

# Research China

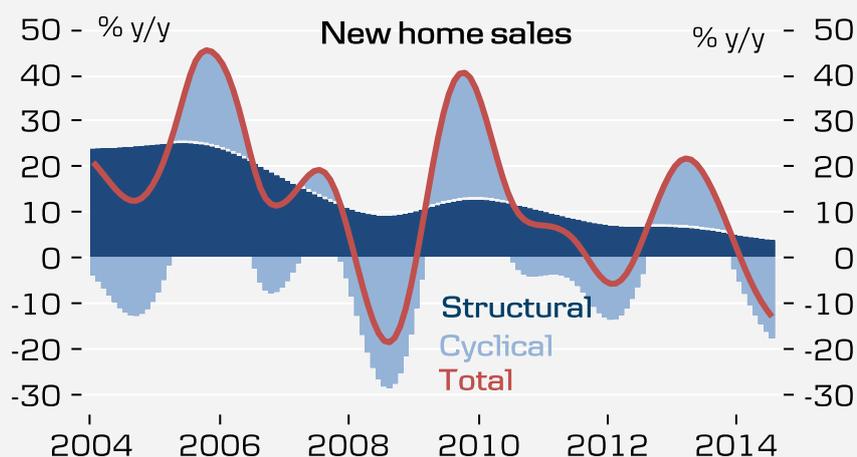
## Is the housing market weakness cyclical or structural?

- Since 2006 there has been a substantial slowdown in new home investments. Our calculations suggest that structural growth in new home investments could already have declined below 7%.
- The structural slowdown mainly reflects that the pace of urbanisation has peaked in China. However, excess supply has also added to the structural slowdown as construction of new homes has been slow to respond to the structural slowdown in demand for new homes.
- Nonetheless, at least 70% of the decline in new home investments over the past year appears to be cyclical and can largely be explained by tighter financial conditions.
- There should gradually be less headwind from the housing market in the coming quarters as financial conditions have so far eased in 2014.
- However, the recovery will be weak as financial conditions have only eased slightly and the structural slowdown will continue to weigh on new home investments.
- Despite the structural headwinds we still think an interest rate cut would be an effective tool to boost the housing market in China.

### Key points

- Substantial structural slowdown in housing market
- But more than 70% of slowdown in the past year is cyclical
- Tighter financial conditions is the main explanation
- Housing market is expected to recover later in 2014
- But housing recovery will be weak without additional easing

Substantial structural slowdown, but most of recent slowdown is cyclical



Source: Macrobond, Danske Bank Markets

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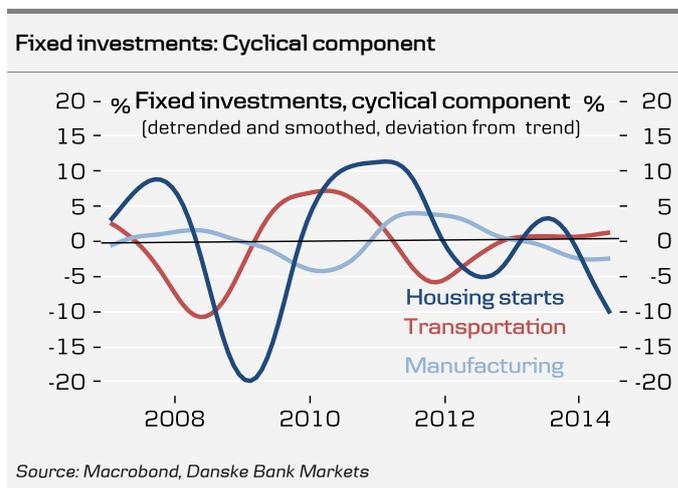
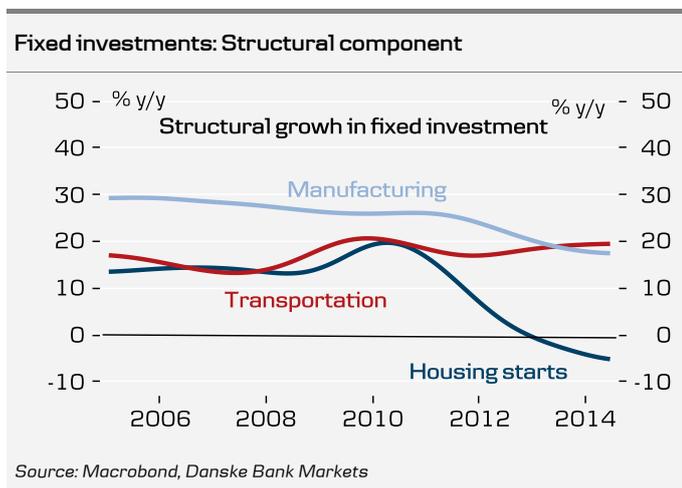
## Is the slowdown in housing structural or cyclical?

**House construction and the housing market in general is currently the weakest spot in the Chinese economy** and is probably the single biggest risk factor in both the short and long term.

In this research note we attempt to answer two important questions. *First*, to what degree has there been a structural slowdown in new home investment? The answer to this question will not least be important for the commodity market where the construction boom in China has been one of the most important drivers for demand for steel and other metals. *Second*, to what degree has the slowdown in the housing market over the past year been cyclical or structural? The answer to this question will be important to judge the Chinese economy's ability to recover from its most recent slowdown.

We do not attempt to cover all the subjects needed for a complete understanding of the Chinese housing market (e.g. sustainability of current level of house prices, relationship between shadow finance and the housing market, systemic risk the housing market poses to overall financial stability, etc). We plan to cover these topics in later papers.

Nor do we go too much into the technical details behind the calculations in this note. We used a Hodrick-Prescott filter to identify both the structural (trend) and cyclical (trend adjusted) components in fixed investments. To start with we used housing starts in square metres as a measure for housing investments and compared the development in housing investment with the development in manufacturing investments and investments within transportation (a crude measure for infrastructure investment). Both manufacturing and transportation investments are measured in current prices. The left-hand chart below shows the calculated structural component in the three types of investments measured as the year-on-year growth. The right-hand chart shows the cyclical components for the three types of investment measured as the percentage deviation from the trend level of investment demand.



## Housing market is currently the weakest spot

From the charts above it is evident that **weakness in investment demand has been most pronounced within housing investments** and that the **weakness has been both structural and cyclical**.

According to our calculations, structural growth in housing starts was relatively stable at about 14% from 2004 to 2008 with even some slight acceleration in the wake of the global financial crisis in late 2008. However, since 2010, structural growth in housing

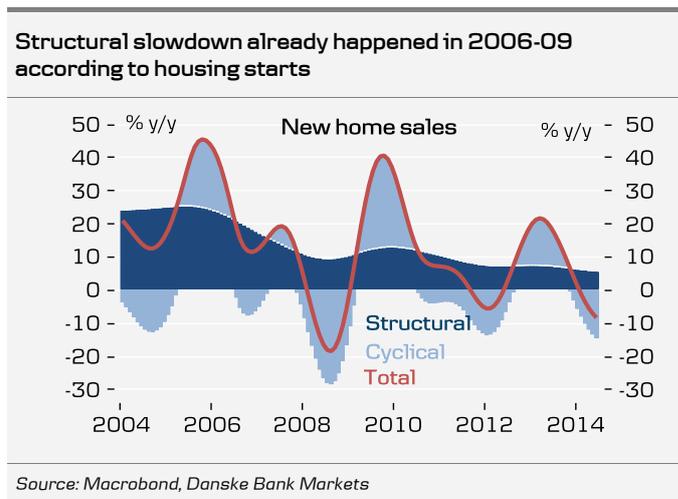
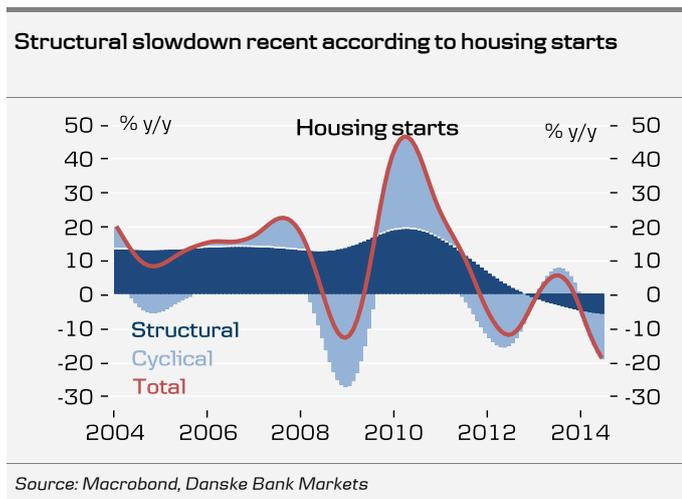
starts has slowed sharply from about 17% y/y to currently -5% y/y. The right-hand chart shows that there has also been a substantial cyclical slowdown in housing starts since mid-2013 with housing starts currently more than 10% between its long-term trend.

**In manufacturing investments there is evidence of only a modest structural and cyclical slowdown.** Our calculations suggest that structural growth in manufacturing investments (in current prices) has slowed to about 17% y/y from about 26% y/y just before the global financial crisis started in late 2008. The business cycle has also weighed on manufacturing investment. We estimate manufacturing investment is currently 4% below its long-term trend level but it has stabilised recently, meaning that there will gradually be a less negative impact on growth. We estimate the cyclical component in June subtracted about two percentage points from the year-on-year growth in manufacturing investments that remains quite resilient at 16% y/y.

**For investments within transportation on the other hand there is evidence of an increase in both structural and cyclical growth.** Our estimate for structural growth in investments within transportation has accelerated to 19% y/y from about 15% y/y just before the global financial started in late 2008. Remember that investment within transportation is probably a good proxy for infrastructure spending. Hence, our calculations suggest that Chinese **growth has become more dependent on the government's infrastructure spending** in the wake of the global financial crisis and this might suggest **excess capacity and longer-term vulnerability for infrastructure spending**. Our calculations also suggest that in recent months there has also been a positive cyclical contribution to growth from investments within transportation, probably reflecting that the mini-fiscal stimulus announced by the Chinese government in April has started to kick in.

### Substantial structural slowdown in the housing market

Above, we measured investments in new homes from the supply side as construction of new homes (housing starts). Below, we supplement our calculations by including a demand-side measure of new home investment based on sales of new homes (also measured in square metres). Sales of new homes have also been split into a structural and a cyclical component. The structural and cyclical contributions to the year-on-year growth in housing starts and new homes sales are shown in the two charts below.



Our two estimates for structural growth in new home investments based on housing starts and new home sales are compared in the left-hand chart at the bottom of this page. There are two important conclusions regarding structural growth in new home investments. *First*, our calculation of structural growth in new home investments based on new homes sales also shows a substantial slowdown from more than 20% y/y in 2004 to just about 6% currently. *Second*, the estimate for structural growth in new home investments based on sales of new homes (+6%) is substantially higher than estimate for structural growth based on housing starts (-5%).

### Supply has been slow to respond to weaker demand

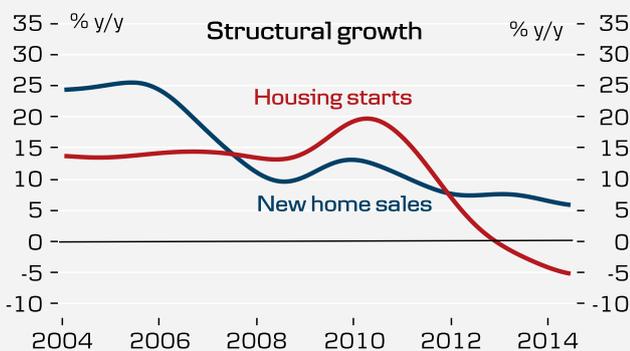
In the very long term, we would expect structural growth in supply and demand for new homes to be broadly similar. However, the substantial difference in the estimates for structural growth in demand and supply for new homes suggests **the existence of longer-lasting imbalances in the supply and demand for new homes.**

Measured from the demand side, structural growth in new home investments appears to have started slowing markedly in 2006 – well ahead of the start of the global financial crisis in late 2008. However, the demand-side calculation also suggests the slowdown in structural growth in new home investments has been relatively modest in recent years and since 2011 has only declined from about 7% to about 6%.

Measured from the supply side, our calculations suggest that the structural slowdown happened later and has been much more severe recently. Structural growth in new home investments according to this calculation was relatively stable just below 15% until the global financial crisis started in late 2008 and even accelerated briefly to close to 20% in the wake of the crisis. However, since 2011, structural growth in new home investment has fallen sharply to -5% according to this estimate.

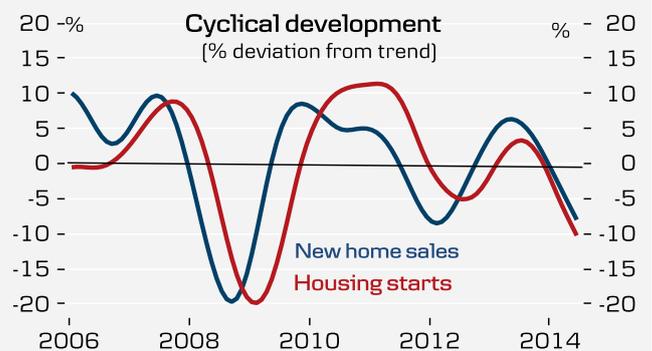
This pattern in our estimates for structural demand and supply for new homes suggests that the **supply/construction of new homes has been relatively slow to respond to the slowdown in structural demand for new homes.** The resulting excess supply is currently weighing on construction of new homes. However, **this pattern also suggests that construction of new homes could currently be undershooting the longer-term structural growth in demand for new homes.**

Construction of new homes adjusted slowly to structural decline in sales of new homes



Source: Macrobond, Danske Bank Markets

Cyclical pattern in housing starts and new home sales more consistent



Source: Macrobond, Danske Bank Markets

## Slowdown in the past year has been mostly cyclical

If we look at the cyclical pattern in housing starts and new home sales, we get a broadly similar picture in our two calculations (see bottom right-hand chart on previous page). That said, new home sales tend (not surprisingly) to lead housing starts by three to five months. Hence, if we are looking for early signs of stabilisation in the housing market, we should be watching new home sales closely. In addition, the recent cyclical downturn in the housing market has been slightly more pronounced in the housing starts. Housing starts are currently 12% below trend level while new home sales are currently only 8% below trend level according to our calculations.

Importantly, the decomposition of housing starts and new home sales into a cyclical and structural component suggests that the **slowdown in the past year has been mostly cyclical for both housing starts and new home sales** (see table below). Of the 18.6% y/y drop in housing starts in June 2014, 13.4 percentage points is cyclical and 4.8 percentage points is structural. In other words, at least 70% of the drop in housing starts over the past year appears to be cyclical. According to our new homes sales calculation, the 8.1% y/y decline in new home sales in June was entirely cyclical with the cyclical component alone subtracting 14.6 percentage points from the year-on year growth in new home sales.

Cyclical and structural contribution to growth in investments

	Growth [% y/y]	Contribution [%-points]	
	June '14	Cyclical	Structural
New Home Sales	-8.2	-14.1	+5.9
Housing Starts	-18.6	-13.4	-5.2
Manufacturing Inv.	+15.4	-1.8	+17.5
Transportation Inv.	+20.1	+0.6	+19.5

Source: Danske Bank Markets

## Cyclical weakness driven by tighter financial conditions

The cyclical development in new home sales in China has historically been closely connected to the monetary cycle in China. **In the past decade, all turning points in the monetary cycle have been followed a turning point in the housing market.** This is illustrated in the top left-hand chart on the next page which shows a close correlation between the two-year government bond yield and the cyclical component in new home sales. The two-year government bond yield tends to lead new homes by about six months or, in other words, it takes about six months before new home sales respond to easier financial conditions.

The implication is that **the weakness we have seen in the Chinese housing market so far this year appears mainly to be due to the substantially tighter financial conditions China experienced in H2 13.** Financial conditions have so far eased in 2014, albeit not substantially. This suggests that new home sales should start to stabilise in the coming months and construction of new homes should stabilise at some stage in Q4 (remember construction of new homes lags new home sales by about three months).

**New home sales should soon stabilise but more easing needed for substantial recovery**



Source: Macrobond, Danske Bank Markets

**Recent weakness in house prices also appears to be largely cyclical**



Source: Macrobond, Danske Bank Markets

As can be seen in the right-hand chart above, the price development for new homes can also largely be explained by the cyclical development in new home sales, underscoring that the recent weakness in the housing market appears to be largely cyclical.

**Main conclusions**

- **There has been a substantial structural slowdown in China’s new home investment.** The structural slowdown in new home investments probably reflects that the pace of urbanisation in China has peaked. However, there are also signs that the structural slowdown is driven by excess supply as construction of new homes has been slow to respond to the structural slowdown in demand for new homes. This suggests that construction of new homes could be undershooting in the medium term.
- **Nonetheless most of the slowdown in new home investments over the past year is cyclical.** Our calculations suggest that at least 70% of the decline in new home investments over the past year is cyclical and can largely be explained by the tighter financial conditions China experienced through H2 13. It is a general pattern that despite the sharp structural slowdown in the past decade the largest part of year-on-year changes in new home investment tend to be cyclical.
- **Looking ahead our calculations suggest the housing market should stabilise later in 2014.** This is mainly because financial conditions have so far eased in 2014 and the housing market typically responds with a six-month lag to easier financial conditions. **However, the recovery in the housing market is expected to be relatively weak.** *First*, monetary policy and financial conditions have so far only been eased modestly. *Second*, the structural slowdown will continue to weigh on the recovery.
- **An official interest rate cut would be an effective tool to boost the housing market.** Historically, the cyclical development in the housing market has been closely connected to the interest rate cycle. At the current juncture, we do not expect PBoC to cut its leading lending rate. So far the government has preferred to ease at the local level some of the regulatory restrictions that have been introduced on home purchases in recent years (down-payment requirements, ownership restrictions).

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