CalPERS Trust Level Review
STATE OF THE ECONOMY

Period Ending June 30, 2016

ECONOMIC SUMMARY

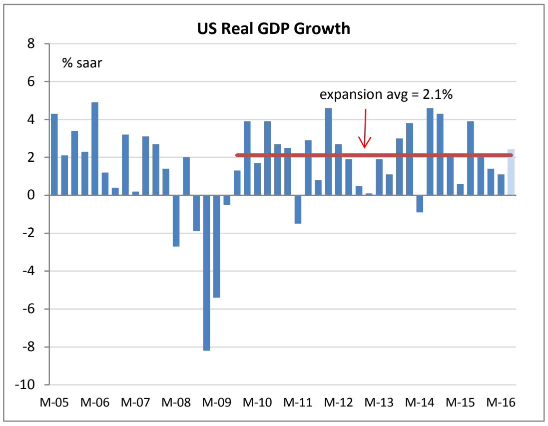
US moving into 'late cycle' but central banks and governments still have capacity to support growth.

- The US economy likely grew by less than 2% in the latest year, with a half point subtraction attributable to a sharp reduction in new mining investment. Shortages of labor are also starting to challenge growth.
- Business investment outside of mining remains tepid, despite strong reserves of cash and a high rate of borrowing. A significant reduction in the profit share of national income, in favor of wages, has reduced the incentive to invest, but it does have th benefit of keeping top line growth elevated.
- Strong points for growth continue to be the household and residential construction components, the former propelled by favorable real personal disposable income and balance sheets, the latter by an improvement in household formation to about 1 million per annum and persistent affordability.
- Net trade has been a wash for the US economy but US financial markets have benefited from Europe, Japan and China all stimulating their economies to ward off a relapse into disinflation.
- The International Monetary Fund has shaved 0.1% off world GDP estimates to account for the assumption of a mild impact from the UK decision to exit the EU, with the effects being managed over a period of time. UK growth itself is expected - in the mild scenario - to be 1% lower over two years.
- Another important event was the convincing win for the LDP in the Japanese upper house election, that is likely to be the catalyst for a large fiscal stimulus, possibly fully monetized. China has also shifted toward state spending to stabilize its economy.
- The key to market returns in the US, aside from imported economic and geopolitical risks, will be whether policy, investment and labor force participation allows the economic expansion to run another 2-3 years.

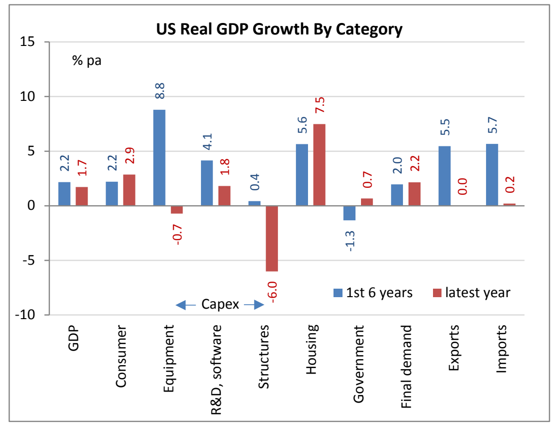
Positive	Same Trend	Negative
- Economy improves since Winter US GDP growth is tracking at around 2 1/2% for the middle quarters of the year after 1% in March qtr. **- Stronger consumer** Retail sales benefitting from stronger incomes growth, esp. for lower paid jobs. **- Reemergence of some inflation** More stable commodity prices, stronger wages (3.6%) and higher core services inflation (3.2%). **- Further policy responses abroad** Arguably US 10yr bond yield is 50-75bps lower because of flows related to easy policy abroad. **- Improved risk assets** Since February there has been a partial rebound in commodity prices and easing in US dollar.	**- US' slow expansion** US eocnomy enters its eight year of growth, averaging just over 2%. **- Household incomes and balance sheet** Strong real disposable income drives risk buffer and a domestic savings pool for asset markets. **- Global trade imbalances manageable** US deficit in 2-3%/GDP range whilst Euro area, Japan and China all at 2-3% surpluses.	**- Soft capex** Led by weaker investment in mining sector but now others have softened. **- Tight labor markets** Available persons to fill job openings very tight at 2.4 ... exacerbated by skills mismatch. **- Profits struggle** Soft top line growth and more challenging costs could weaken hiring. **- Modest tightening of credit conditions ....** ... according to the Senior Loan Officers's Survey ... however corporate borrowing costs remain low. **- Long term budget outlook** CBO report says new President will confront a steep budget blowout after 2017. **- Multiple global economic downside risks** Potential impact on GDP and financial assets from Brexit, faltering Japanese growth and China debt **- Geopolitical challenges** US election, territorial issues in Asia, rise of nationalism in Europe are amongst these.

SUMMARY

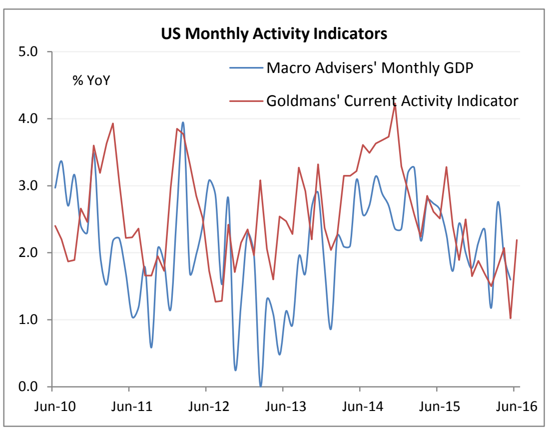
- US GDP growth is likely to have undershot 2% real in the past year, with business capex and inventory drawdown the main culprits. GDP would have been ½ point higher without reduction in mining investment.



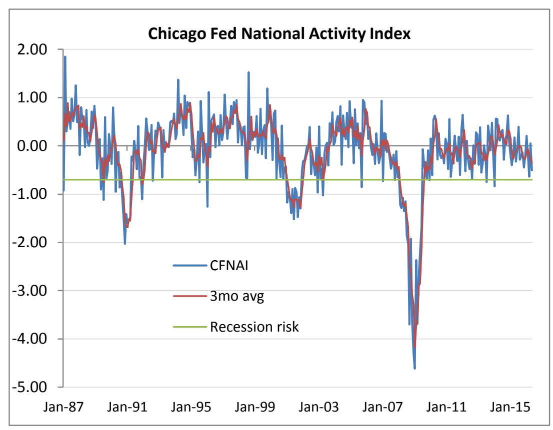
- US enters eighth year of slow expansion.



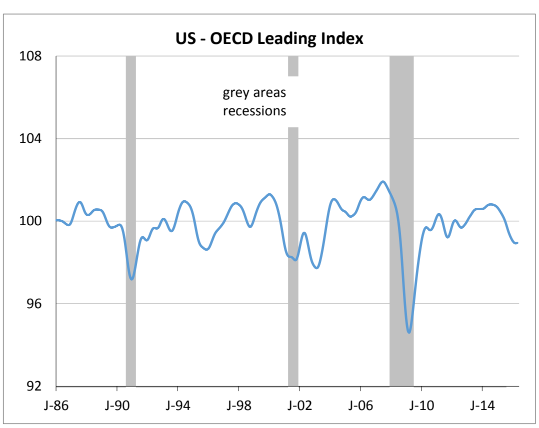
- Soft capex drives below par year for GDP.



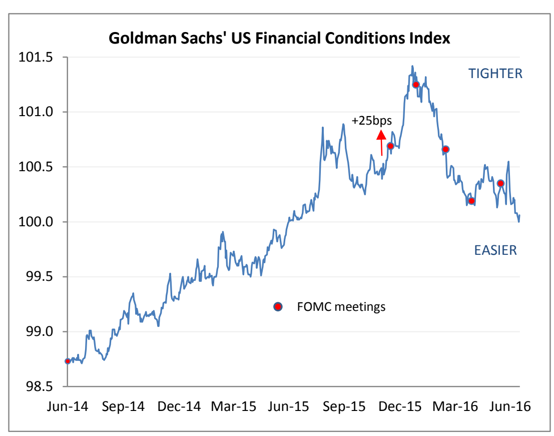
- Two slow years coincides with soft energy.



- Chicago Fed NAI confirms growth is slow.



- Other measures of the US cycle also tepid.

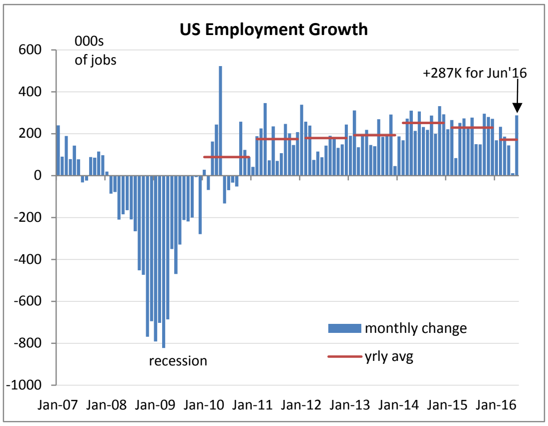


- Benign Fed has eased financial conditions.

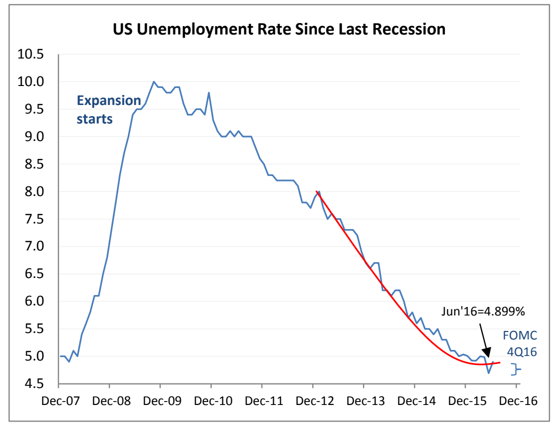
LABOR MARKET

SUMMARY

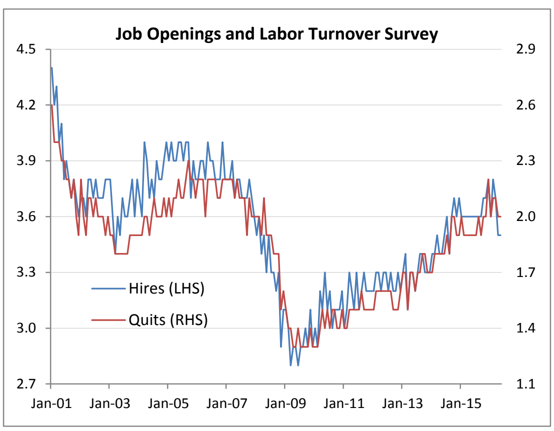
- Jobs growth has slowed this year as supply of labor, especially skilled workers, tightens. Wages growth and hours have picked up so that aggregate wages income is still growing at more than 4% per year.



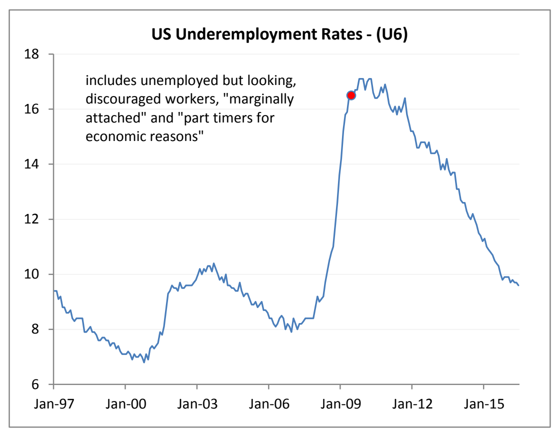
- US jobs growth just 172K pm in 1H16.



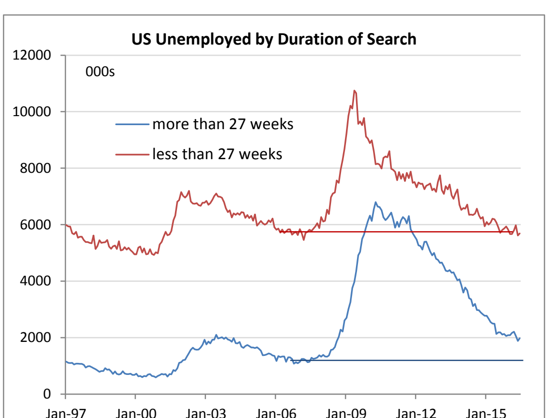
- Stable u-rate as labor force improves.



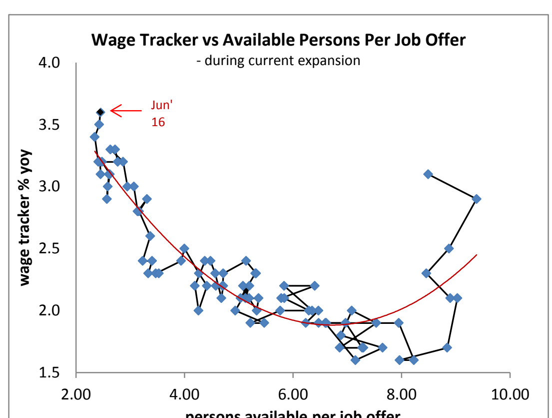
- Quitting for better job pretty elevated.



- Underemployment continues to ease.



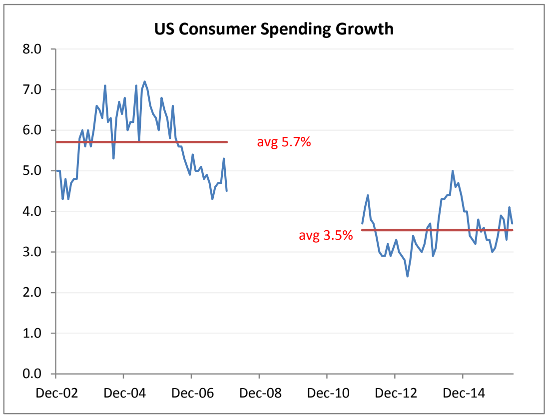
- Longer term unemployed doing better now.



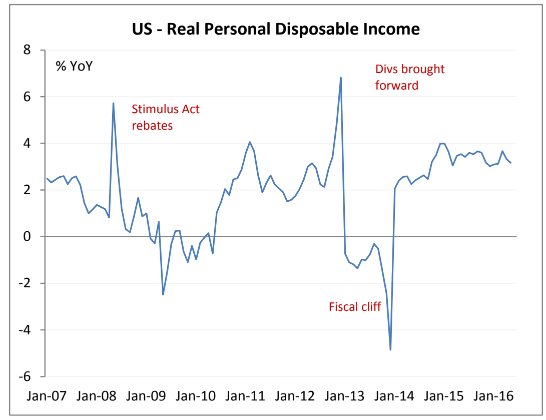
- Compensation plans heating up

SUMMARY

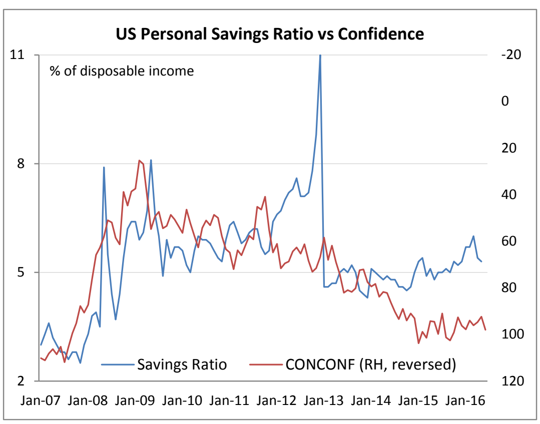
- Household spending has not experienced the boom or bust dynamics of the 2000s. Personal spending growth has been very stable despite improved balance sheets and high confidence.



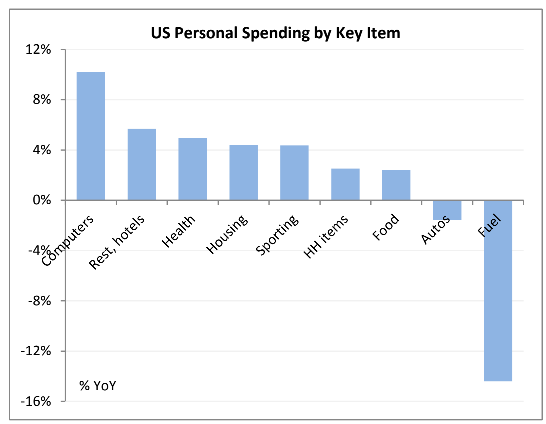
- Steadier, lower cycle than in 2000s.



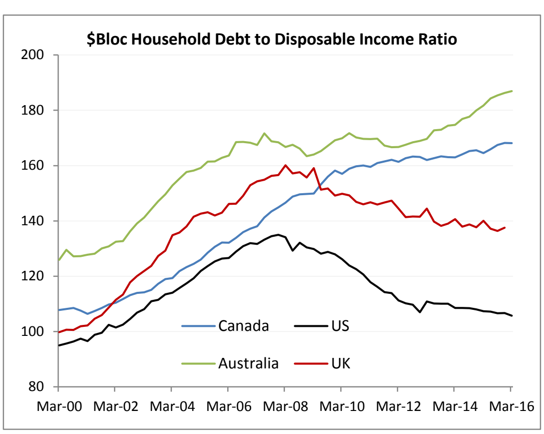
- Consumer purchasing power is strong.



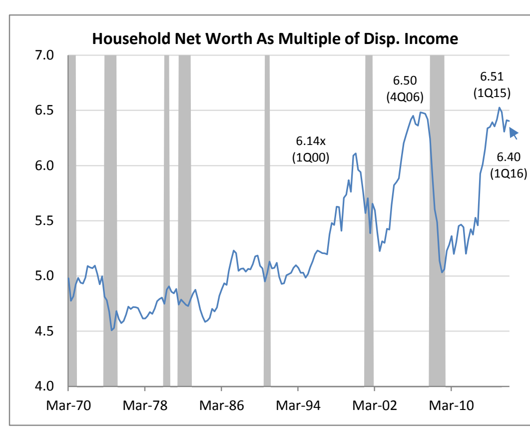
- But households have saved their windfalls.



- Significant changes in wallet share.



- Household debt has eased most in US.

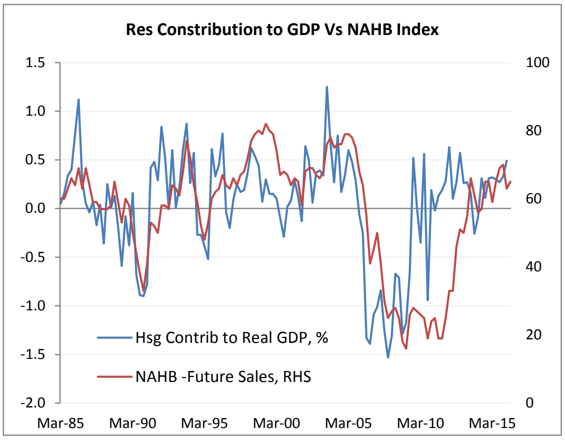


- Risk – lower stocks forces down wealth.

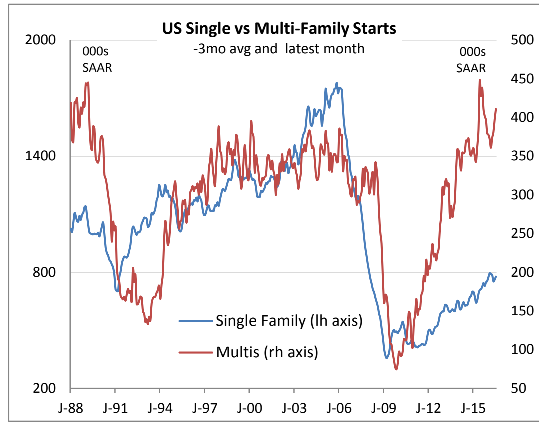
HOUSING

SUMMARY

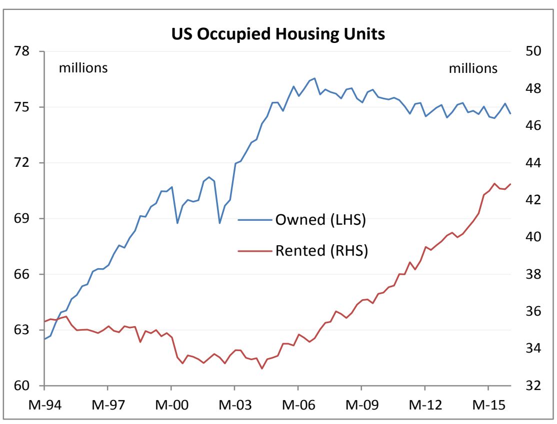
- Fundamentals of the housing market remain promising … reduced vacancies, willingness to buy and an emergent supply response.



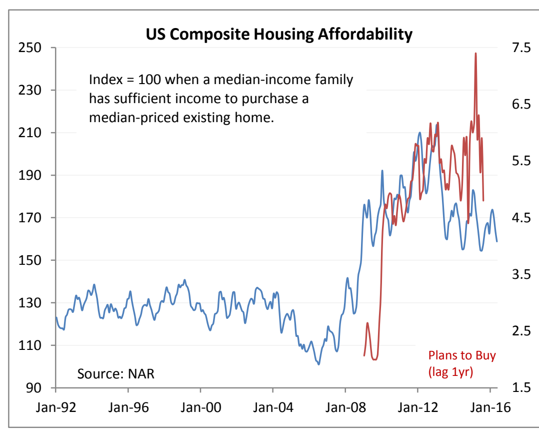
- Housing remains solid growth contributor.



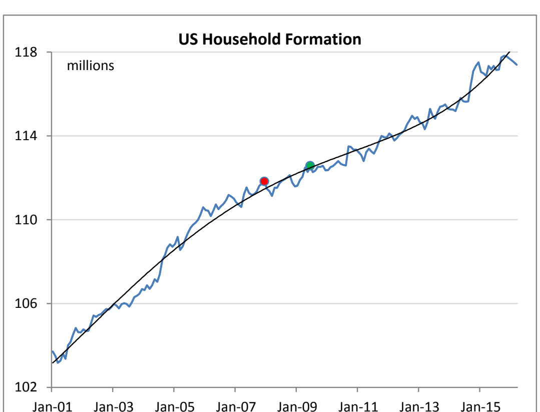
- Most strength remains in multis.



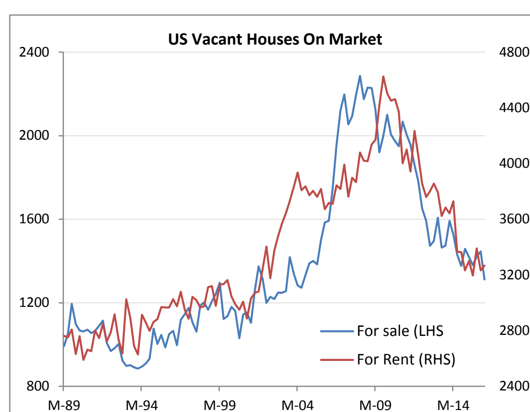
- Renters 36.5%/households, like pre 90s.



- Plans to buy and affordability still OK.



- Formation back up to 1mn pa.

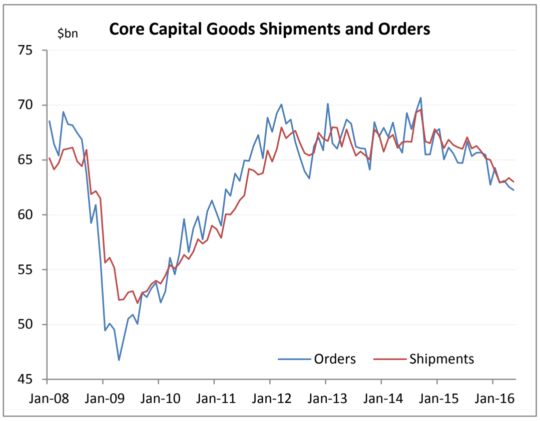


- Vacant houses back to tight lows.

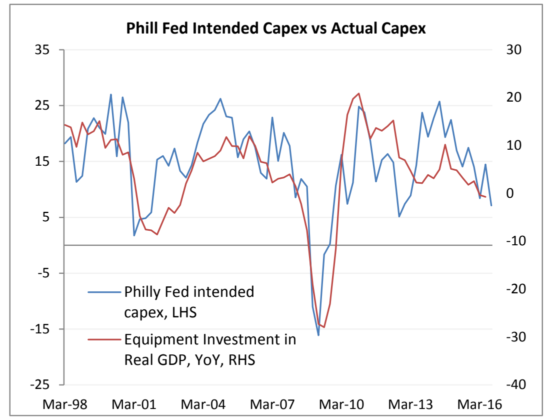
BUSINESS SECTOR

SUMMARY

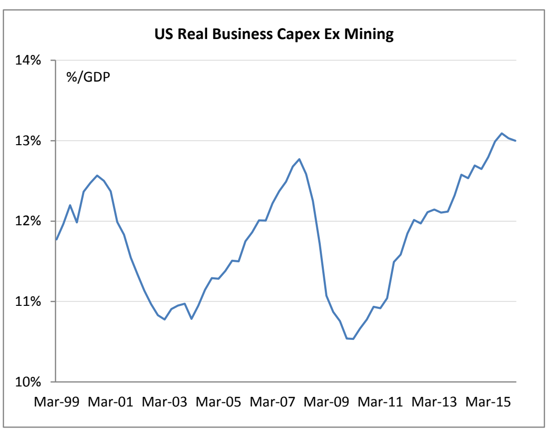
- Business investment has been a drag on growth this past year, and there are no signs that firms are about to unleash plentiful cash reserves and borrowed funds into an investment surge.



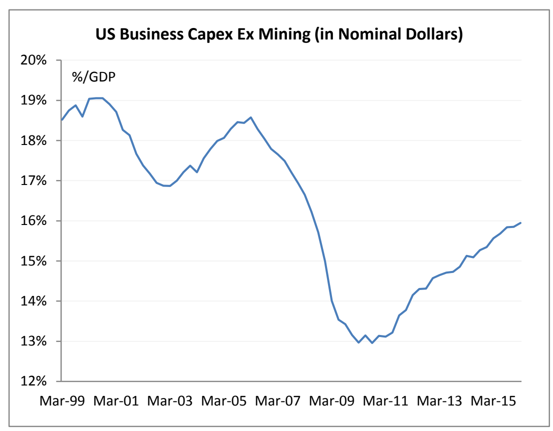
- Capex is undeniably soft.



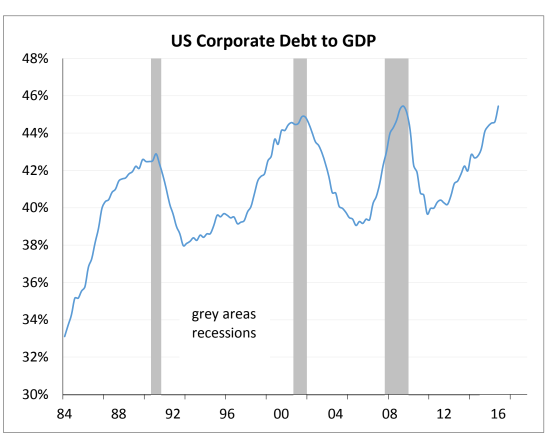
- .... including intended capex.



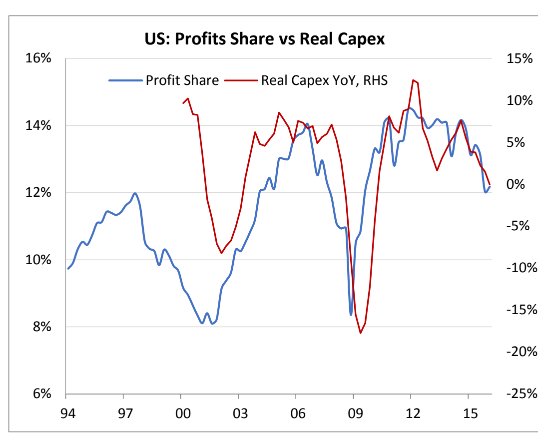
- Real capex share of GDP is high.



- ... but nominal share is below past highs.



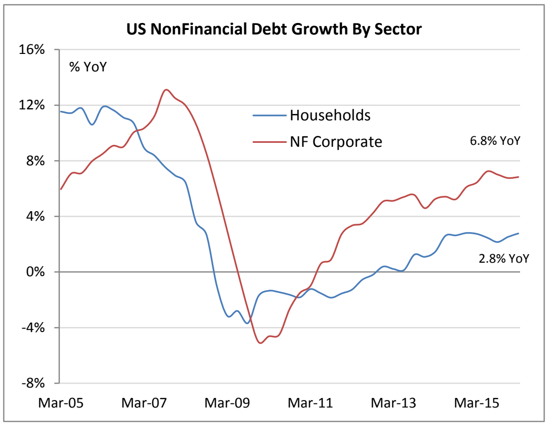
- Corporates borrowing but for buybacks etc.



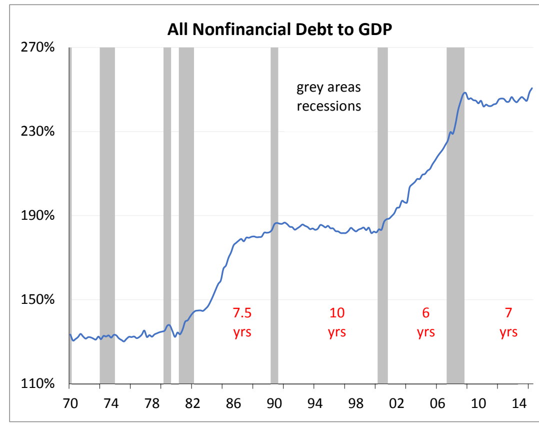
- Lower profits also compromise investment.

SUMMARY

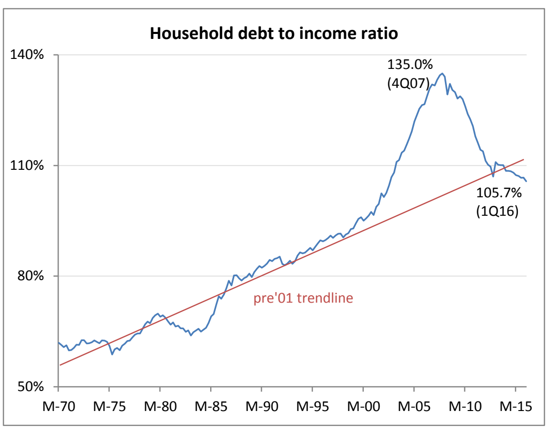
- There has been a modest uptick in the growth of debt but a far cry from the leveraging that went on in the 2000s. Household balance sheets remain strong in aggregate but growth of net worth has slowed



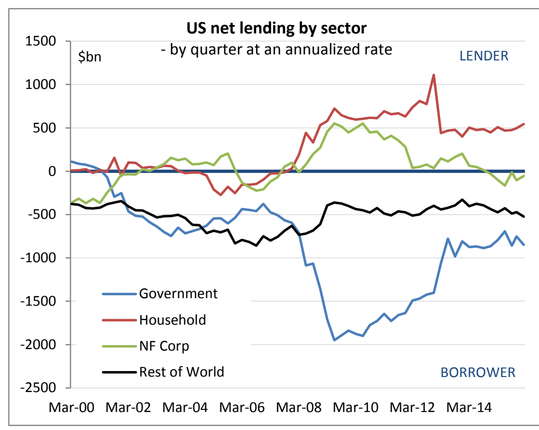
- Modest pick up in leverage.



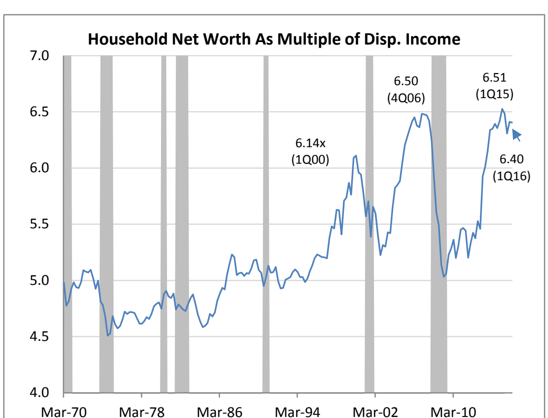
- As %/GDP it is still stable, unlike 00s.



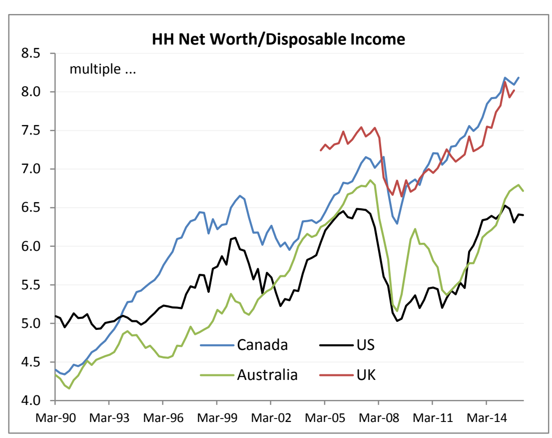
- Households have leeway to increase debt.



- But their surpluses still support markets



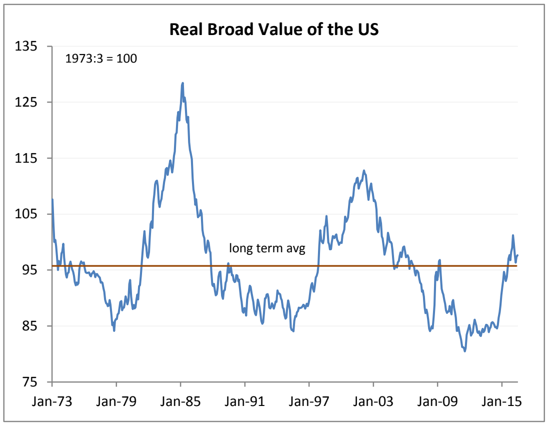
- Household balance sheets remain strong.



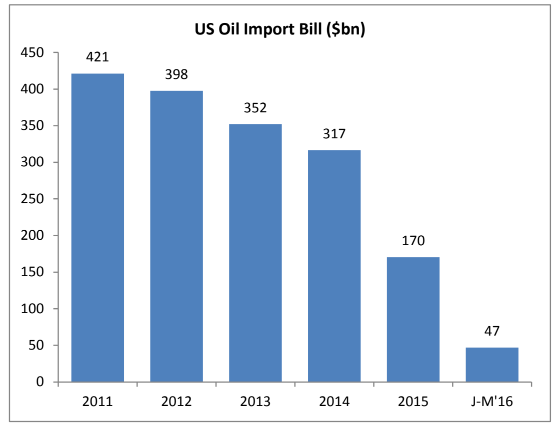
- And valuations friendlier than peer group.

SUMMARY

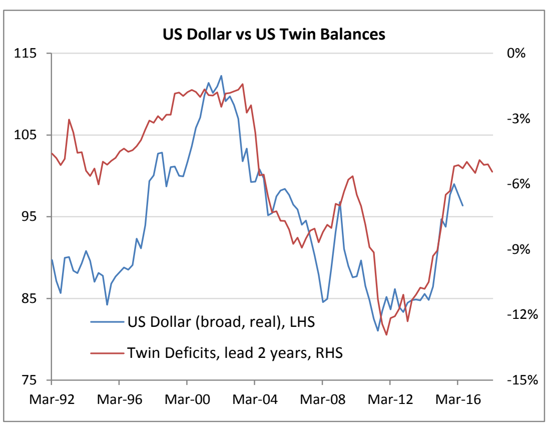
- The US dollar has risen to its long term average, supported by oil independence and stronger business cycle. Gains from here will be harder. Brexit is a key global risk but Japan and China stimulus supports growth.



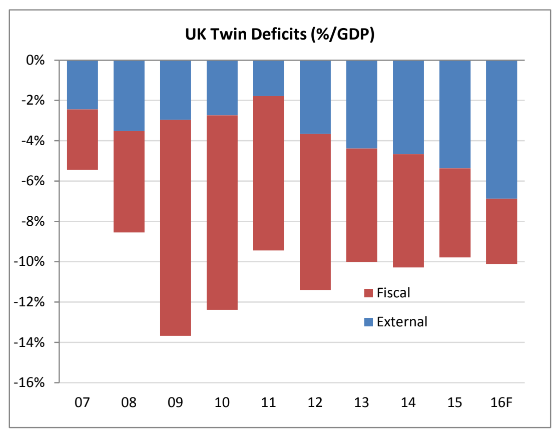
- US dollar now above long term average.



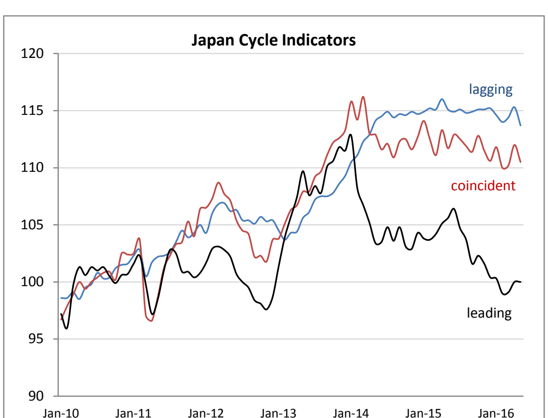
- More Oil independence a boon for trade.



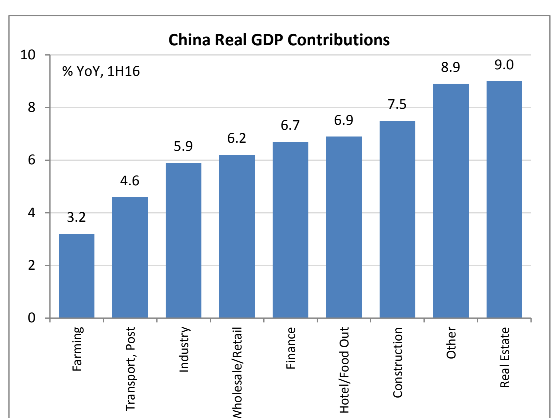
- ‘Twin deficits’ limit further USD upside.



- Can UK fund its deficits post Brexit?



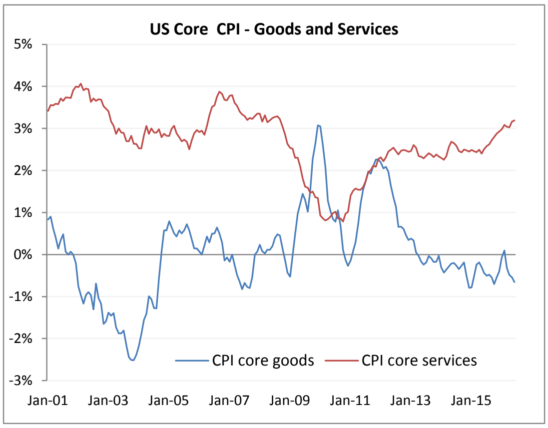
- As Japan struggles it investors look abroad.



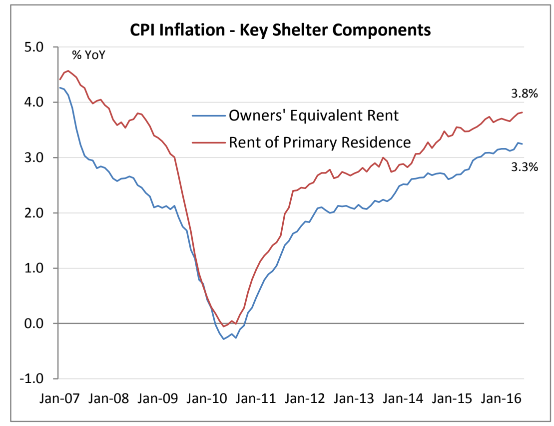
- China stimulates construction and services.

SUMMARY

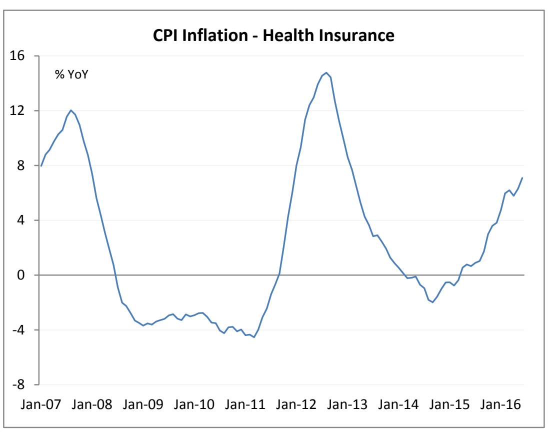
- US inflation is two speed with higher wages growth (and scarce housing supply) translating into more core service sector inflation, but cheap gas and food temporarily holding down headline inflation.



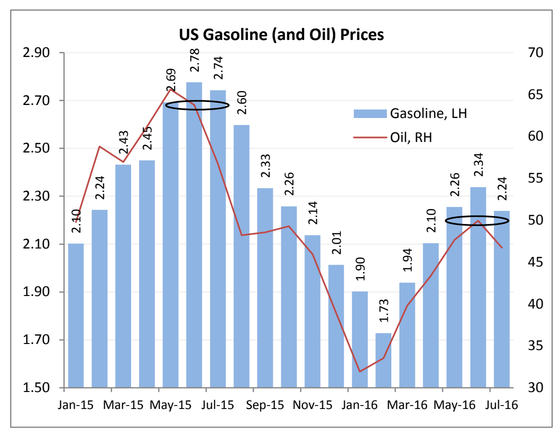
- Core services (60% of CPI) are frothy.



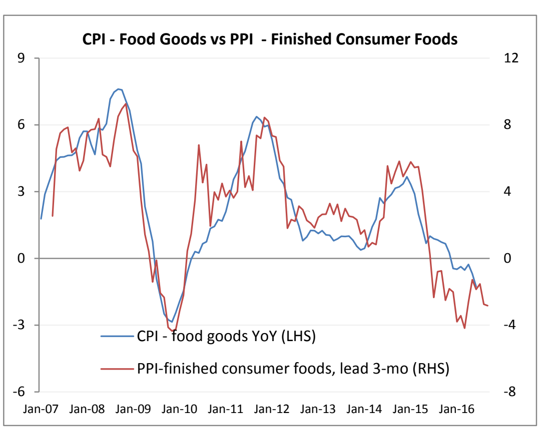
- Led by ongoing creep up in housing.



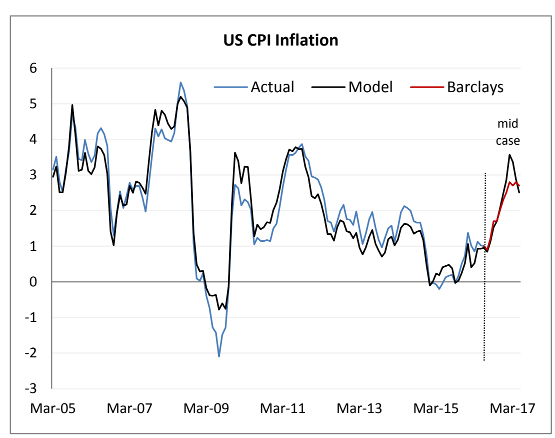
- Health insurance only 1%/CPI but rising.



- Headline held back for now by cheaper gas.



- … and by cheaper food.



- But US CPI might touch high 2's by Winter.