

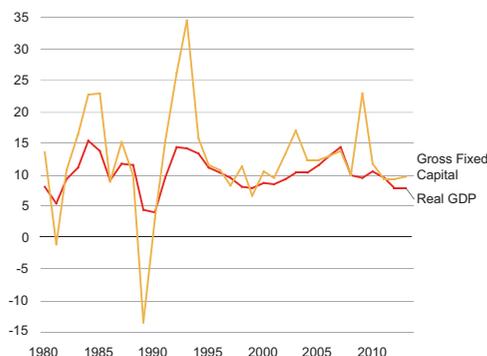
A REBALANCING CHINESE ECONOMY



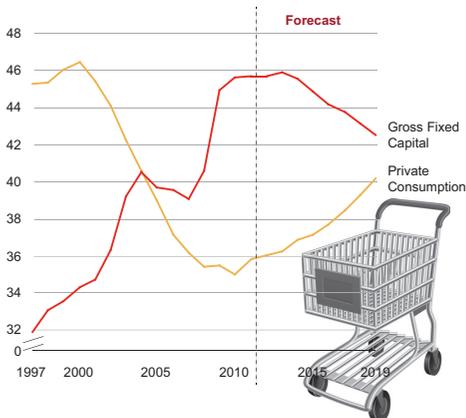
CHINESE ECONOMIC GROWTH HAS SLOWED DOWN GIVEN WEAKENED INVESTMENT, with evidence of a slow rebalancing of the economy towards more consumption-driven growth

China's GDP growth reached 7.4% in 2014 (the first time the target was not exceeded). Chinese growth has been slowing, as has investment. This slowdown could reflect the limits put on credit to manage the real estate boom or could actually signal a more structural and long term trend of deceleration. What is not up for debate is the rebalancing taking place in the Chinese economy, with private consumption contributing more to GDP. Rising income and social safety net reform will accelerate this trend, leading to even more consumption and lower savings. As the Chinese population ages, healthcare spending is likely to rise

Growth in Fixed Capital Formation and in Real GDP over Time
(In % Y-o-Y Change, 1980-2013)



Contribution to Gross Domestic Product
(In % of Total GDP, 1997-2019)

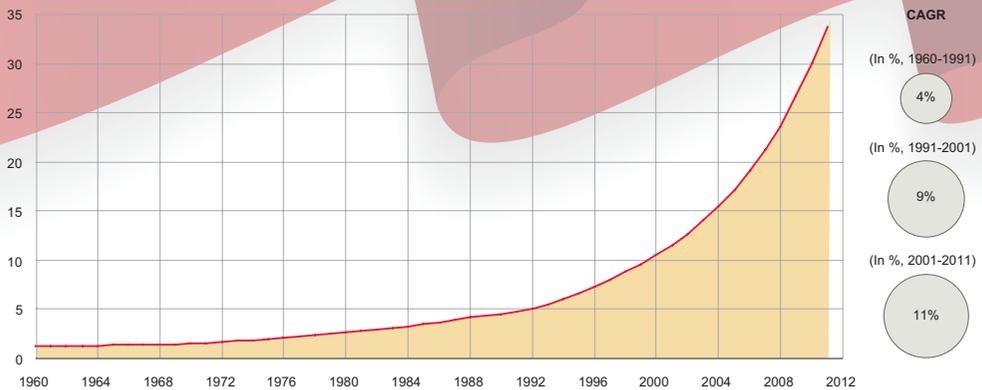


Source- Left Chart: World Bank Development Indicators
Source- Right Chart: Economist Intelligence Unit (EIU)

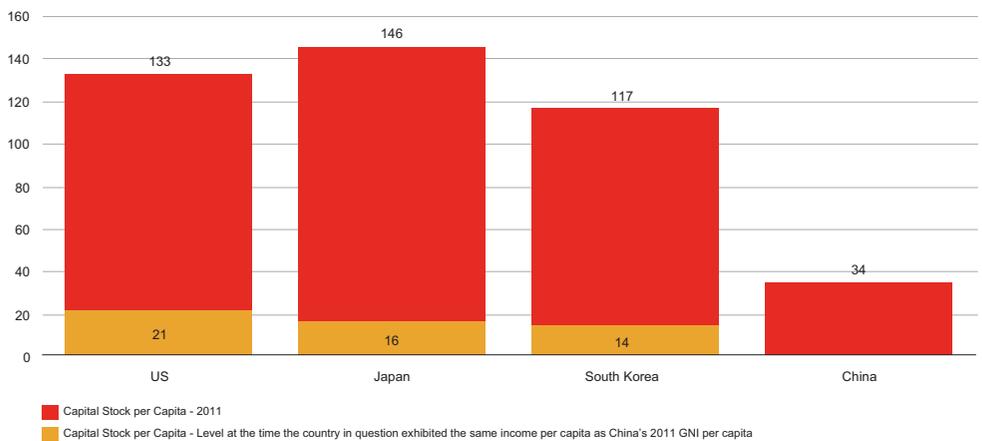
HIGH INVESTMENT OVER THE YEARS HAS RESULTED IN RAPID CHINESE CAPITAL STOCK ACCUMULATION, although the level in China is lower than in some countries with which China is often compared

Much of the controversy over China's economic growth is over what has been termed its "overinvestment". But many economists argue that Chinese investment levels—despite their rapid increases—are still much lower than they ought to be. For instance, capital stock per capita rates are still much lower than in other Asian economies (even when accounting for level of development). There is also some criticism of China for having a high number of "white-elephant" investments in real estate and infrastructure

China's Capital Stock per Capita over Time
(In 2005 US\$ Thousand, 1960-2011)



Capital Stock per Capita at Purchasing Power Parity in Major Economies⁽¹⁾
(In 2005 US\$ Thousand, 2011)

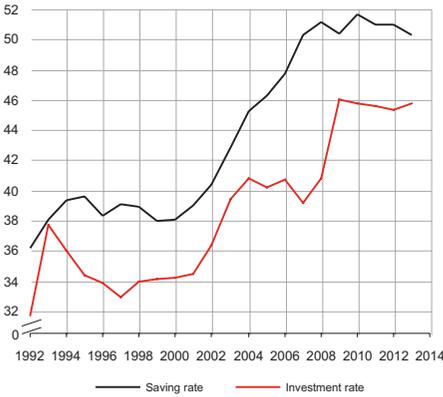


Note: (1) US rate at 2011 China GDP per capita based on backwards projections from 1950 of GDP per capita and capital stock per capita, applying 20-year CAGR (1950-1970)
Source- Upper and Lower Charts: Penn World Table

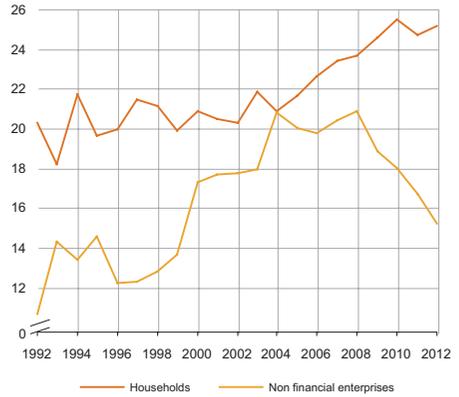
THE SHIFT FROM INVESTMENT TO CONSUMPTION IS EVIDENT IN DECLINING SAVING RATES, and a drop in current account surpluses

As the Chinese economy rebalances from investment to consumption, national saving rates are starting to decline (1.5 percentage points since 2010). However, this rebalancing has not been evident in all parts of the economy. Household saving remained stable at around 25% of GDP while corporate saving dropped by about 5 percentage points since 2008. The rebalancing is also evident in the drop in current account surpluses (once seen as a cause of global imbalance)

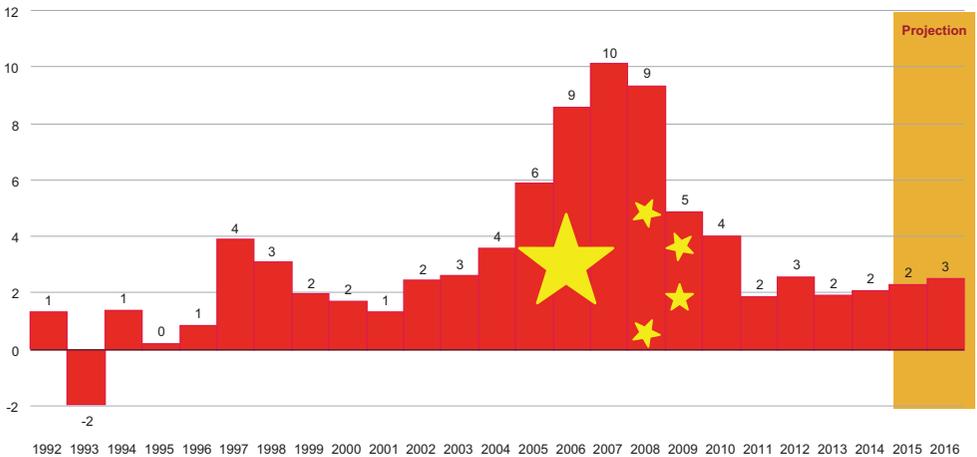
Chinese National Saving and Investment over Time
(In % of GDP, 1992-2013)



Saving Rates by Type over Time
(In % of GDP, 1992-2012)



Current Account Balance over Time
(In % of GDP, 1992-2016)

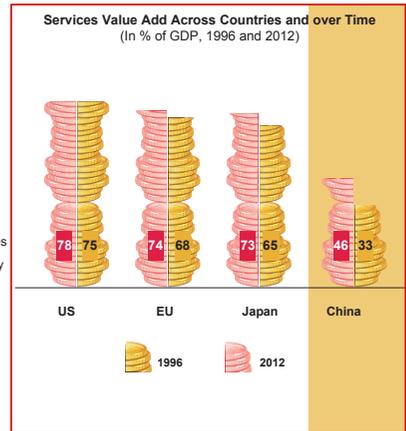
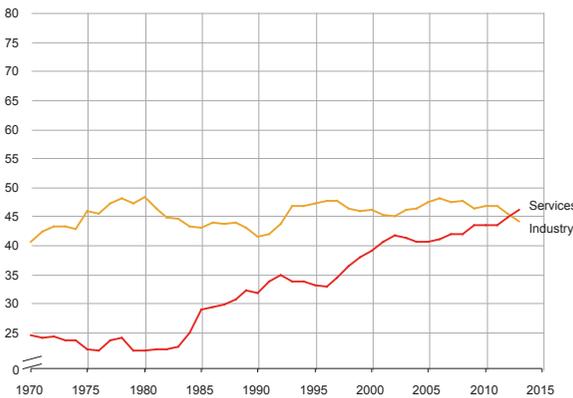


Source- Upper and Lower Charts: "OECD China Economic Survey", OECD, 2015

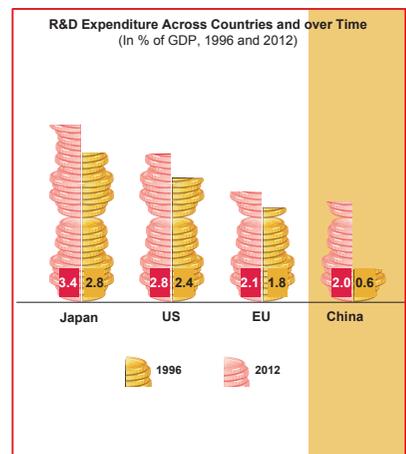
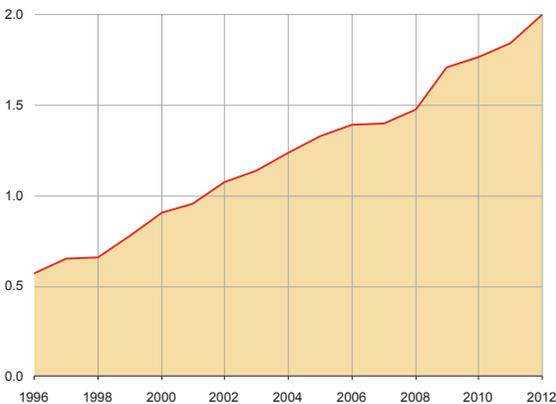
THE CHINESE ECONOMY IS ALSO REBALANCING TOWARDS MORE SERVICES and transitioning to a knowledge economy with high R&D spending

As China shifts its economy to boost domestic demand and reduce reliance on exports and manufacturing, services are an increasingly important growth pillar. While the contribution to GDP from services surpassed that of industry in 2012, it remains far below other developed economies, indicating significant room for advancement. The ratio of investment in research and development (R&D) relative to GDP has increased more than 300% since 1996, with some estimates putting China on track to surpass the US in R&D spending by 2019

Industry and Services Value Added over Time
(In % of GDP, 1970-2013)



Chinese R&D Spending over Time
(In % of GDP, 1996-2012)



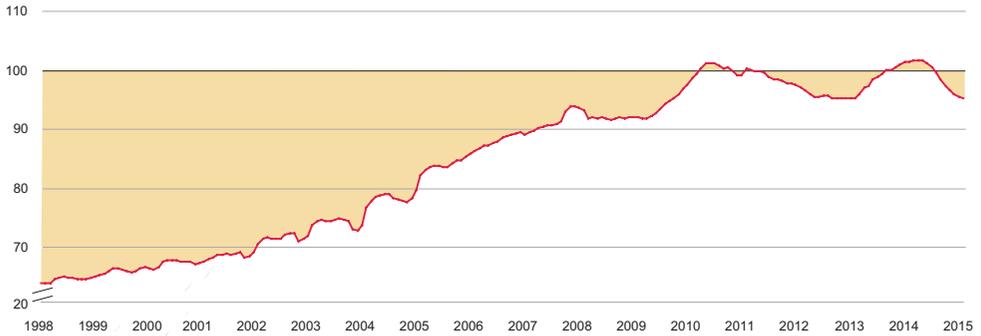
Source- Upper and Lower Charts: World Bank Indicators; OECD

THE COOLING OF HOUSING PRICES SIGNALS UNWINDING OF ANOTHER IMBALANCE— THAT OF PROPERTY MARKETS— with vacancies rising and price to income ratios dropping

China's real estate market witnessed a cooling down in 2014 that accelerated in the beginning of 2015, with land purchases by developers down 31.7% in the first two months compared to the previous year. Real estate development in China has grown to 19% of total fixed investment, with the sector representing 25-30% of GDP. Large inventories and falling prices are most pronounced in small cities; they are less evident in megacities. Policy measures to reign in expansion are expected to be sufficient to avoid major systemic risk, but are likely to depress short-term growth

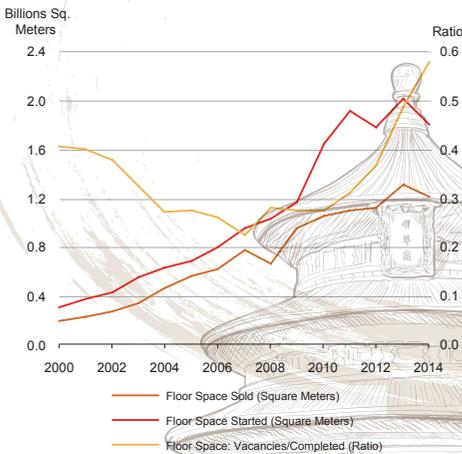
Housing Prices over Time

(In Housing Price Index Value as % of Base Year 2010=100, 1998-2015)



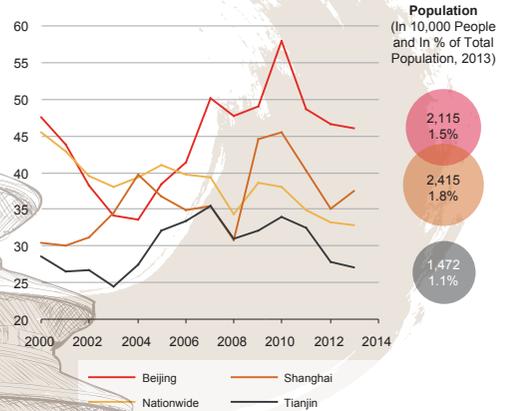
Residential Floorspace by Unit Type

(In Billion Square Meters, 2000-2014)



Price to Income Ratio in Various Cities

(In Years of Average Disposable Income to Purchase 100 Square Meter Unit, 2000-2013)



Population
(In 10,000 People
and In % of Total
Population, 2013)

2,115
1.5%

2,415
1.8%

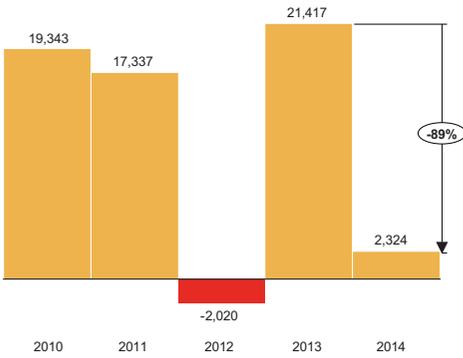
1,472
1.1%

Source- Upper Chart: "Economic Surveys: China", OECD, 2015; International Business Times
Source- Lower Left Chart: National Bureau of Statistics
Source- Lower Right Chart: "Economic Surveys: China", OECD, 2015

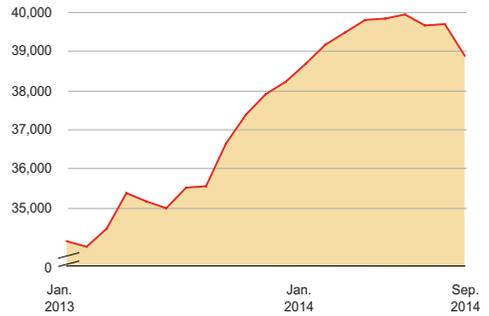
MONETARY POLICY IS RESORTING TO QUANTITATIVE MEASURES TO KEEP THE ECONOMY GROWING and to compensate for the large outflows of capital

The People's Bank of China (PBOC) has been attempting to stimulate economic activity. However, increased capital outflows from China have made traditional PBOC tools less effective. Rising yields on dollar assets and a weakening yuan have diminished investor interest in holding yuan-denominated assets, while reforms have made it easier for capital to leave the country in search of better returns. As such, PBOC is unable to pump in liquidity through its foreign exchange reserve accumulation channel. The PBOC had to lower required reserve ratios (one of the sharpest declines since 2008) and extend new credit facilities

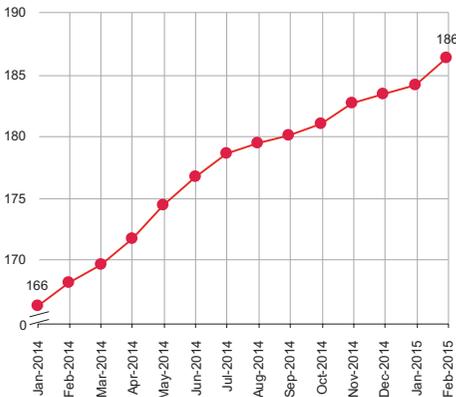
China's Capital and Financial Account Balance over Time
(In 100 Million RMB, 2010-2014)



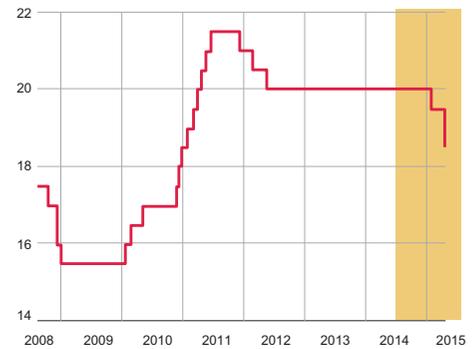
China's Holdings of Foreign Exchange Reserves over Time
(In 100 Million RMB, Jan. 2013 - Sep. 2014)



China's Broad Money Index
(In M2 Index 2010=100, Jan. 2014 - Feb. 2015)



China's Required Reserve Ratios
(In %, Jun. 2008 - Apr. 2015)

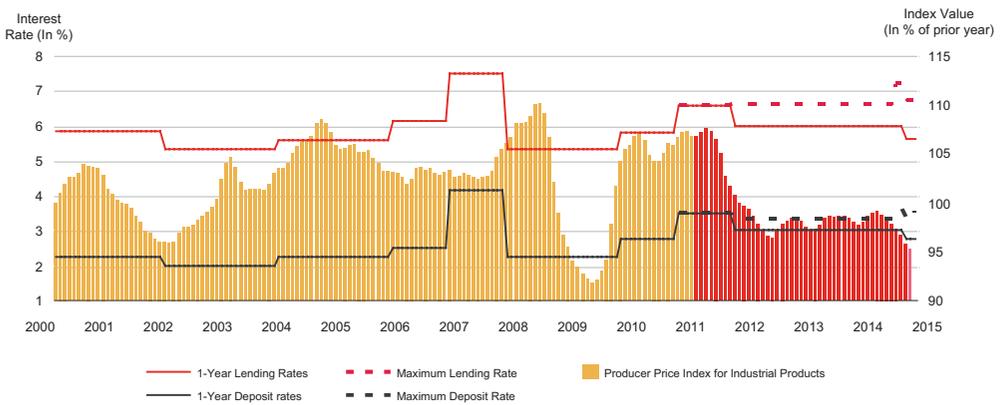


Source- Upper Charts: China's State Administration of Foreign Exchange
Source- Lower Left Chart: OECD Statistics
Source- Lower Right Chart: People's Bank of China

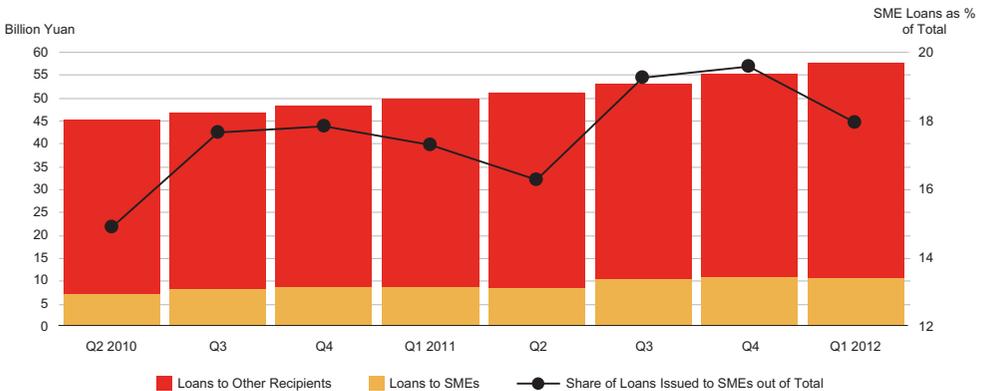
WITHOUT FULL LIBERALIZATION OF INTEREST RATES, “FINANCIAL REPRESSION”⁽¹⁾ COULD DIVERT CREDIT TO SOEs and starve small companies of needed funds

China took steps to accelerate the liberalization of interest rates in 2014, simplifying the benchmark structure, cutting rates and raising the rate ceiling. The cuts are expected to spur growth by broadening access to capital, particularly among small and medium enterprises (SMEs). Still, bank bias against lending to small firms is likely to limit the impact of these reforms in the short-term. Although SMEs represent 99% of enterprises and 60% of GDP, they receive only 20% of all loans

Liberalization of Chinese Deposit and Lending Rates over Time
(In % and Producer Price Index for Industrial Goods In % of Previous Year, 2000-2015)



Loans to Small Businesses
(In Billion Yuan and In % of Total Loans Disbursed, Q2 2010 - Q1 2012)

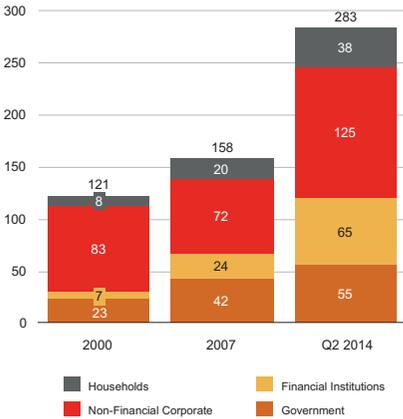


Note: (1) Financial Repression is a term used to describe measures sometimes used by governments to boost their revenues and/or reduce debt. These measures include the deliberate attempt to hold down interest rates to below inflation, representing a tax on savers and a transfer of benefits from lenders to borrowers
Sources- Upper Chart: China National Bureau of Statistics; People’s Bank of China; Wall Street Journal
Sources- Lower Chart: China National Bureau of Statistics; Wall Street Journal

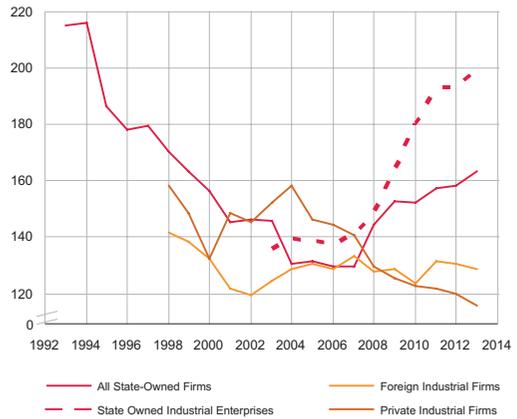
CHINA'S TOTAL DEBT SURGED TO 283% OF GDP IN 2014, with the level of public and publicly guaranteed debt being particularly alarming

2014 marked the sixth consecutive year that China's credit growth exceeded economic growth, bringing China's total debt to more than US\$ 28.2 Trillion. Between 2007 and 2014, total credit grew at an average annual rate of nearly 23%, creating US\$ 20.8 Trillion in new debt, a third of all the world debt added in that period. Causing China's mounting debt are state-owned enterprises, which account for 65% of private sector debt according to Societe Generale, underscoring the urgent need for sector reform

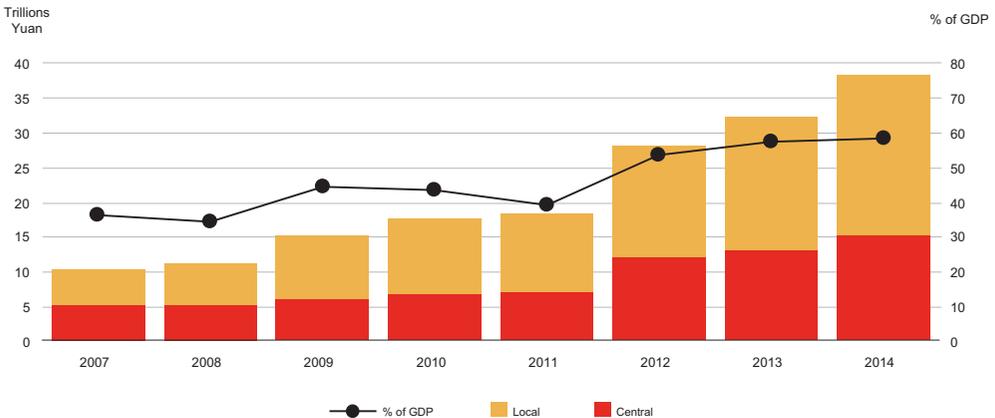
China's Total Debt by Borrower Type
(In % of GDP, 2000, 2007 and Q2 2014)



Debt-to-Equity Ratio by Firm Ownership
(In Ratio of Debt to Equity, 1993-2013)



Local and Central Government Debt over Time
(In Trillion Yuan and In % of GDP, 2007-2014)

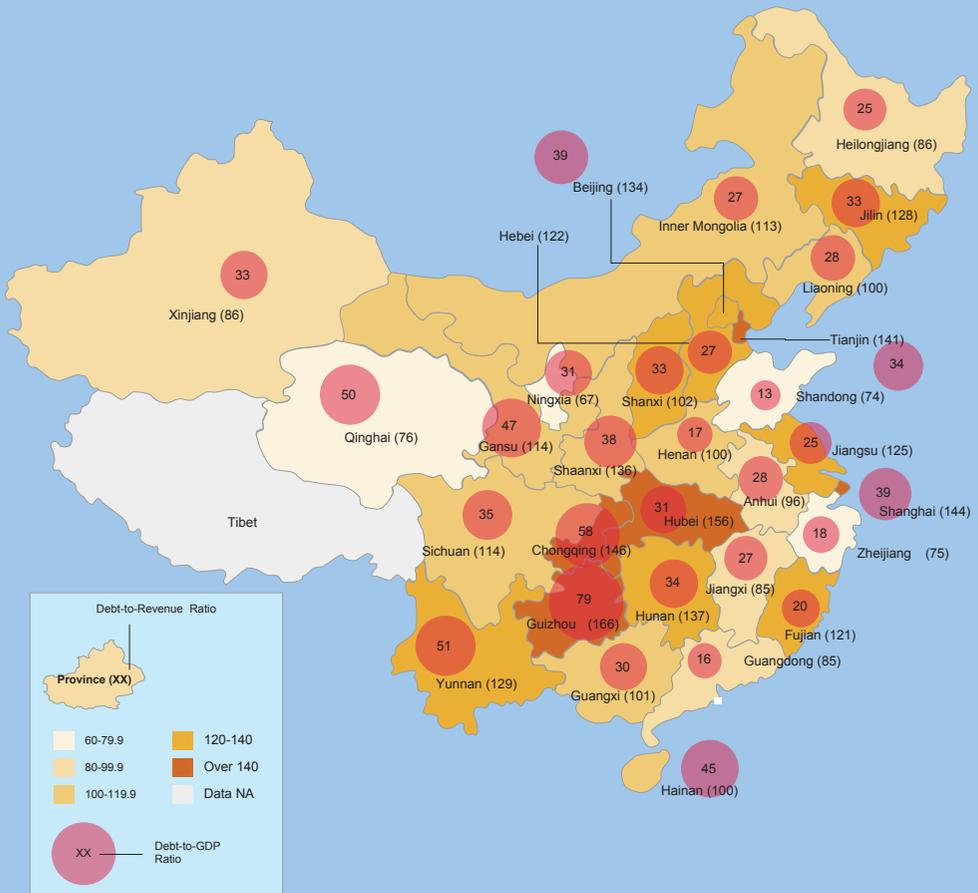


Sources- Upper Charts: "Debt and Not Much Deleveraging", McKinsey Global Institute, 2015; "Deleveraging the State in China", Peterson Institute for International Economics, 2015
Source- Lower Chart: "Local Government Debt Structures in China", Japan research Institute, 2014

LOCAL GOVERNMENT DEBT IS A MAJOR RISK IN CHINA, especially in some of the central and southern provinces

In recent years, China's local governments accumulated massive debts to fund the infrastructure and housing projects that have been essential in maintaining fast economic growth. However, as the economy slows down, debt servicing has become harder, threatening to burden banks—major lenders to local governments—with bad loans. Following the 2013 audit, the Chinese Ministry of Finance began efforts to reign in mounting local government debt, which is estimated at 17.9 trillion yuan. After facing a cap on borrowing in October 2014, local governments will be able to exchange one trillion yuan of high interest loans for lower-cost bonds, with estimated savings on interest of 40 to 50 billion yuan in 2015 alone

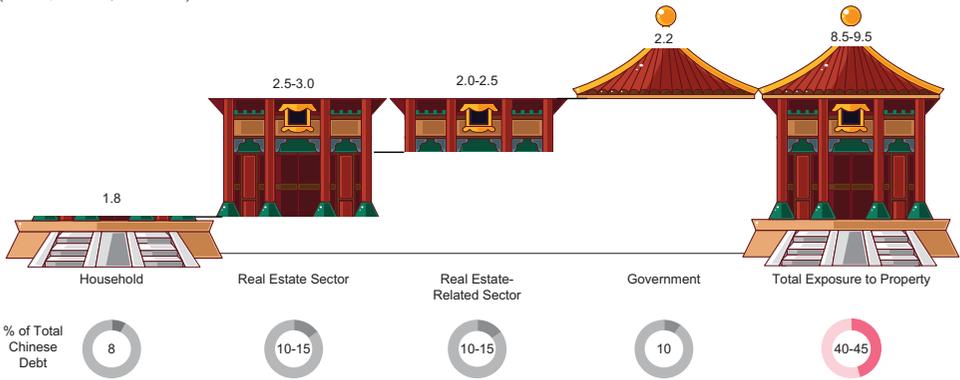
Local Government Debt by Province
(In Ratio of Debt-to-Revenue and Debt-to-GDP, 2012)



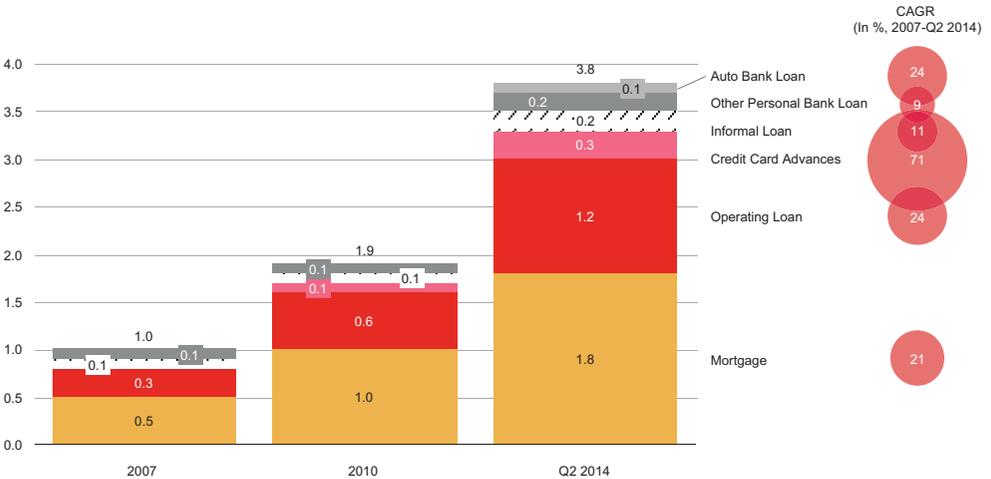
IN GENERAL, 45% OF CHINA'S DEBT IS TIED TO REAL ESTATE, with households having half of their debt tied to mortgages (a relatively low number compared to advanced economies)

According to McKinsey Global Institute, an estimated 45% of China's debt is directly or indirectly tied to the real estate sector. With property sales down 12.5% (q-o-q) in the final quarter of 2014, the lowest levels since 2009, there is growing concern about the certainty of both publicly guaranteed and non-guaranteed loans. While homeowners are likely to feel the strain of falling house prices, the greatest impact will likely be on property developers and companies in related sectors, which are comparably more leveraged. Mortgages account for only 47% of household debt in China, compared to 70% in the US

Share of China's Debt Tied to Real Estate
(In US\$ Trillion, Q2 2014)



Distribution of Chinese Household Debt by Purpose
(In US\$ Trillion at 2013 Prices, 2007, 2010 and Q2 2014)



Source- Upper and Lower Charts: "Debt and Not Much Deleveraging", McKinsey Global Institute, 2015