



# BANK OF FINLAND BULLETIN

BANK OF FINLAND ARTICLES ON THE ECONOMY

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# Rising indebtedness increases risks in China

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The total amount of public and private debt in China has increased rapidly since the financial crisis. The country's debt-to-GDP ratio has already reached the level seen in many advanced economies. The rapid rise in debt in many countries has led to financial sector problems and to a marked slowing of economic growth. Sustainable management of the economy in China would require a slowdown in the debt build-up. There are no indications of this as yet. Curbing debt accumulation would require China's readiness to accept lower growth targets.



## China's strong stimulus based on borrowed money

The Chinese economy has been growing vigorously for more than 30 years. A large part of this growth has stemmed from increased investment: firms have modernised their production, and rapid urbanisation and integration into the global economy have required substantial construction and infrastructure investments. The financing of these projects has traditionally come from the mainly state-owned banking sector, whose operations the government has steered via tight regulation. It has been easy for banks to obtain financing, as a scarcity of investment opportunities of the Chinese people has maintained the popularity of bank deposits, despite the often very low rates of interest paid. Consequently, it has been easy to finance investment-driven growth.

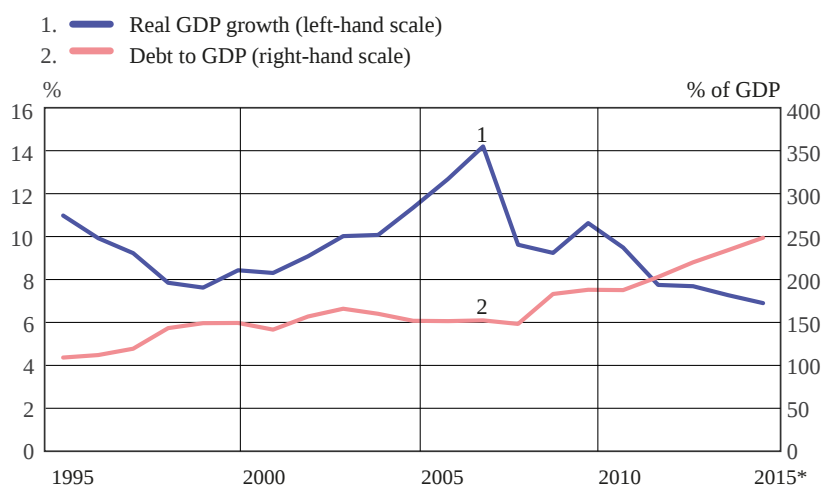
In the wake of the Asian financial crisis, the Chinese banking sector faced major problems with non-performing assets, which led to extensive recapitalisation of banks. The authorities thus began to closely monitor credit growth. Banks' loan quotas were

strictly adhered to, and in 1998–2008 indebtedness grew at roughly the same pace as the economy. Debt relative to GDP remained at 150%.<sup>[1]</sup>

Following the onset of the global financial crisis in 2008, China feared an abrupt slowdown in economic growth. The country’s political leadership decided to provide a strong stimulus to the economy, as did many other countries. A sizeable two-year stimulus package of CNY 4,000 billion (over EUR 430 billion, 12% of GDP) was allocated mainly for investment purposes. Restrictions on bank lending were relaxed. The state-owned banking sector and other government-related businesses were eager to respond to policy-makers’ calls for stimulus. In 2009, a huge number of new investment projects were launched, and the stock of credit grew by 30 percentage points to 180% of GDP during the year (Chart 1). These actions helped to maintain robust economic growth, and GDP expanded by more than 9% in 2009. Measured by the change in the outstanding debt, the actual stimulus was more than twice as large as announced in the official stimulus programme and was realised in one year instead of two. The stimulus was thus exceptionally large compared with any other country.

Chart 1.

### China’s debt-to-GDP ratio up sharply since financial crisis



\*Debt for 2015 in an estimate.

Sources: BIS, National Bureau of Statistics of China and BOFIT.

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China’s credit stock relative to GDP resumed its upward trend in 2012, in response to a further relaxation of direct regulation of bank lending. The authorities have not reined in credit growth, given their desire to keep economic growth on target and prevent an excessively rapid slowdown. Estimated debt at the end of 2015 was about 250% of GDP,

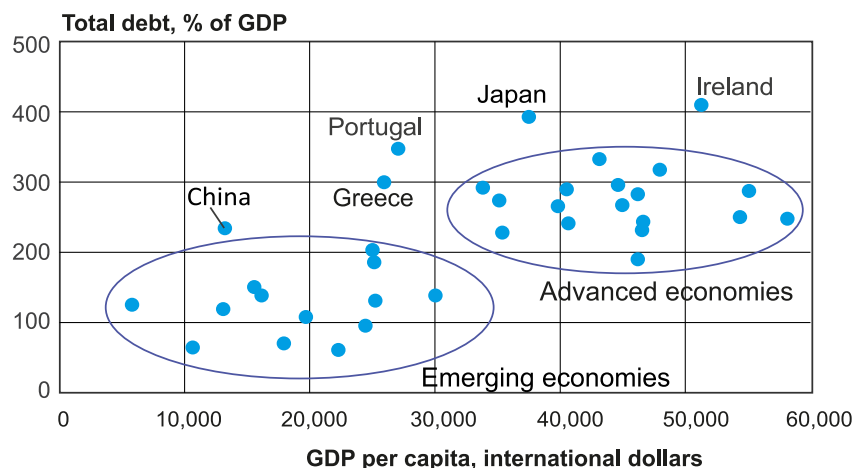
1. In examining total debt, this article uses BIS debt statistics, which are comparable with other countries.

Recourse to other sources gives slightly different debt levels, but the magnitude is roughly the same. Total debt includes domestic and foreign debt for the public-sector, non-financial corporations and households but excludes financial sector liabilities.

and Chinese statistics also point to continued rapid credit growth in early 2016. The total debt has grown by approximately 100 percentage points relative to GDP since the financial crisis. Compared with other countries, the level of China's debt is very high. It is of the same order of magnitude as in many advanced economies and distinctly higher than in the other emerging economies (Chart 2).

Chart 2.

### China has high debt compared to other emerging economies



PPP-adjusted GDP per capita and total debt to GDP in 2014.

Sources: IMF and BIS.

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## Mixing of private sector debt and government debt

There are many problems with the measurement of the amount of China's debt. One of the greatest difficulties is posed by the assessment of public-sector debt, as activity in the public sector is, in part, statistically recorded as private sector activity. The roots of the problem largely go back to the stimulus measures.

At the end of 2008, responsibility for implementation of the stimulus policies was mainly assigned to local governments. But they had to address the problem of where to get money quickly for the realisation of the projects. Local governments have limited scope for boosting tax revenues and, on the other hand, additional income received through changes in taxation only comes after a time lag. Moreover, local governments were not allowed to incur debt, as they had a statutory balanced-budget obligation. The problem was, however, known to local policy-makers, and they had come up with a solution for it long ago. Enterprises for organising project finance via bank loans were established off budget – and hence outside the public sector. During the stimulus phase, these off-budget public projects and the underlying loans snowballed. What was actually public stimulus was thus moved off the public budget.

As Chinese public-sector debt prior to 2009 was generally estimated at 20% of GDP, it was very small by international standards. However, the estimate only included central government debt, not local government liabilities. Based on current statistics, the country's public-sector debt accounts for about 43% of GDP, of which half relates to the central government and half to local governments. The IMF estimates local governments' off-budget liabilities at approximately 20% of GDP and total public-sector debt at about 60% of GDP (Chart 3). Considerably higher estimates have also been suggested.

Chart 3.

### Chinese debt growing rapidly across all sectors

1. Total debt
2. Household debt
3. Public-sector debt
4. Corporate debt (excl. internal financial sector liabilities)



\*IMF estimate, taking off-budget local government liabilities into account.

\*\*Debt for 2015 is an estimate.

Sources: BIS, IMF and BOFIT.

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At the end of 2011, a pilot scheme for public sector financing was carried out in China, whereby some cities were allowed to issue bonds. The scheme has subsequently been expanded, and local governments have to some extent repaid off-budget bank loans with proceeds from bond sales. Consequently, public-sector liabilities have been partly brought back from corporate debt to public debt.

Given the government's extensive activity in the corporate sector, actual corporate indebtedness is difficult to assess. If local government liabilities are excluded from corporate debt, non-financial corporations' accumulated debt amounts to around 150% of GDP. Debt accumulation has been significant especially among real estate and construction companies. Based on IMF estimates, indebtedness within sectors is quite heavily concentrated in certain companies that are generally owned by the state or local governments. Compared with any other country, Chinese firms have very high debt levels. According to BIS, the debt ratio in major and medium-sized emerging economies is typically about 50% of GDP.

Thrifty Chinese households have traditionally had little debt. However, consumer credit has become considerably more extensive, the outstanding amount having grown annually by several tens of percent in recent years. Housing loans have also become more common, as housing prices have risen and house purchase on borrowed money has been made easier. Even so, the Chinese continue to pay a large part of the house price in cash. The down-payment requirement for a first-time homebuyer is at least 20% of the house price and for other buyers 30%. Total cash payment for a house is not highly unusual.

Liberalisation of capital restrictions in China has increased borrowing from abroad, albeit external debt remains relatively small. As reported by China's State Administration of Foreign Exchange (SAFE), there was over USD 1,500 billion of debt, i.e. 14% of GDP, at the end of September 2015.<sup>[2]</sup> Of this amount, nearly half (46%) was financial sector debt. Public-sector debt accounted for around 10% and other sectors for approximately a third of the total. Slightly over 10% represented inter-company loans. In the course of 2015, the depreciation of the yuan and the expected continuation of the currency's slide led market participants to reduce their holdings of external debt by more than USD 100 billion. According to SAFE, about half of the external debt was denominated in yuan at the end of 2014; the other half was largely USD-denominated.

## **An increasingly large share of financing from the shadow banking sector**

In China, it has often been much more difficult for private companies to obtain bank credit than it is for state-owned enterprises. During the last 10 years, private firms have increasingly turned to the shadow banking sector for financing (Chart 4).<sup>[3]</sup> This has been enabled by the liberalisation and development of the financial sector. On the other hand, the shadow banking sector's activities have always expanded rapidly when authorities have curbed bank lending. Already in 2006–2007, the share of financing provided by the shadow banking sector broadly doubled to nearly 10% of total domestic financing. During the course of 2011, the sector's share grew to 15%, thereafter remaining at 15–18%.

Investors have been interested in using the shadow banking sector, as it has often offered much better returns than bank deposits. Commercial banks and other financial intermediaries have packaged shadow banking loans into asset management products. Investors have not always been aware of or understood the risks involved in different investments. Shadow banking credit has also been channelled to companies that have not always been able to repay their loans. Accumulated losses for the time being total at least tens of billions of yuan. However, the risk realisations have not hit the investors; instead, the central and local governments have so far assumed the bulk of the losses.

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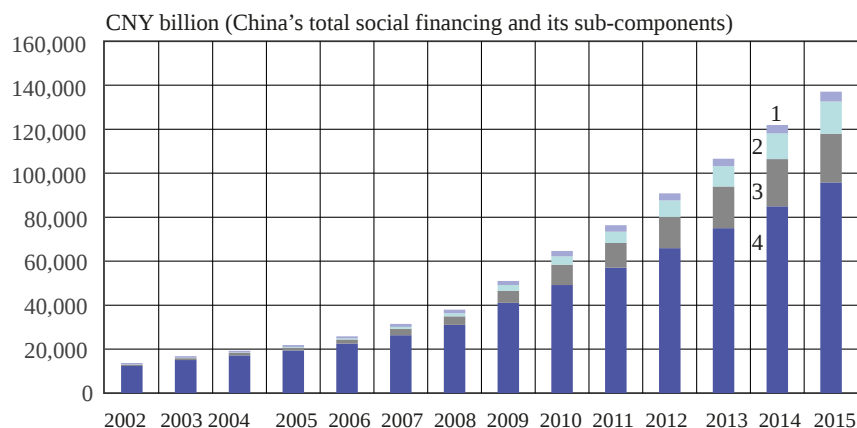
2. China altered its statistical compilation of external debt at the beginning of 2015. Prior to 2015, external debt included only foreign-currency debt, but after the change it also includes external debt denominated in yuan.

3. As the activities of the financial sector have diversified since the beginning of the first post-millennium decade, China has begun to publish its own indicator for overall financing in the economy, i.e. total social financing (TSF). It seeks to cover all financing provided to the domestic corporate sector (excl. the financial sector) and households. It includes bank loans, bankers' acceptances, trust and entrusted loans and equity and debt issues. In this article, the shadow banking sector includes bankers' acceptances and trust and entrusted loans.

Chart 4.

### The shadow banking sector has come to play a major role

1. Equity financing
2. Corporate bonds
3. Shadow banking sector (trust and entrusted loans and bankers' acceptances)
4. Bank loans



Source: People's Bank of China.

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As total financing has grown quickly, the risk of financing unprofitable projects has increased. To date, according to official statistics, the levels of commercial banks' non-performing loans, while rising, have remained moderate, averaging less than 2% of the outstanding amount of credit. In addition, as indicated by official statistics, nearly 4% of the loans are in danger of becoming problem loans. On the basis of many independent assessments, the actual proportion is, however, considerably higher. Banks are assumed to grant new credit for repayment of old loans, although the future repayment ability of firms is dubious. This applies, in particular, to state- and local government-owned enterprises. Also of some concern is the slowing of corporate profit growth and the corporate sector's weakened ability to handle its commitments. Moreover, China's efforts to close down production facilities in sectors with excess capacity is likely to increase non-performing loans in the years to come.

China has experience of managing banking sector problems. Following the Asian financial crisis at the end of the 1990s, commercial banks' non-performing assets were estimated at 40–50% of the outstanding amount of credit. After the 1998 Asian financial crisis, the government provided support to the banking sector on several occasions amounting to hundreds of billions of euros. In addition to capital injections, the government transferred commercial banks' non-performing loans to asset management companies. These banks succeeded relatively poorly in realising non-performing assets, but the significance of these assets has diminished over time, as the economy has grown rapidly and inflation has reduced the value of money.



## Is China willing to break the debt spiral?

China's rapid increase in indebtedness causes concern, as similar developments in many countries have led to problems in the financial sector and to a prompt slowing of economic growth. Nor does the rush to indebtedness show signs of easing off. Moreover, financing from the shadow banking sector appears to increase in China whenever lending by the banking sector is tightened. This shows that steering the financial markets by old tools based on regulations and quotas for the banking sector does not work; such guidance should be based more on the price of money.

Despite the involvement of foreign strategic investors in large banks, it seems that the banks' governance methods still leave much to be desired. The huge role of the government as both the organiser and recipient of financing is highly problematic. Improvement of banks' risk management and allocation of finance according to more market-based criteria require a downsizing of the government's role in the operation of the financial markets.

As was the case at the turn of the millennium, possible restructuring in the Chinese banking sector is likely to end up being financed by the government and, in the last resort, by ordinary people. In its stress scenario, the IMF estimated in summer 2015 that the Chinese general government debt-to-GDP ratio would rise by about 20 percentage points if 10% of bank assets were restructured. However, the IMF considers the public sector's current debt sustainability to be good. A large part of the debt is domestically-held and, compared with many other countries, China has exceptionally large buffers. The government has abundant resources (e.g. holdings in state-owned enterprises) and the banks' reserve deposits in the central bank are abundant. Sizeable foreign exchange reserves provide protection against external risks.

If China adheres to its objective of doubling its GDP per capita in 2020 compared to 2010, this will require ongoing economic growth nearly at a current pace. However, the contracting labour force and slower productivity growth point to a continuously weakening trend in growth fundamentals in the years ahead. Maintaining economic growth at current levels appears to require continuing growth in debt accumulation. It is another question how appropriate it is to continue at the current growth rate if the labour market would be able to withstand a slower but otherwise in all respects more sustainable rate of growth. Unsustainable financial praxis can be costly.

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