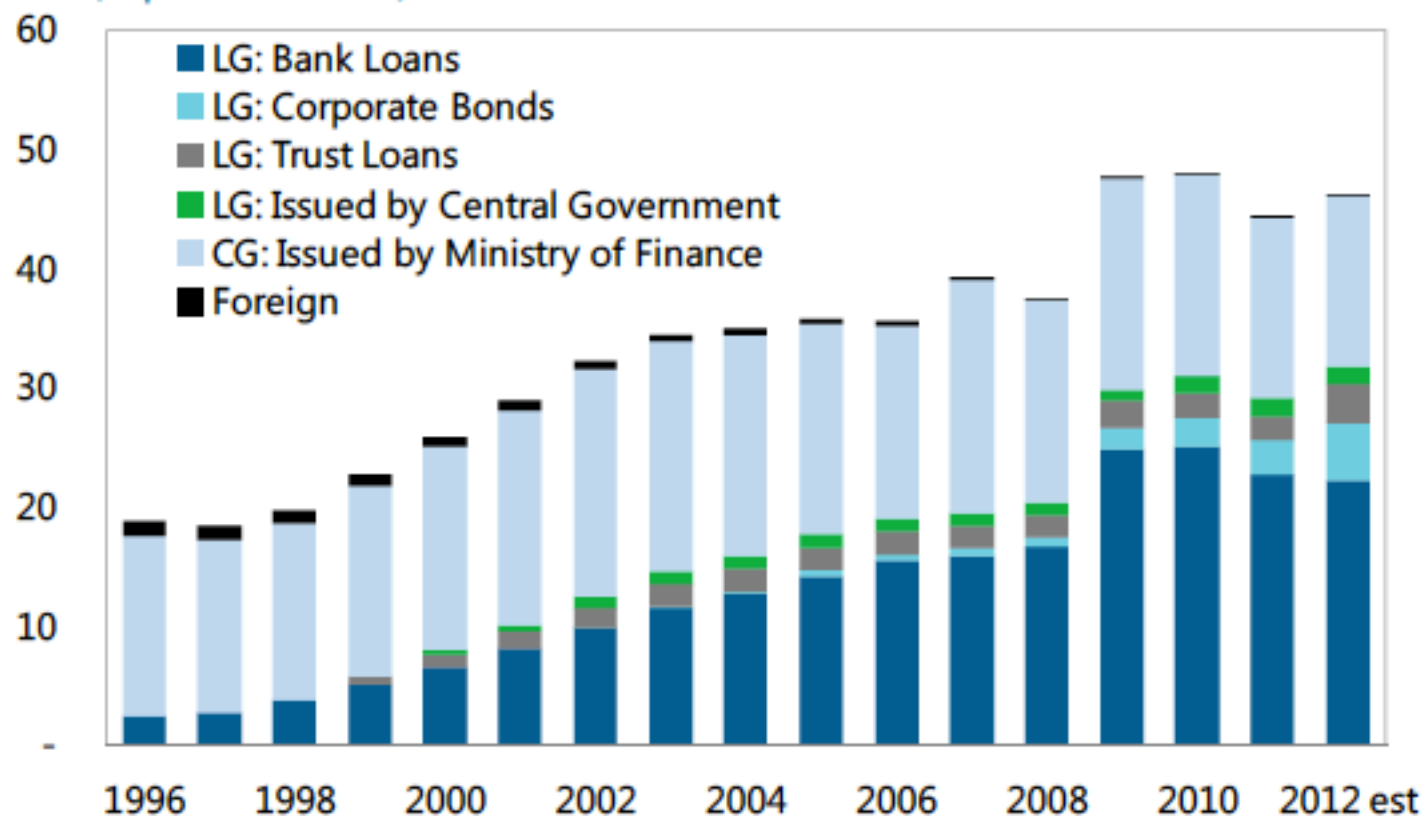
(In percent of GDP)



Sources: CEIC; Chinabond; EUROSTAT; China Citic Press; China Trustee Association; NAO; and the Ministry of Finance; and IMF staff estimates.

Augmented Public Debt Level

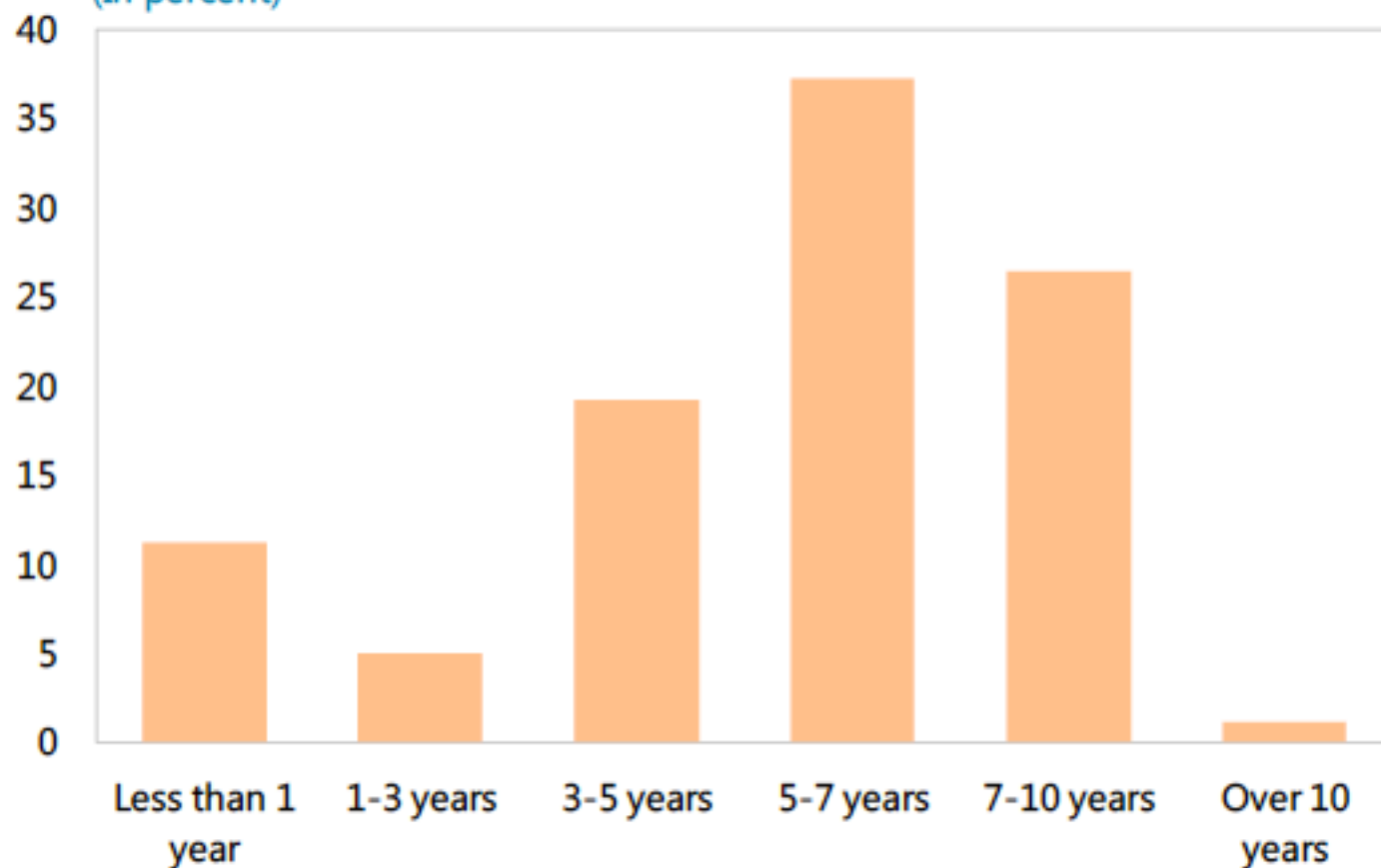
(In percent of GDP)



Sources: CEIC, Chinabond, EUROSTAT, China Citic Press, China Trustee Association, NAO, and the Ministry of Finance; and IMF staff estimates.

Maturity Structure of Corporate Bonds Issued to LGFVs

(In percent)



Source: NAO (2011); and IMF staff estimates.

Table 2. Profitability of LGVs by Levels of Government

| Level of government | Operating Profit/Total Profit (A) | Government Subsidy/total Profit (B) | Share of LGFVs with A>B |
|---------------------|-----------------------------------|-------------------------------------|-------------------------|
| Township | -2.57 | 100.17 | 21.15 |
| City | -0.77 | 97.33 | 14.89 |
| Capital city | 3.76 | 84.9 | 30.56 |
| Provinces | 66.92 | 21.29 | 60 |
| Municipalities | 24.14 | 47.11 | 42.86 |
| Total | 4.12 | 89.19 | 22.31 |

Source: Ma (2012).

Table 3. Commercial Banks' Holding of LGFV Loans

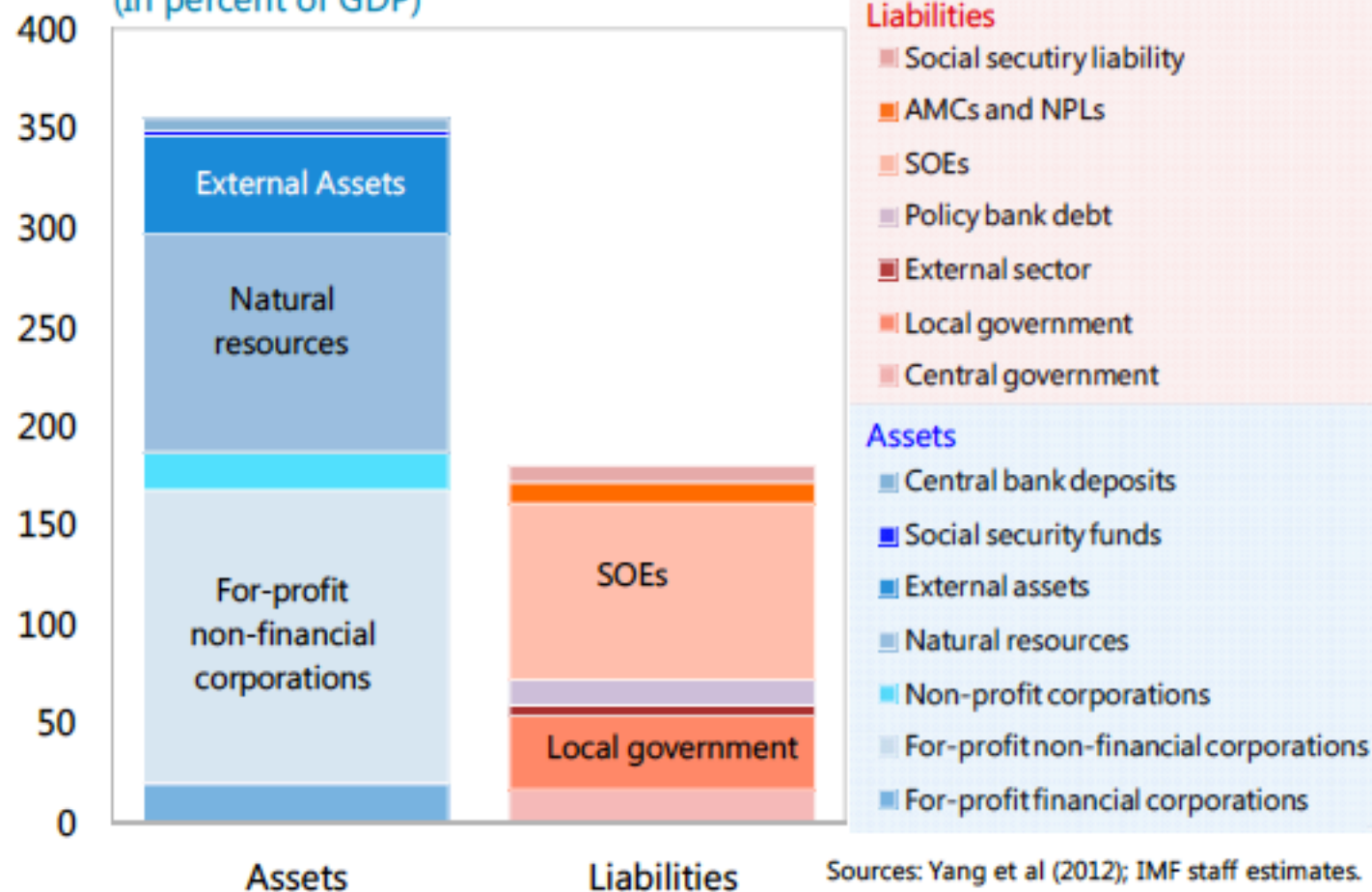
| | LGFV Loans | LGFV/Total | |
|-------------------------------------|----------------------|---------------------|---------------------|
| | (CYN billion) | Loans | NPL |
| | | (In percent) | (In percent) |
| China Development Bank | 5,500 | 66.7 | 0.25 |
| Industrial Commercial Bank of China | 931 | 8.7 | 1.09 |
| Agriculture Bank of China | 530.1 | 10.23 | 0.17 |
| Bank of China | 531.5 | 8.55 | 1.1 |
| China Construction Bank | 580 | 9.44 | 0.19 |
| Bank of Communications | 308.3 | 12.67 | 0 |
| China Minsheng Banking Group | 172.1 | 15.06 | |
| Shenzhen Development Bank | 66 | 14.72 | 0.57 |
| China Everbright Bank | 94.9 | 11.5 | 0 |
| Shanghai Pudong Development Bank | 105 | 8.84 | |
| China Citic Bank | 170 | | |
| China Merchants Bank | 124.6 | 8.6 | |

Source: Ma (2012).

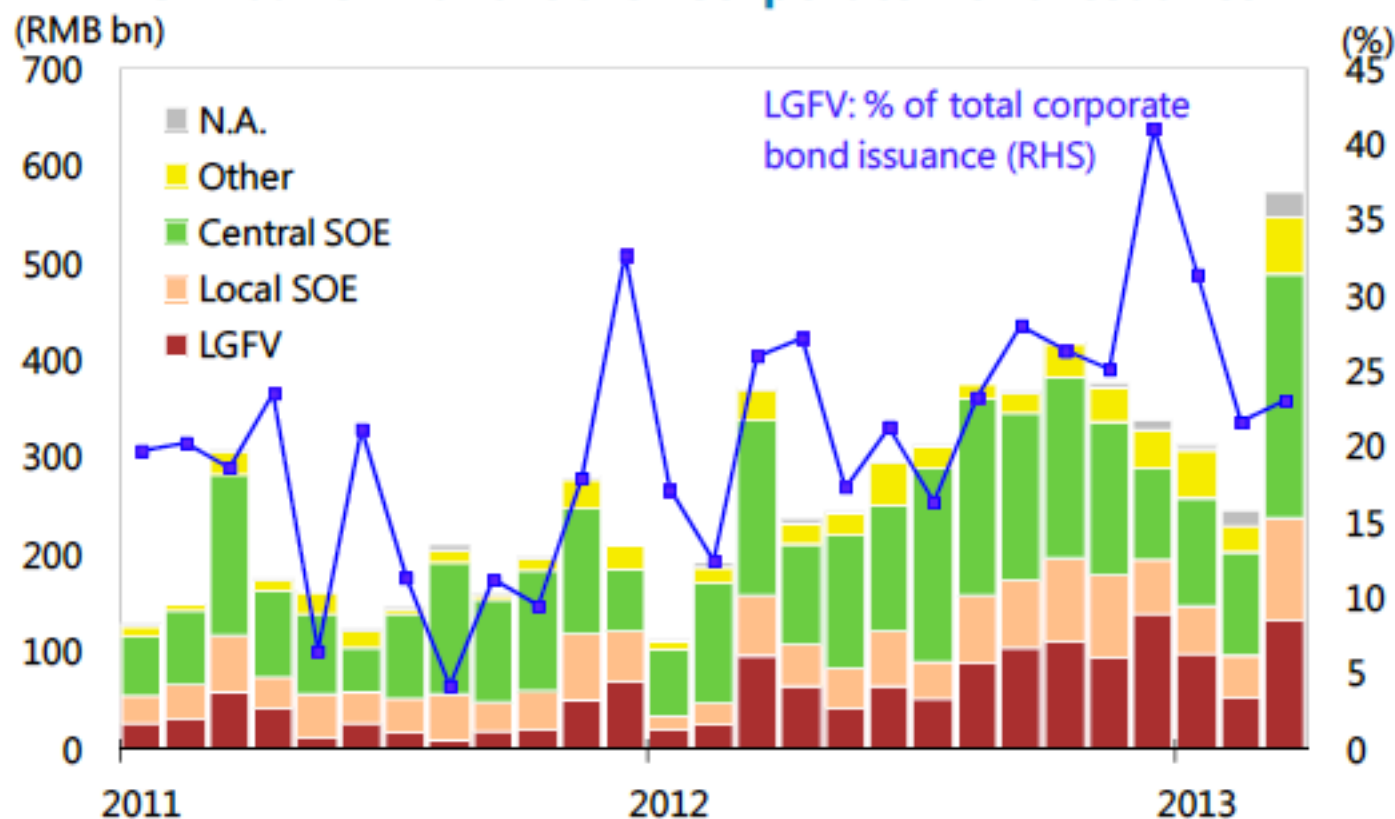
Note: Amount by the second quarter of 2011.

Public Sector Balance Sheet

(In percent of GDP)



China: LGFV and Other Corporate Bond Issuance¹



1/ Includes bonds, medium-term notes, short-term commercial paper, and convertible bonds issued by enterprises and listed companies.

Sources: Wind; and IMF staff calculations.