GavekalDragonomics

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Why China Inc. Has Stopped Investing

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Why is Chinese corporate investment tanking?

Investment growth is at multi-year lows

The fundamental reason why China's overall economic growth is slowing is that China is an investment-driven economy, and investment growth just keeps slowing.

On multiple measures, investment growth is now the slowest it has been in recent memory and it continues to decelerate. Annual real growth in gross capital formation hit 6.6% in 2014, down from 10.2% in 2013 and 9% in 2012, and the slowest since 1999. Monthly fixed-asset investment (a flawed but timely gauge) is also at its slowest in a decade, with nominal growth of10% in the second quarter of 2015 against 17% a year ago.

There are shorter-term factors behind the investment crunch: the collapse in commodity prices that began in August 2014, and the accompanying industrial profit recession, exacerbated the problem. But ultimately this extended slowdown is the result of cycles playing out on much longer timescales, notably in demand for housing.

The main culprit is housing

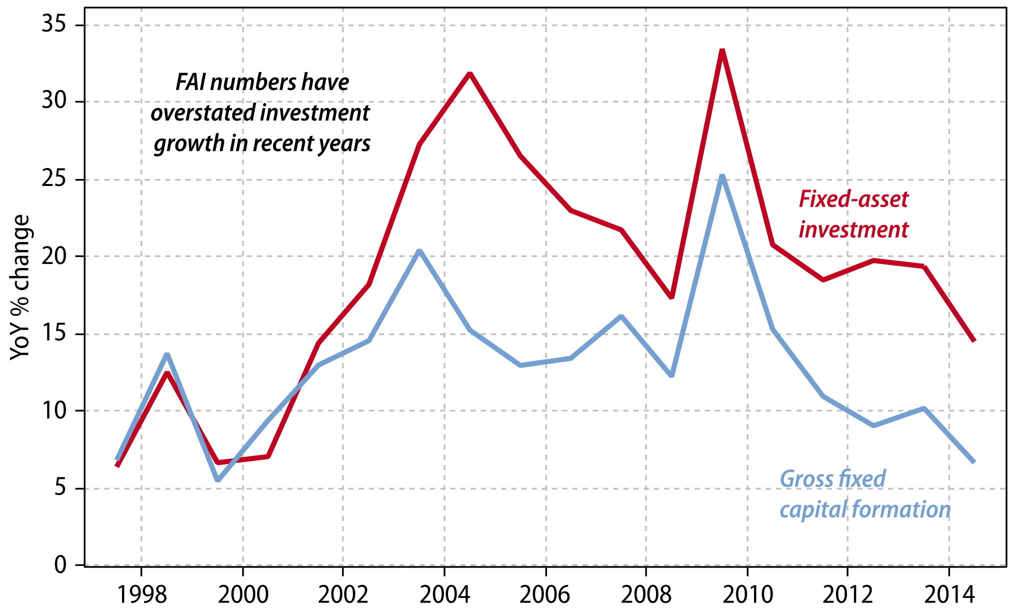
China's housing supercycle has long been a key driver of growth. When housing demand started to take off around 2003, the mining and manufacturing sectors also boomed. The surge in the construction of new housing drove demand for steel and other construction materials, household appliances and construction equipment. The makers of those products in turn needed to buy lots of capital equipment to expand their capacity, further accelerating the investment boom.

But housing demand has plateaued over the last couple of years, and residential investment growth has fallen to just 0.4% in Q2, from 18% two years ago. So the multiplier effect is now operating in reverse. Stagnating demand in goods associated with construction is weighing on sales and creating widespread deflationary pressure through industry. Until the industrial sector can adjust to the "new normal" in housing demand, investment growth will remain sluggish.

Investment growth is barely keeping up with depreciation

China's investment growth has plummeted since 2009

Annual real growth rates (both deflated by fixed-asset investment price index)



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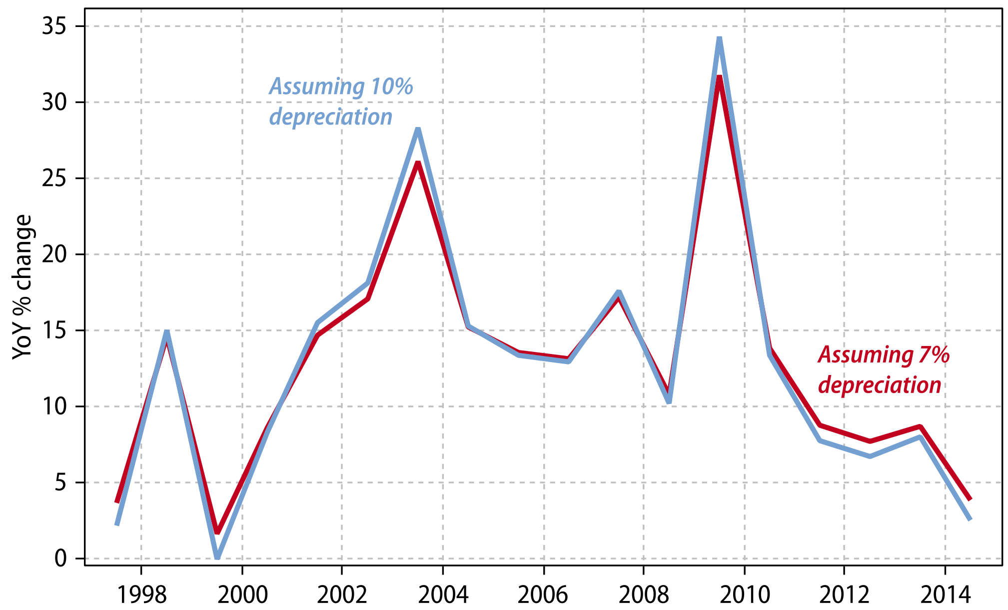
Net capital formation growth is barely above zero

Estimated real growth of fixed capital formation net of depreciation



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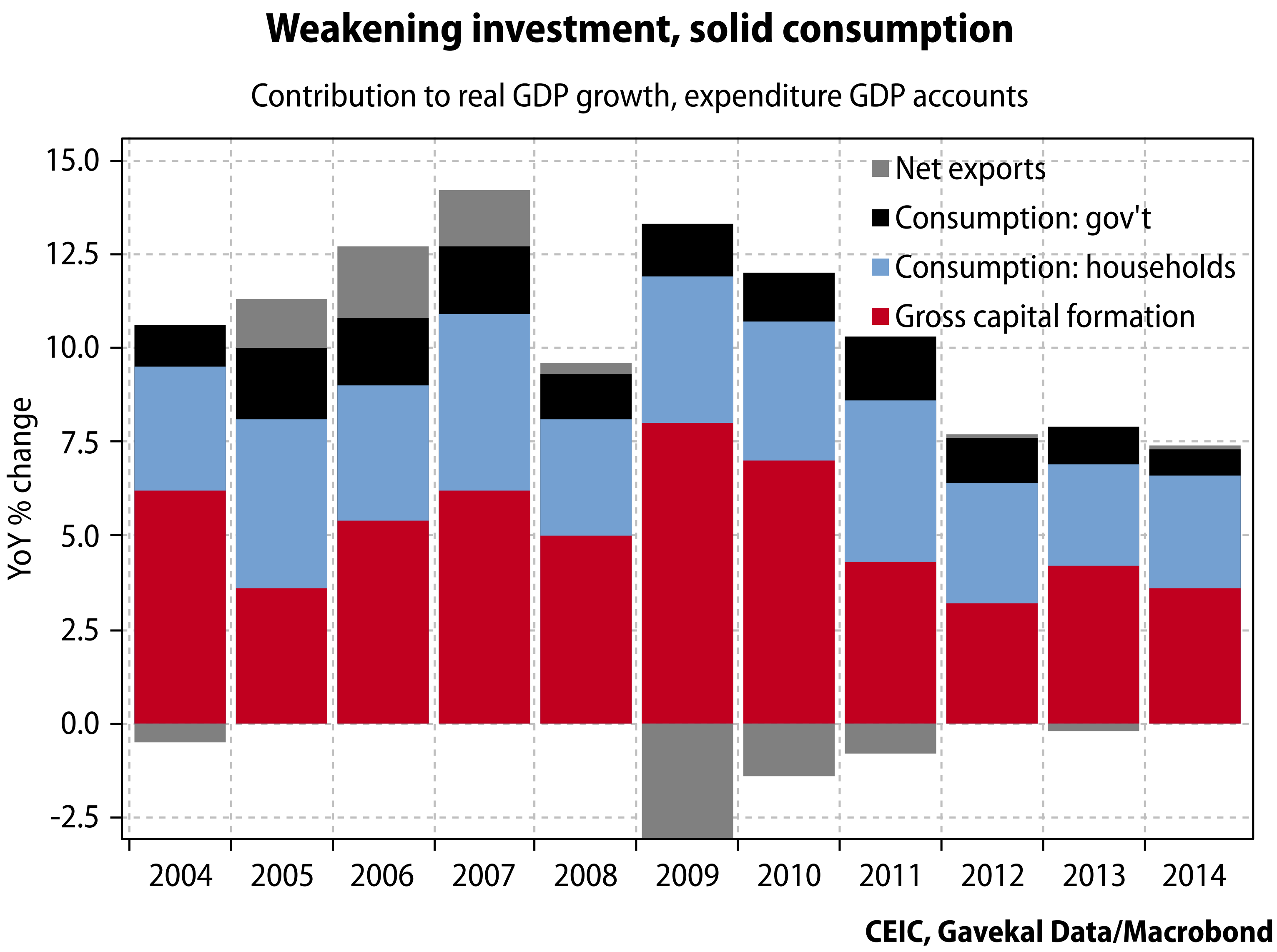
Gross fixed-capital formation, the most accurate if least timely measure of nationwide capital spending, has slowed markedly in recent years. Real growth has gone from an average of roughly 15% a year between 2002 and 2011 to around 7% in 2014. These gross numbers however do not account for the rising amount of spending needed to offset the depreciation of China's capital stock.

If the average depreciation rate across the economy is 7% (a conservative estimate), in 2014 around RMB10trn in capital would need to be replaced. While gross capital formation in 2014 grew 7% from 2013 in real terms, we estimate net capital formation growth after depreciation was just 3%. It is very likely that so far in 2015 net capital formation growth is at or below zero.

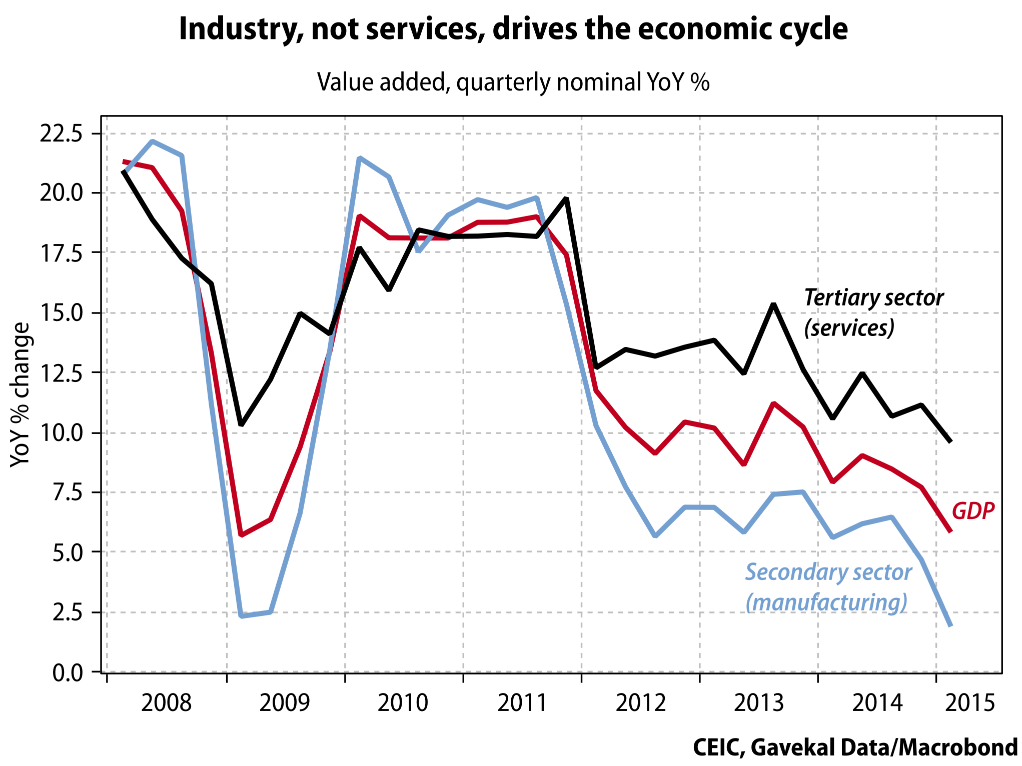
The economy is still investment-driven

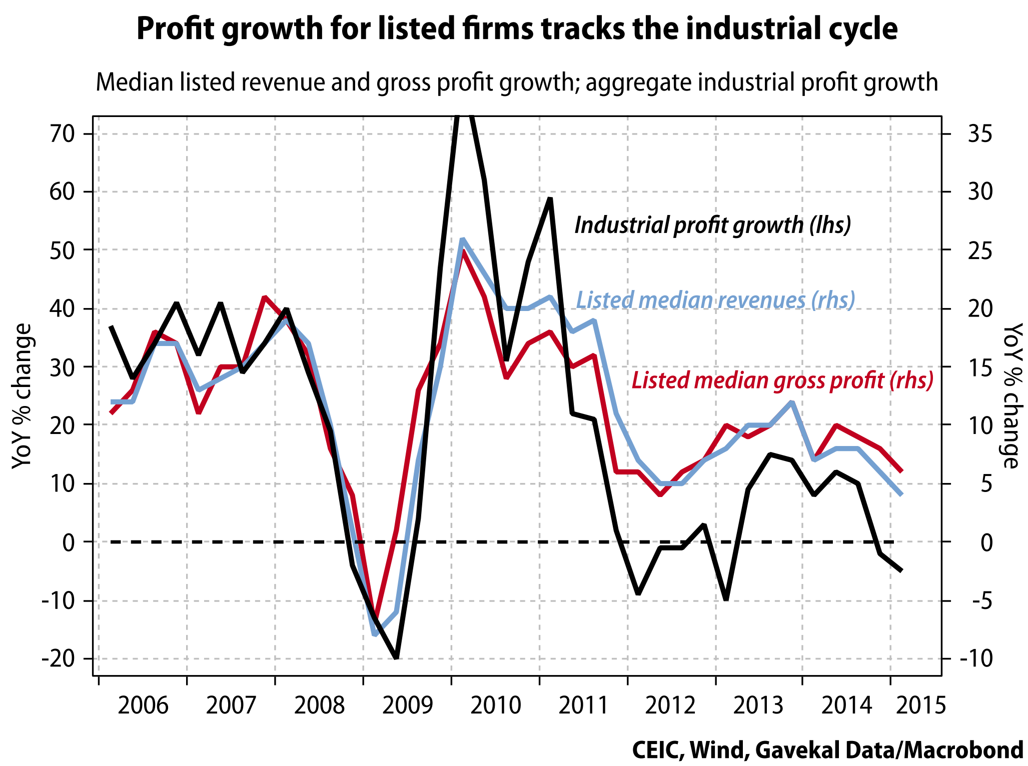


For most of the last decade the majority of GDP growth has come from investment. While a 'rebalancing' towards consumption is inevitable, a sharp decline in investment growth still has very negative implications.

Household consumption can only keep growing if employers continue pay rising wages. And the health of industrial employers depends greatly on investment, which drives demand for many of their products. Much of the service sector (such as transport) is also ultimately dependent on industrial activity and investment.

Investment drives industry, and industry drives the cycle





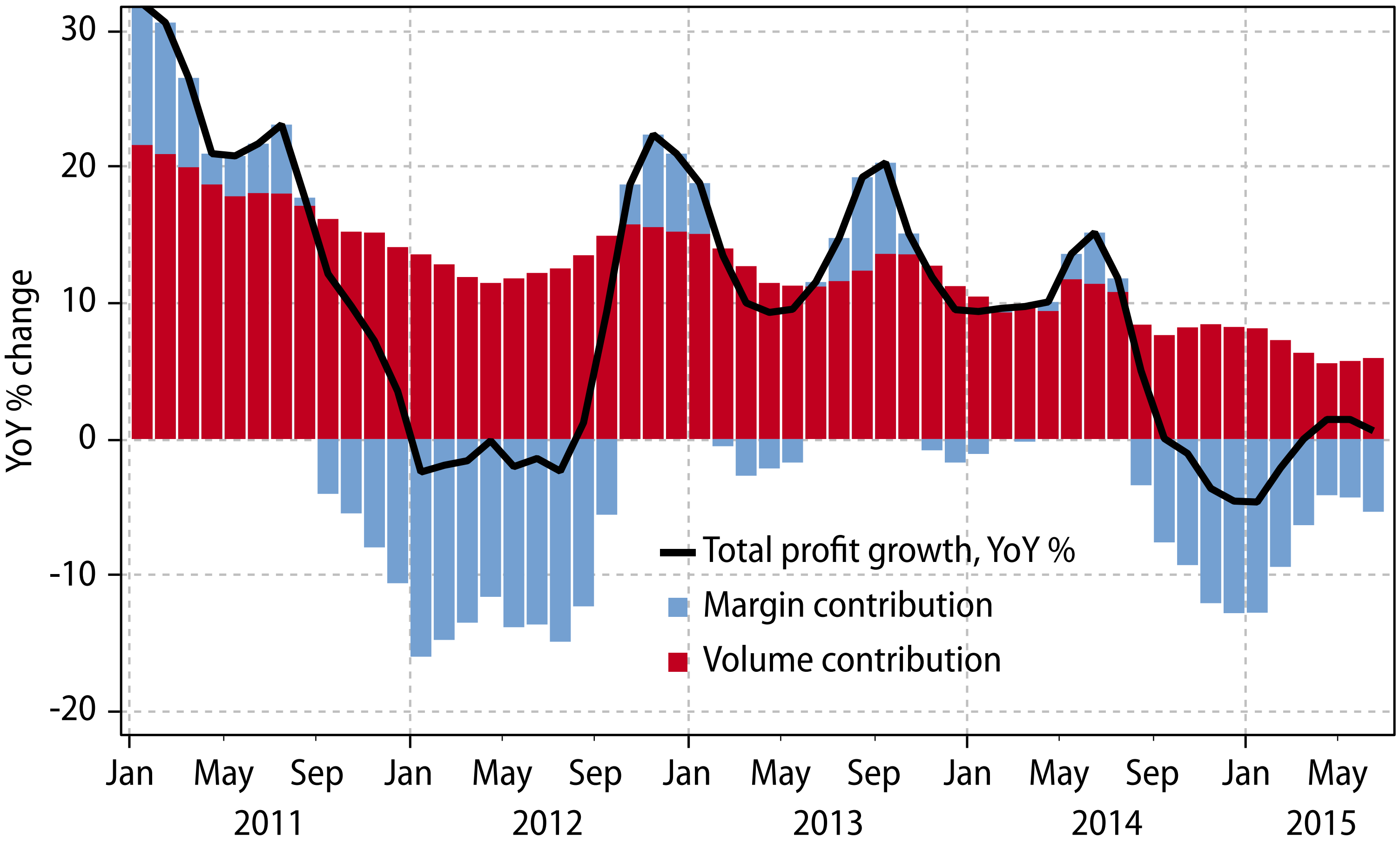
In China as elsewhere in the world, the investment cycle is more volatile than consumption. As a consequence industrial firms have more volatile sales and profits than the service sector. Even though the service sector is now a larger part of GDP than industry, the greater volatility in industry means that it is still the main driver of cyclical swings in growth.

In fact, the service sector is not very isolated from the industrial sector. The approximately 2,500 non-financial firms listed on domestic stock markets are mainly non-industrial firms, and their sales and profit growth are still closely linked to the industrial cycle. This is because industrial firms are big customers for logistics, trade, energy and commercial services companies.

So how are industrial firms doing? Not great

Margin contraction has slowed, but volume growth continues to weaken

The two components of industrial profit growth, 3mcma



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We decompose industrial profit growth into sales volumes (how many units did you sell) and margins (how much money did you make on each unit).

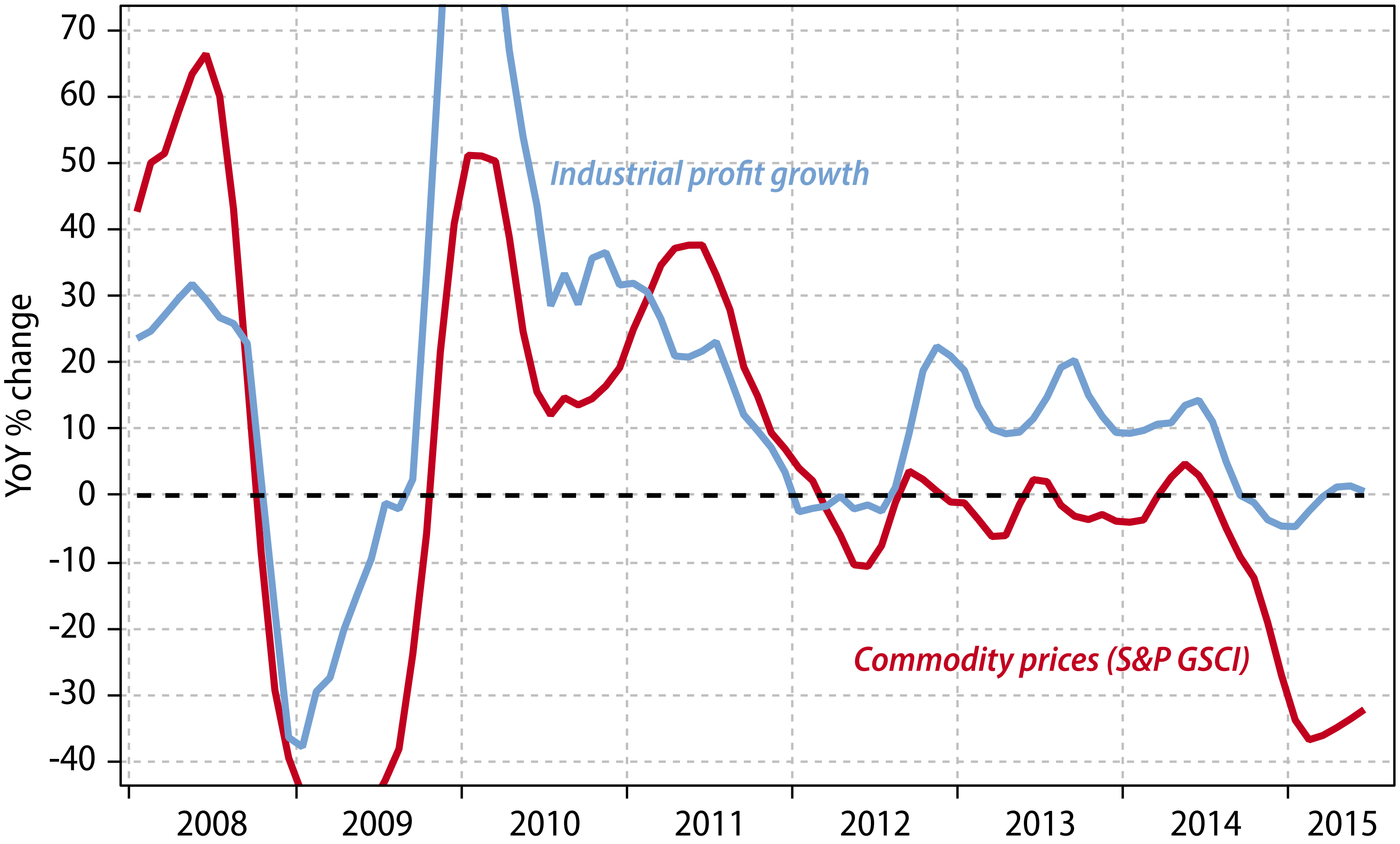
The latest profit cycle was driven by margins, which contracted as commodity prices fell and rebounded as those prices stabilized.

Sales volume growth has been much less cyclical but has steadily slowed in recent years. Volume growth is currently around 6%, around half the pace in early 2014 and a quarter of the rate in 2011.

The commodity price collapse hit margins hard

Falling commodity prices squeeze industrial margins and profits

Industrial profit growth and commodity prices (S&P GSCI index), 3mcma



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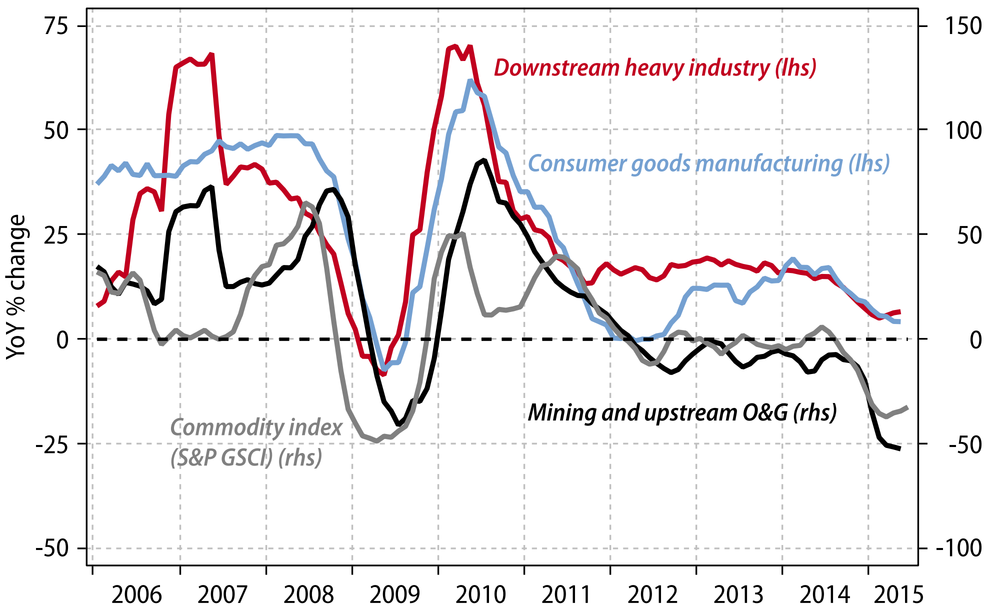
The immediate cause of the latest downturn in profits was the global commodity price collapse in mid-2014, which hit China's own commodity producers hard. But the deflationary impact went beyond mining and energy firms.

Since commodity producers are big customers of machinery makers and other industrial firms, weak demand in this sector weakened pricing power for many manufacturers. This decline can easily outweigh the benefit from cheaper raw material inputs because those inputs usually make up a relatively small part of a product's final cost.

The margin hit was most severe upstream, but all sectors suffered

Upstream energy suffered the most, but no sector was immune

Profit growth by industrial sectors, YoY % 6mma



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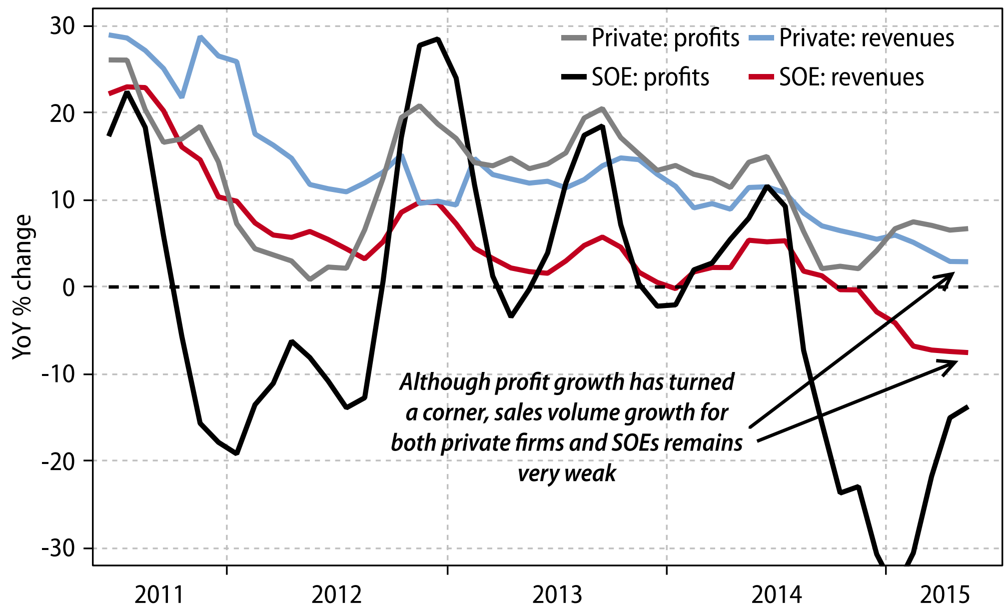
Both SOEs and private firms have seen profits and sales growth eroded

Industrial profits and revenue growth by ownership, YoY % 3mcma



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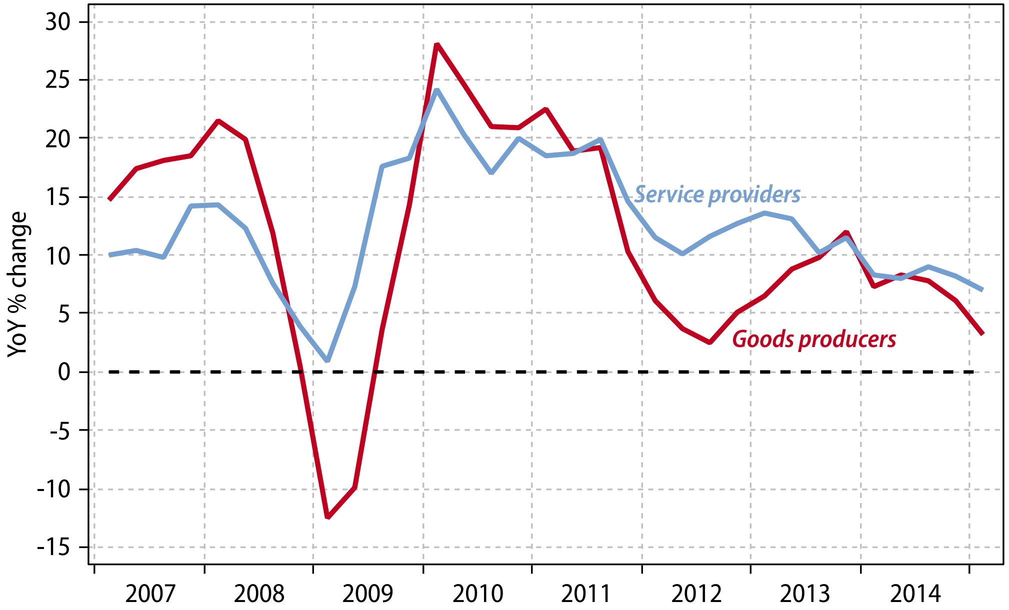
The commodity price collapse was, not surprisingly, toughest on China's own commodity producers in the mining and upstream energy sectors. The drop in prices also came after three years of stagnant profits for these firms, so they had little financial cushion to absorb the shock. While other manufacturing sectors had been doing reasonably well in 2013 and 2014, they too saw margins eroded as the deflationary impulse passed through the system.

Looking at the impact of the commodity price crunch on an ownership basis, it is clear that state-owned enterprises took the biggest hit. This is not surprising since they are concentrated in the upstream and heavy industrial sectors. Private firms also took a hit to their margins in late 2014, though they were quicker to recover given their higher exposure to consumer demand. Worryingly, volume sales growth continues to slow for both private firms and SOEs.

Large parts of the service sector rely on industrial demand

Service-sector revenue growth has held up a little better

Median revenue growth YoY %, non-financial listed firms



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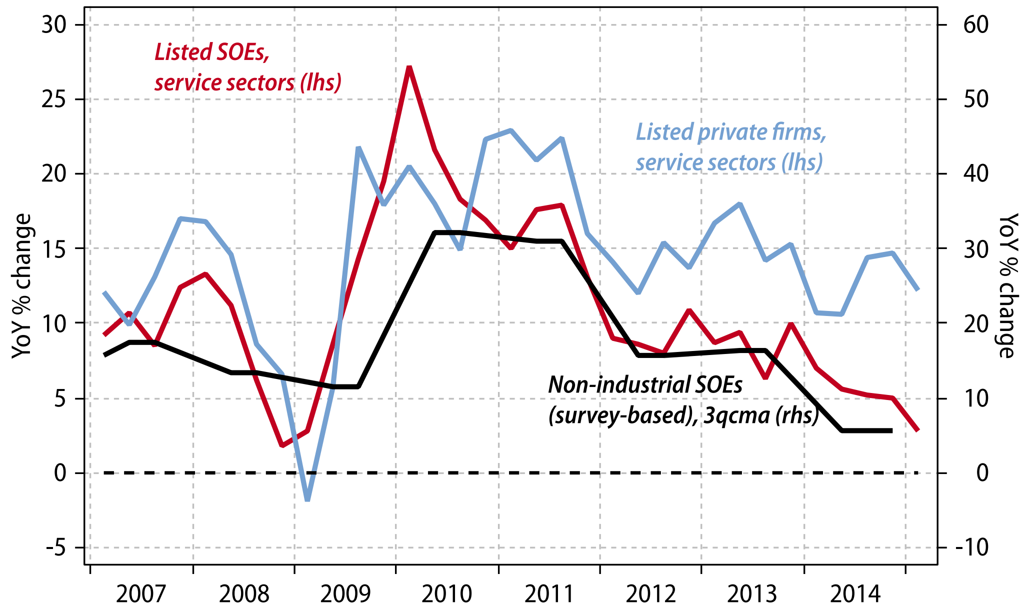
But only for private firms - service SOEs are suffering

Median listed quarterly sales YoY % growth



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Listed service sector firms have tended to ride out downturns with less volatility than their peers in manufacturing, and that remained true in the most recent downturn –median sales growth remained in the high single digits compared to sub-5% for manufacturing firms. Yet service sector firms are not immune to the industrial cycle – sales growth today is well below 2010/11 levels.

This weakness comes from state-owned service firms in transport, utilities and other infrastructure, whose fortunes are closely tied to the industrial cycle. Private service firms in IT and healthcare are doing better, but these tend to be smaller companies in more “asset-light” industries, so they have less impact on overall capital spending trends.

Is the investment slowdown cyclical or structural?

Given that industrial profits have been in a downturn, and the service sector is also slowing, it is no surprise at all that overall corporate investment spending has been weak.

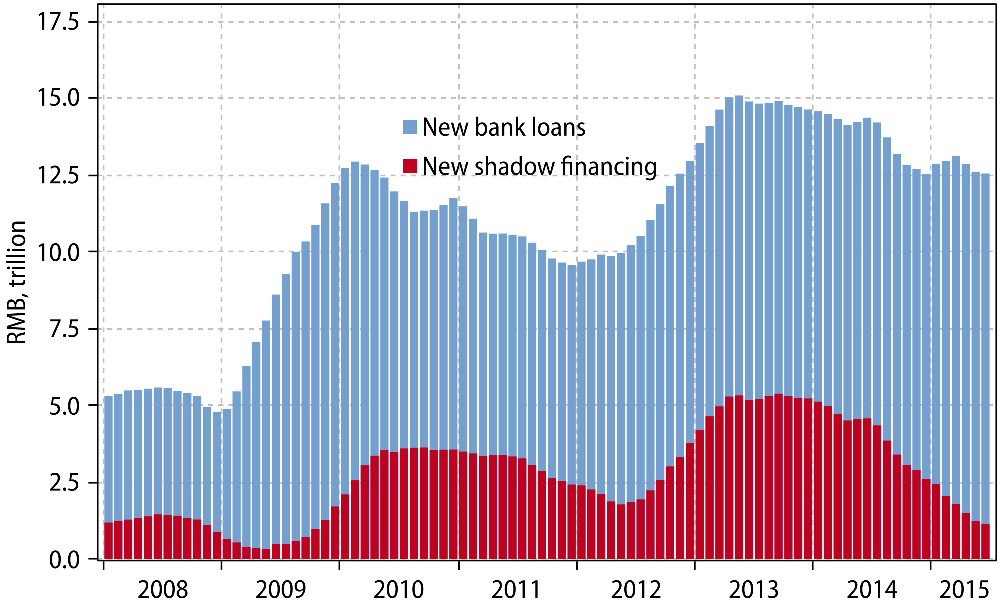
The big question is whether investment will follow the profit cycle back up, or whether we are looking at a more of a structural multi-year investment slowdown.

Easing credit conditions and widening profit margins could argue for some pickup in investment. But we think weak domestic and external demand is the more important problem.

Investment has slowed with the credit cycle

Shadow financing growth has slowed sharply

YoY growth in credit stock, 3mcma



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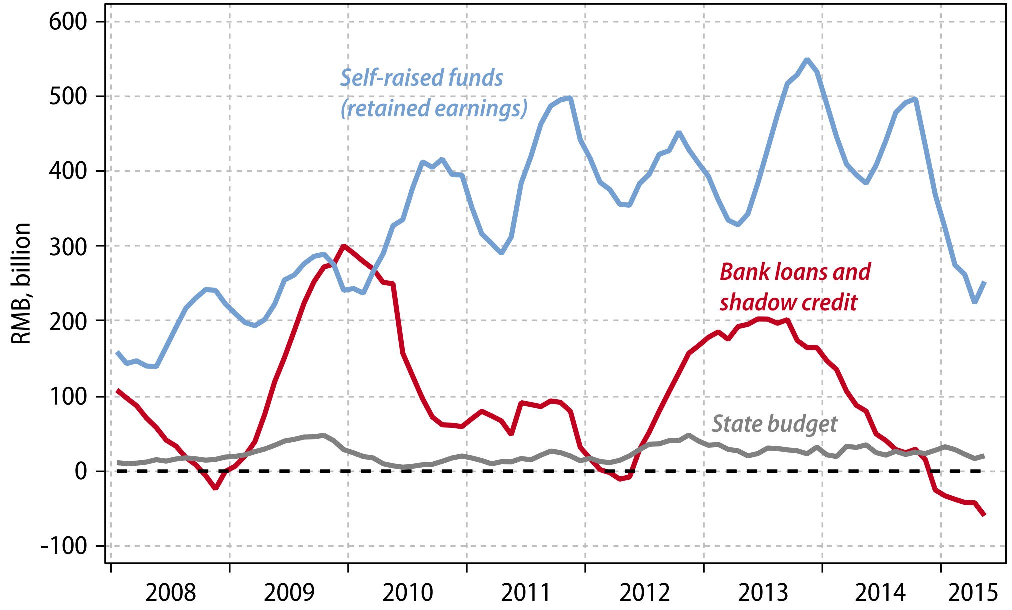
Fixed-asset investment funded by credit funding is now shrinking

Source of funds for fixed asset investment; incremental YoY 6mma



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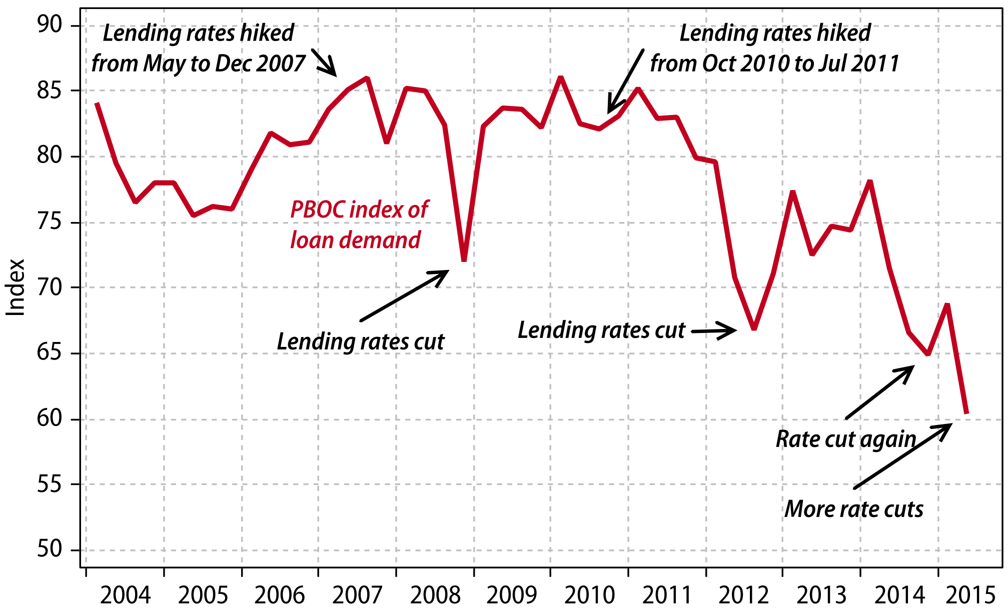
Particularly since 2009, the credit cycle has been a major driver of China's economic swings. The slowdown in credit growth since mid-2014 is therefore a plausible culprit for weak investment. Shadow finance growth in particular has fallen off sharply as the central bank has toughened regulation. This is a particular problem for private firms who have difficulty getting bank loans.

It is certainly true that much of the slowdown in investment funding has come from an outright reduction in the amount of bank loans and shadow credit utilized. But after four interest rate cuts and a determined government push to support growth, new credit is likely to pick up in the second half of 2015, which in theory should support investment.

Funding for investment is not the problem

Demand for loans in China is at historic lows

PBOC index of loan demand



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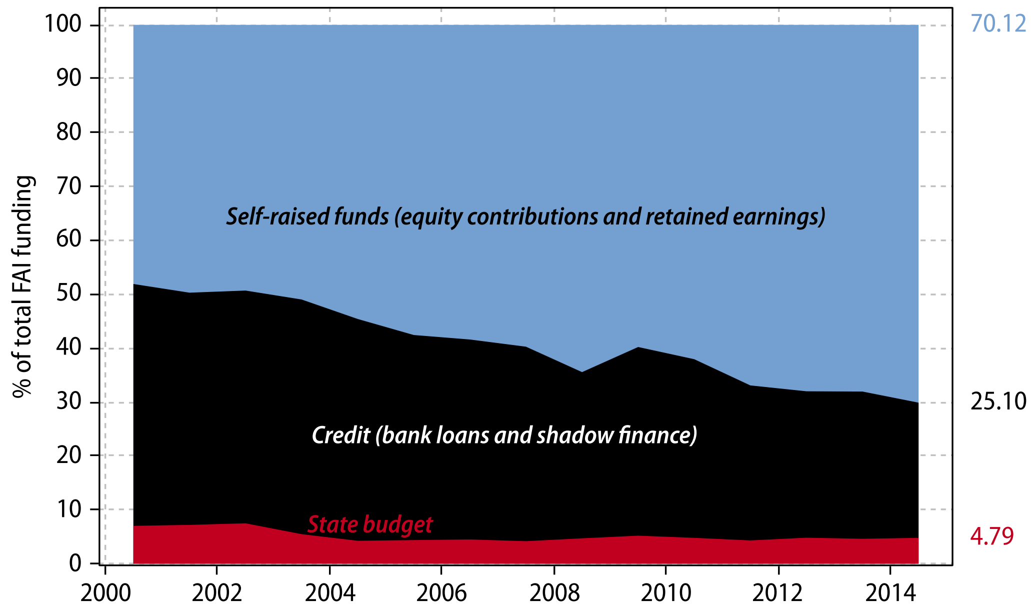
Most investment is funded by retained earnings, not credit

Source of funds for fixed-asset investment



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Yet the fact that fewer firms are borrowing to fund investment is not because credit is less available. China remains a highly liquid environment with total credit growth well in excess of nominal GDP growth. The issue is more that firms are less willing to borrow to invest, not less able. Now that nominal industrial sales growth is close to zero and the average lending rate remains above 6%, it is rational for companies to cut back on debt-funded expansion.

In fact, retained earnings are an even more important source of funding for investment than credit. As industrial firms return to profit growth, their stock of retained earnings will rise, further bolstering their ability to invest. So both the credit and profit cycles are looking favorable for investment. What looks less favorable are the demand conditions companies face. The role of housing is particularly important given that it directly and indirectly drives much investment.

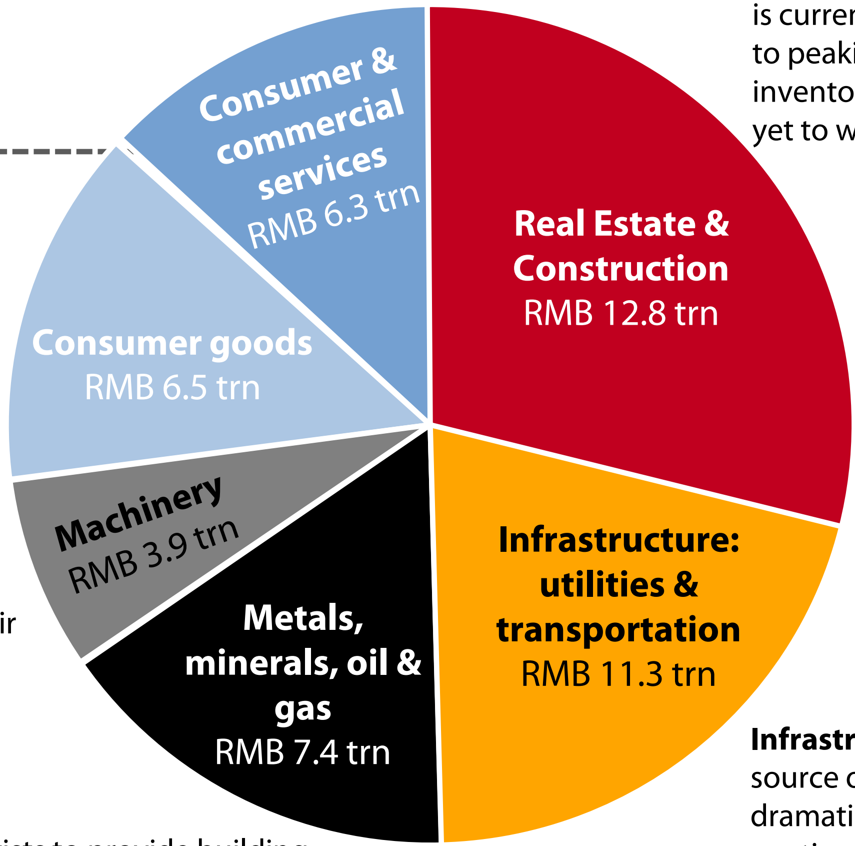
Investment is dominated by housing, infrastructure and industry

Consumer and commercial services are a mixed bag, but they are a relatively stable source of final demand largely insulated from housing and infrastructure.

Real estate & construction investment remains the critical swing factor for Chinese economic activity. It is primarily funded by private firms, and is currently undergoing a structural downturn due to peaking demand, exacerbated by a large inventory of unsold housing that developers have yet to work through.

Investment by 'industrial' firms = RMB 17 trn

Consumer goods firms produce staples (food, clothing) and discretionary goods (cars, electronics and pharmaceuticals). Demand for staples is pretty well insulated from housing and infrastructure, but Chinese people have tended to buy more cars and appliances when they buy apartments, so consumer goods demand growth is influenced by the housing supercycle.



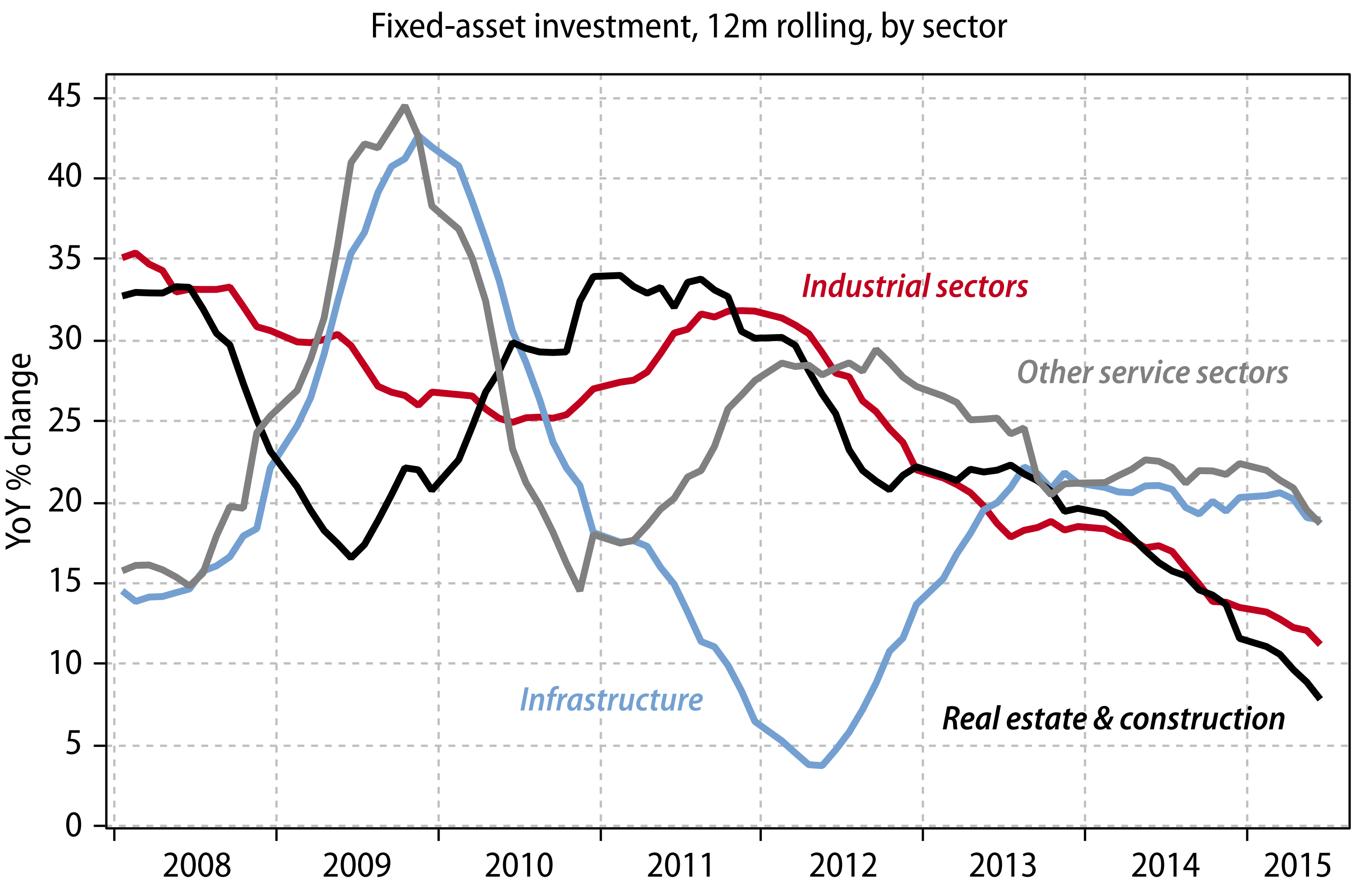
Machinery firms supply products to the construction industry, for export and to upstream and downstream industrial firms. Demand for their products is strongly linked to final demand from housing and infrastructure, but export and consumer goods demand is also important.

Infrastructure investment is an important second source of final demand. It was ramped up dramatically during the 2009 stimulus and continues to grow at a rapid pace. In-progress reforms to infrastructure funding, however, and the fact that numbers are already very large, make it highly unlikely that infrastructure investment can accelerate much from here.

Metals & minerals mining and processing exists to provide building materials for housing and infrastructure construction – any investment by these firms is catalyzed by investment upstream in these sources of final demand. **Oil & gas** also serves consumer & export markets – chemicals, rubber and plastics have myriad final uses.

Housing construction is weak, infrastructure is not picking up the slack

Manufacturing investment is decelerating, led by weak construction



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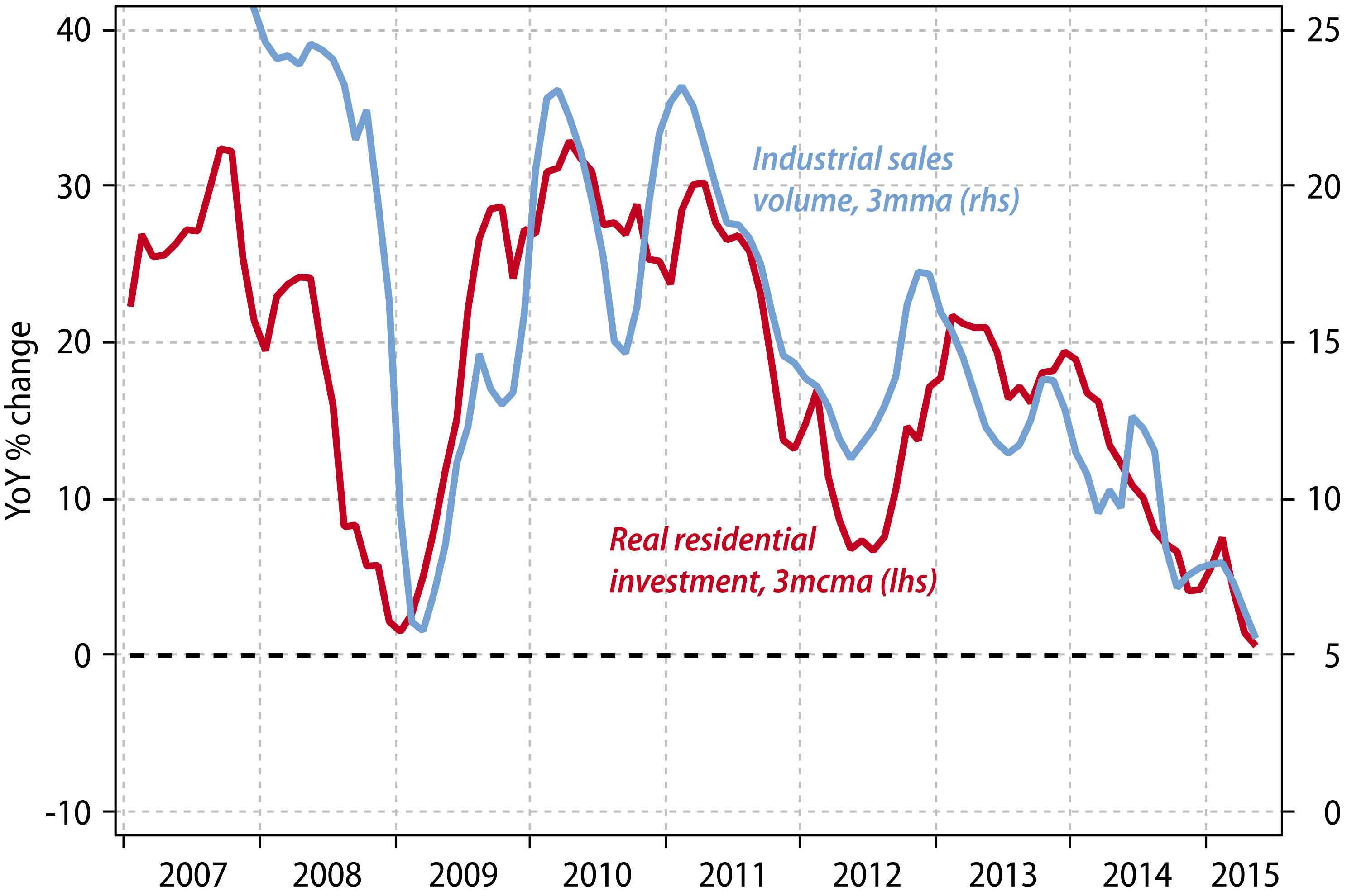
Slowing growth real-estate investment is dragging manufacturing investment down with it, as real estate is a big source of demand for industrial products.

Real estate & construction FAI has slowed from 22% in May 2013 to 9% in May 2015. Unlike in 2009 infrastructure investment (75% state-funded) has not picked up to offset this slowdown: growth has been steady around 20% since 2013. The consumer and commercial services sector remain the most vibrant area of investment, but it too has slowed by 5pp since 2013. Industrial investment has slowed accordingly, from 19% to 12% over the same period.

Industrial sales are highly correlated with housing construction

As construction activity has slowed, so have industrial sales volumes



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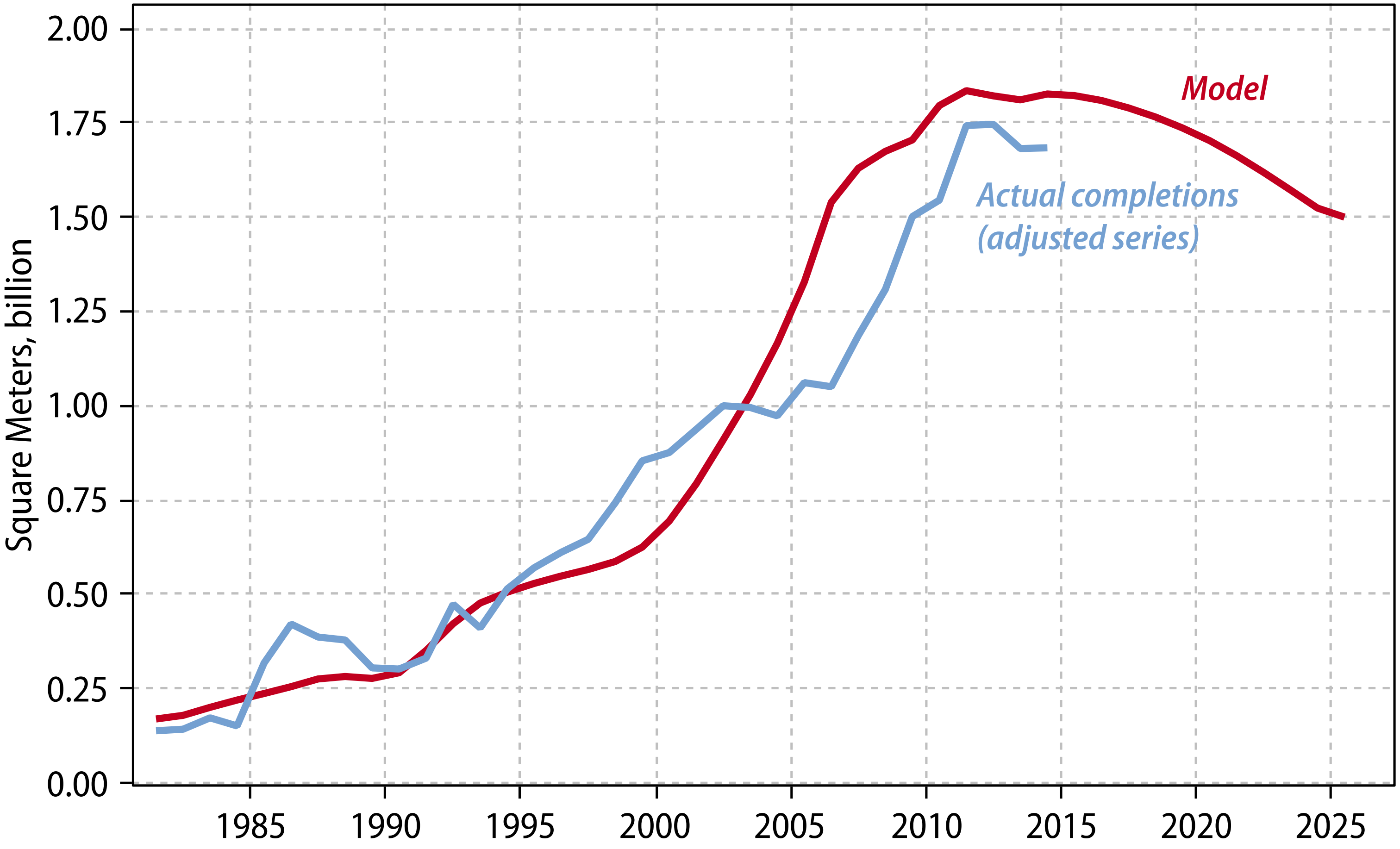
Quite apart from being a big source of investment in its own right, real estate is also the key swing factor for sales volumes in the industrial sector.

Industrial sales volume growth has been slowing since 2011, a shift that is primarily driven by housing demand. The structural slowdown in construction activity means slower demand for building materials and construction machinery. As those sectors scale back expansion plans, capital goods makers also see weaker demand.

Slowing construction activity is the new normal

China's demand for new housing is peaking and set to decline

Gross residential completions, actual and projected



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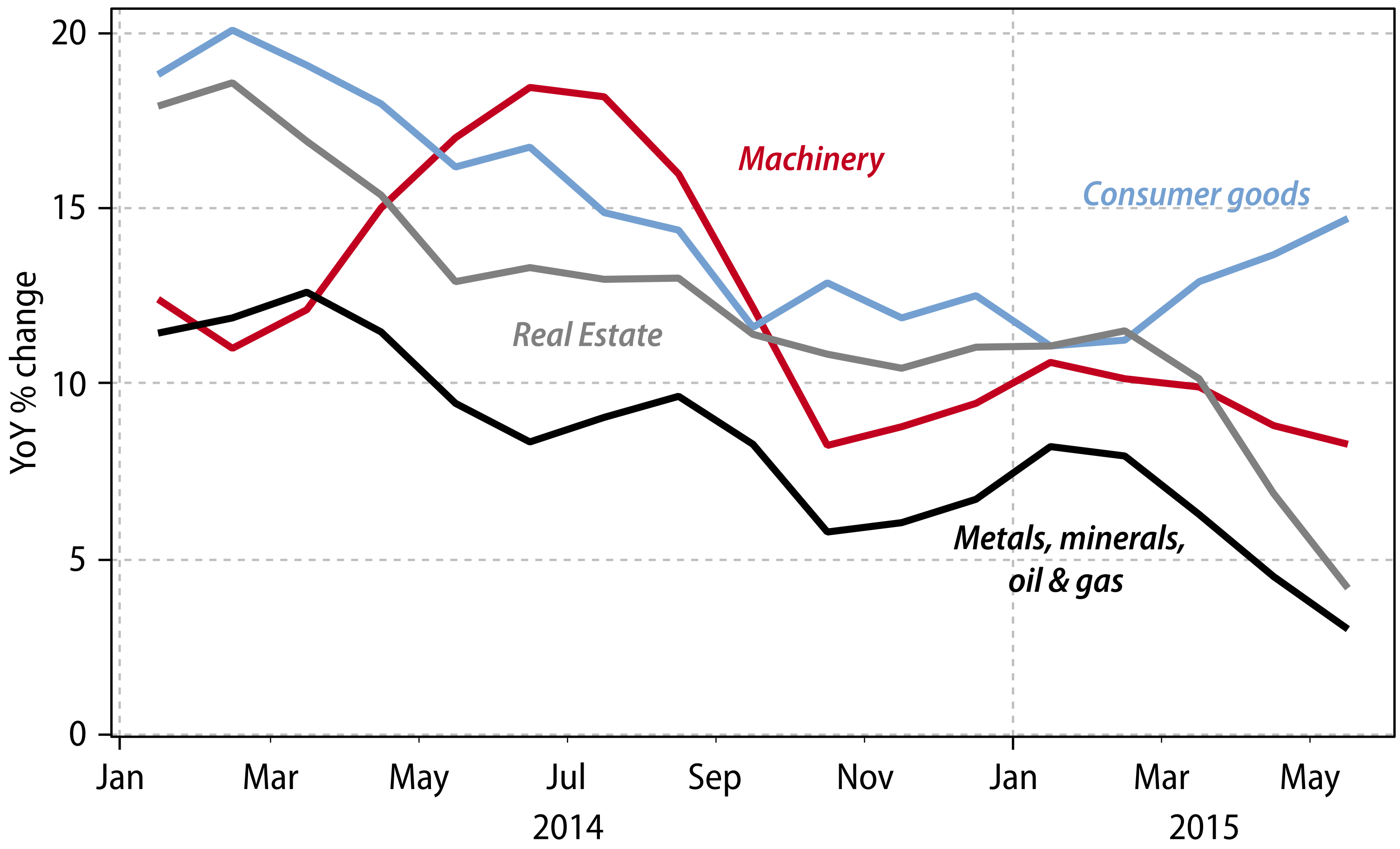
The harsh reality for industrial firms is that China's housing market has completed its high-growth phase. Our housing model shows fundamental demand has been hovering around its peak level since 2011, a projection broadly in line with the official data.

In coming years total housing demand will gradually decline, with the model projecting construction volume will fall roughly 15-20% from current levels by 2025. This decline is a function of demand for housing getting more saturated: future increases in household income will lead to smaller incremental gains in demand for housing.

Consumer goods manufacturers are still investing, for now

Heavy industry slowing, consumer goods investment accelerating

FAI growth by sector, 3mma



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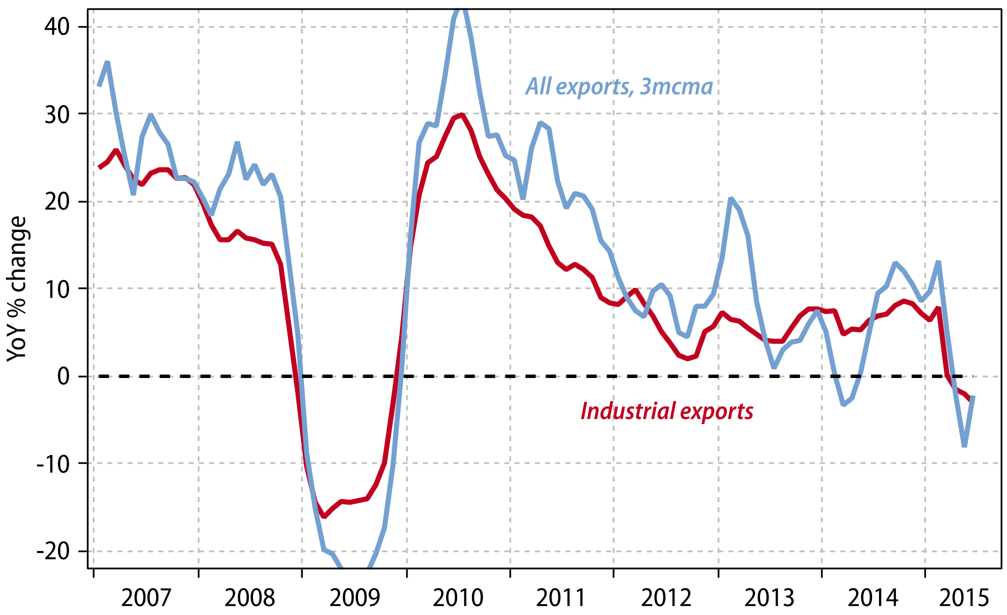
Heavy industrial investment is slowing in line with real estate, as is investment by machinery firms – though the decline is cushioned somewhat by the fact that machinery firms have a broader range of customers outside construction.

One bright spot in industrial investment is consumer goods, both staples and discretionary. But with car sales growth slowing and income growth likely to be less buoyant in H2 the sources of final demand fueling this acceleration will weaken in the second half of the year.

Weak export growth will drag on investment in H2

Industrial export growth is weak

YoY % growth in total exports and industrial exports, by value



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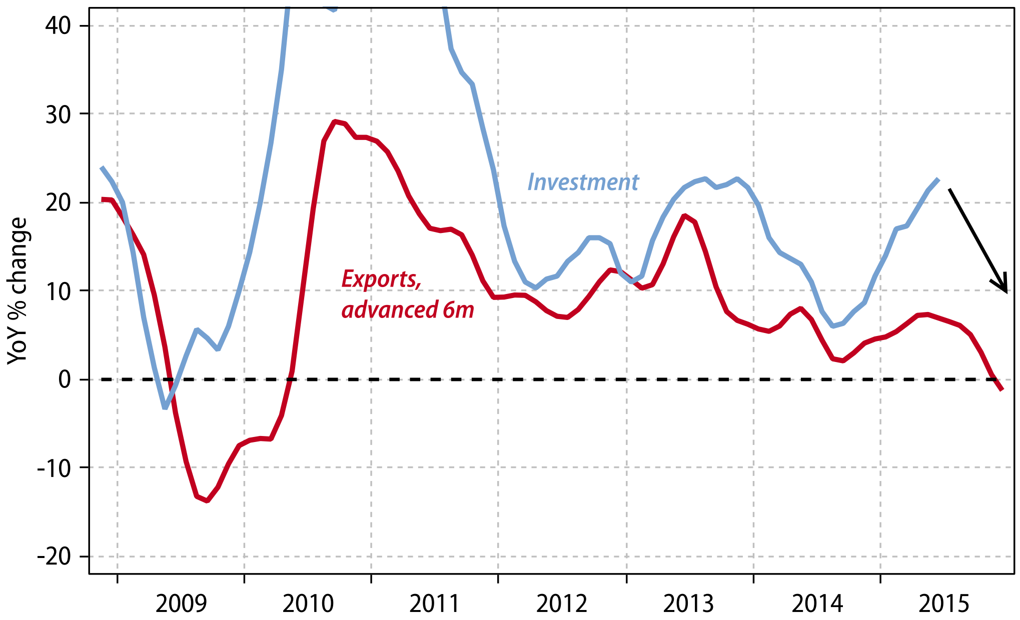
Investment in electronics will slow due to weak exports

Electronic equipment sector investment and exports, 3mma



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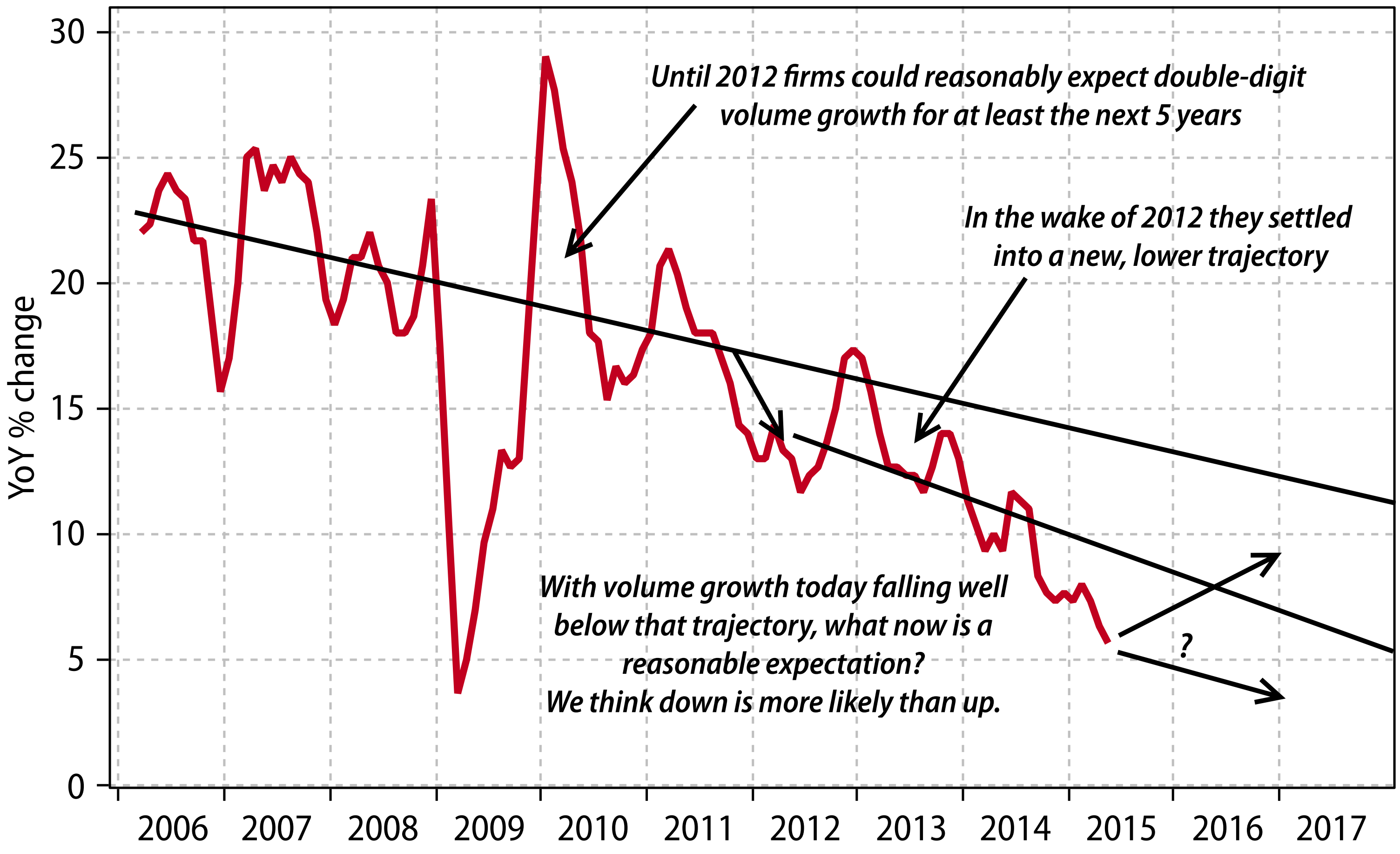
While export growth is not the primary driver of domestic investment activity in the industrial sector, it does contribute at the margin. Specifically, it is the primary driver of investment for firms producing electronics, the only sector for which exports are larger than domestic demand (57% of sales). Other equipment and machinery manufacturers are exposed to exports to a lesser degree (10-20% of sales)

In the past investment by electronic equipment manufacturing investment growth has followed export growth in that sector's products, with a lag of about 6m. If this pattern continues export weakness will translate into weakening investment in this sizeable sector (RMB800bn in FAI last year) in H2. The same effect will play out to a lesser degree in other machinery sectors.

A rebound in investment requires confidence in volume growth

Sales volume growth has taken yet another leg down

Industrial sales volume growth, 3mma



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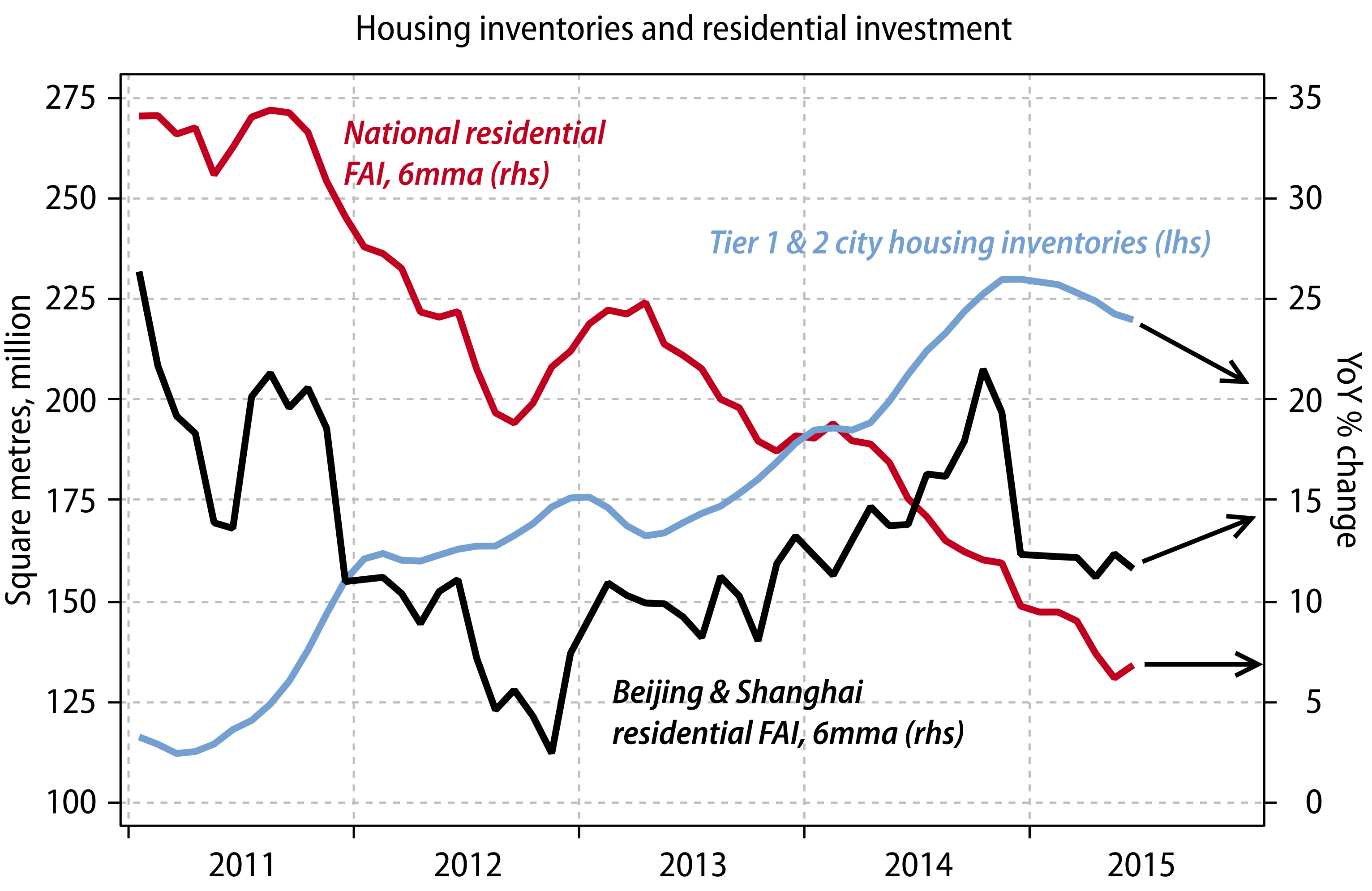
While profitability and credit availability determines firms' **ability** to invest, it is growth in their sales volume which determines their **willingness** to do so.

Until 2012 industrial firms could reasonably expect volume sales growth of 15%+ a year out to 2017. Today firms face major uncertainty about whether volumes will bounce back to the 2013/14 trajectory. This uncertainty is itself helps hold back firms' investment decisions.

The second half of 2015 is unlikely to be as bad as the first

As big city inventories fall, residential FAI will stabilize



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The severe slowdown in sales volumes and investment in H1 is unlikely to be repeated in H2. While we don't think housing investment is going to rebound, strong housing sales and falling inventories in Tier 1 and Tier 2 cities should help at least put a floor under the decline in construction and industrial sales volumes. A pickup in credit growth after interest-rate cuts, and some recovery in profit margins will also help somewhat.

But while the investment outlook may stop getting worse for the next several months, it is hard to see a recovery of any magnitude.

When will China's animal spirits return?

The longer-term issue for corporate investment in China, as we have argued throughout this presentation, is that the major source of final demand for industry is plateauing and headed for decline. There will of course still be cyclical swings in housing construction but the trend is downward.

The next cyclical upswing is unlikely to arrive until the record-high housing inventories in many Chinese cities are finally digested. The timing of this is difficult to project but it will certainly take more than a year. But we should not expect too much from such a cyclical pickup given the weak fundamentals of housing demand.

For private investment to regain the animal spirits of previous years requires not a momentary respite in housing construction, but new sources of final demand. Unfortunately many of the new growth sectors of consumer spending are not in manufactured goods but in less capital-intensive industries.

In this context, it is increasingly urgent for China to use supply-side reforms to unlock the potential for private-sector capital spending. These could take two forms:

1) Encouraging the market exit of state-owned industrial firms who are contributing to excess capacity and keeping prices and margins low.

2) Allowing the entrance of new competitors into service and other sectors currently closed to private investment.

There are some early signs of progress on the first type of reform, with stricter environmental rules recently leading to closures of some facilities. But there is little evidence of a broad-based push for opening up to private-sector investment. Pressure for both types of reforms will however continue to build as long as private investment remains depressed.

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