

CalPERS Trust Level Review

STATE OF THE ECONOMY




Period Ending December 31, 2014



ECONOMIC SUMMARY

Improving US economy but with some 'imported' tail risks

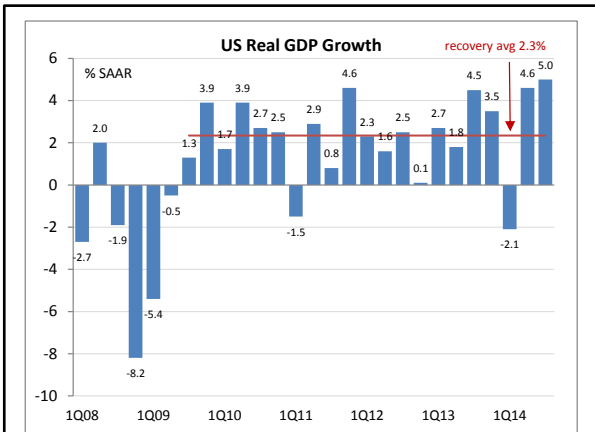
- US economic growth has clearly accelerated since the last Review.
- The sharp reduction in Oil prices has compromised investment plans in the US Oil and Gas sector and may take 10- 20K per month off US jobs growth in that and related sectors if sustained. However, since the US is a net energy importer to the tune of about 15% of its usage, the US should be a net beneficiary from falling prices; thus jobs and investment will be created elsewhere.
- Consumer spending was one driver of the improvement in US economic growth, as increased confidence and improved labor market conditions have offset the impact on balance sheets of slightly less favorable financial markets and house prices.
- The residential housing market has been a slow performer in the recovery phase, with only a slow improvement household formation and a dip in plans to buy as affordability slips. However the fundamentals continue to support the 'slower but longer' recovery in real estate.
- Globally, the drop in Oil prices has created stark winners and losers, raising the risk of financial accidents and contagion. A key measure to watch is whether core inflation (ie, excluding energy) starts to slip toward deflation as well.
- Global monetary expansion will be supported by the more aggressive approach of the Bank of Japan and European Central Bank. There remain key policy changes abroad, not the least in China where credit growth has slowed and the currency is very expensive.

 Positive	 Same Trend	 Negative
<p>- Lower Oil prices help US US is still a net energy importer (15% of usage), so lower prices are a net gain to the economy.</p> <p>- GDP growth Real GDP growth(E) likely met 4% rate in the second half of 2014.</p> <p>- Demand for labor improving Job openings +20% YoY, more quitting for better jobs, small business plans to increase comp.</p> <p>- Personal confidence surge Repaired balance sheets and better labor markets have restored household confidence.</p> <p>- Services sector rolling along 5% YoY growth in 3Q14 and a further improvement in health related spending.</p> <p>- Credit growth Bank credit growing at around 7% YoY and households cautiously adding leverage.</p> <p>- GDP - Rates gap For example, low borrowing costs relative to GDP have recently stimulated mortgage lending.</p> <p>- ECB and BoJ monetary measures Implies potential global monetary base expansion well beyond past year's.</p>	<p>- Labor market repair Labor Market Conditions Index and Atlanta Fed spider recovering at steady modest pace.</p> <p>- Household spending growth Household spending growth steady at around 4%, albeit with shifting composition.</p> <p>- Rising dollar Gradually rising dollar is helping to bridge gap between US and foreign growth.</p>	<p>- Slower global growth China, Japan and Europe finish the year with question marks about sources of growth.</p> <p>- Deflation likely in 2015 Headline CPI inflation predicted to drop to -1% by June 2015, possibly stifling investment.</p> <p>- Oil - losers as well as winners Lower prices will induce drop in rig count, capex and jobs in states like TX and ND.</p> <p>- Business capex While the recovery in investment has been solid since the recession it has recently leveled out.</p> <p>- Triennial Survey of Consumer Finances Income and wealth gains since 2010 have been concentrated in high income groups.</p> <p>- Stretched valuations? US household net worth as a multiple of income has leveled out near past cycle highs.</p> <p>- Greek austerity concerns Greece will try to reschedule debt again, setting up a conflict with the EU at the 5th Review.</p>

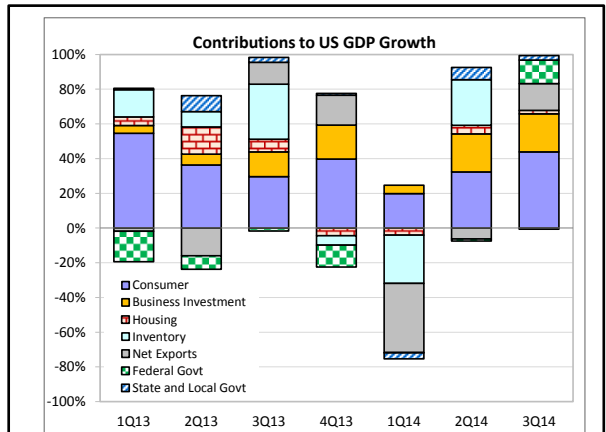
US ECONOMY IN AGGREGATE

SUMMARY

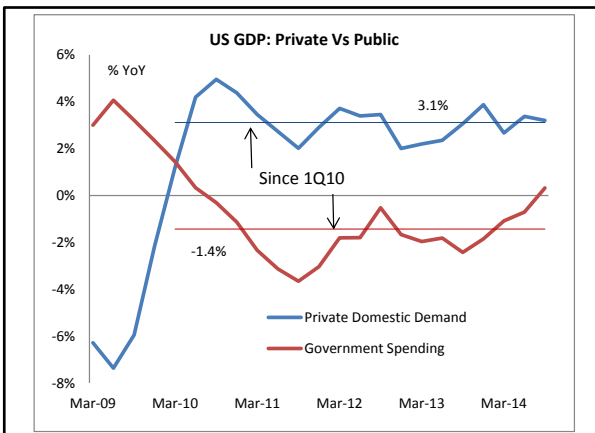
- The US economic recovery broadened in the second half of 2014. With the US still a net energy importer there should be net benefits from falling Oil prices despite offsets from lower capex and jobs in that sector.



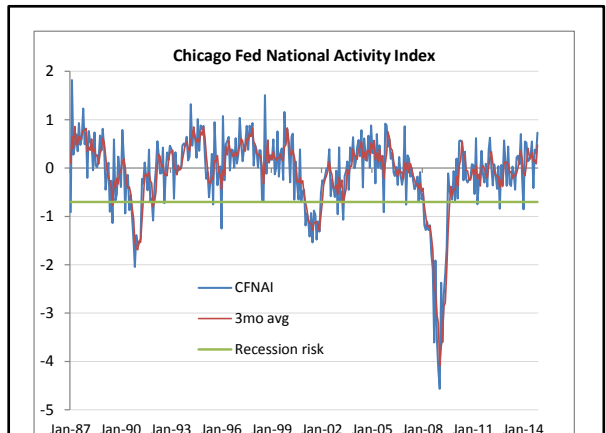
- US GDP growth has rebounded strongly.



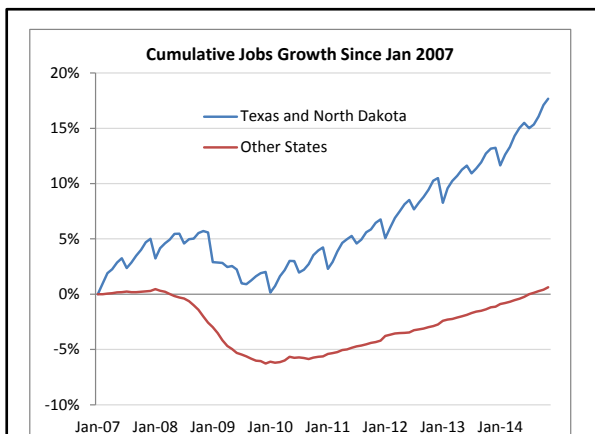
- Most GDP categories have been positive.



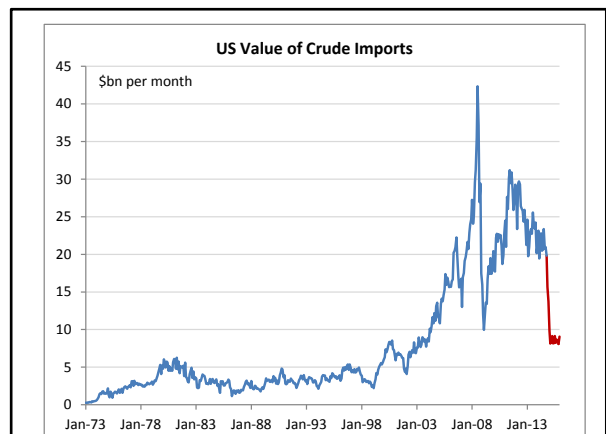
- Private demand steady, public improving.



- Regional Fed activity measure accelerates.



- Strong jobs growth in the Energy States.

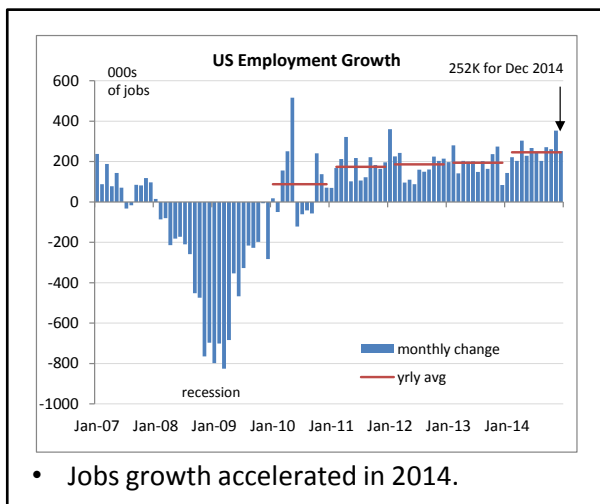


- Oil import bill might halve during 2015.

LABOR MARKET

SUMMARY

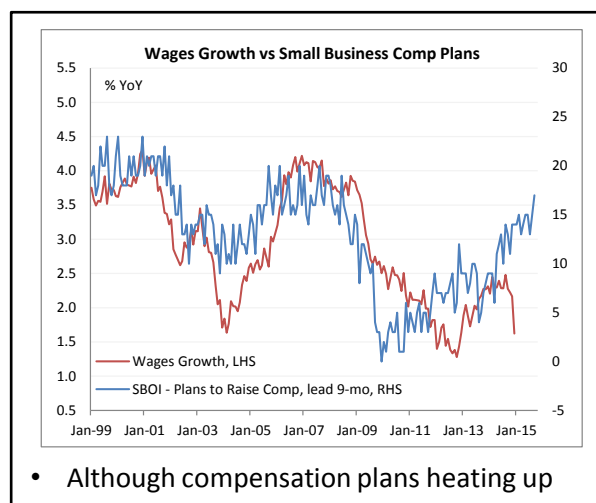
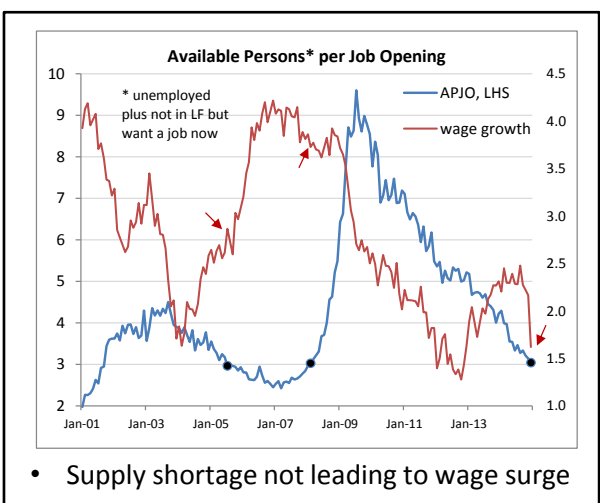
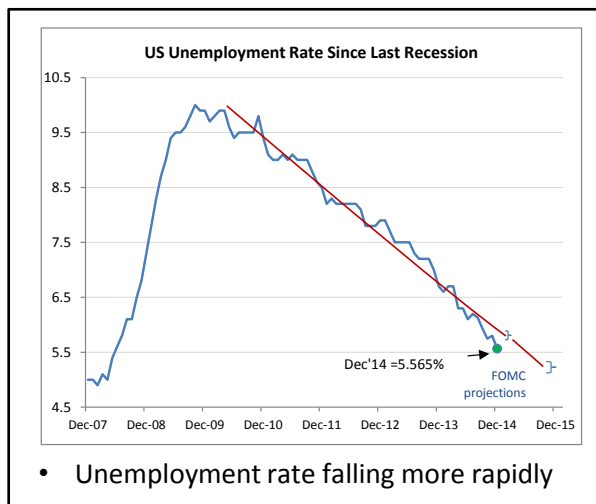
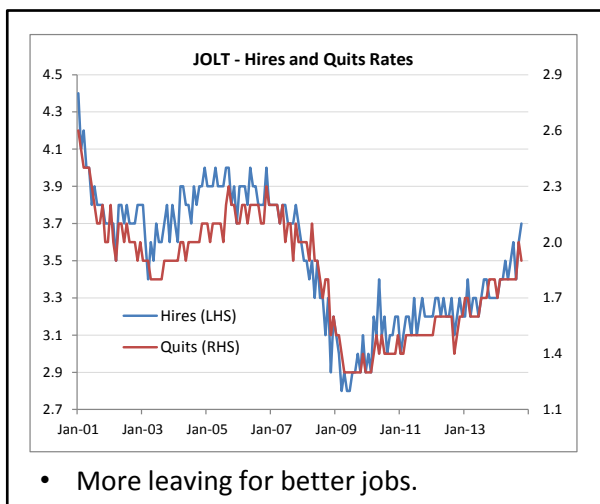
- 2014 was a year of stronger jobs growth, especially in construction, manufacturing, healthcare and government. Fed's Labor Market Conditions Index showing solid and persistent improvement.



Jobs by Age Group 2014				
Age:	Pop	L.Force	Jobs	U-rate
16-24	-0.5%	-0.1%	1.3%	-1.1
25-34	1.3%	1.3%	2.5%	-1.1
35-44	-0.1%	-0.3%	0.8%	-1.1
45-54	-0.8%	-0.4%	0.7%	-1.1
55+	2.8%	2.7%	4.0%	-1.2
Total	0.9%	0.7%	1.9%	-1.1

Jobs by Education 2014				
	LFPR	LF	Jobs	%LF
No HS	1.7	2.5%	3.9%	0.08
HS	-0.6	-3.1%	-1.3%	0.25
Some Coll	-0.9	0.9%	1.2%	0.30
Coll+	-0.6	4.2%	4.7%	0.37

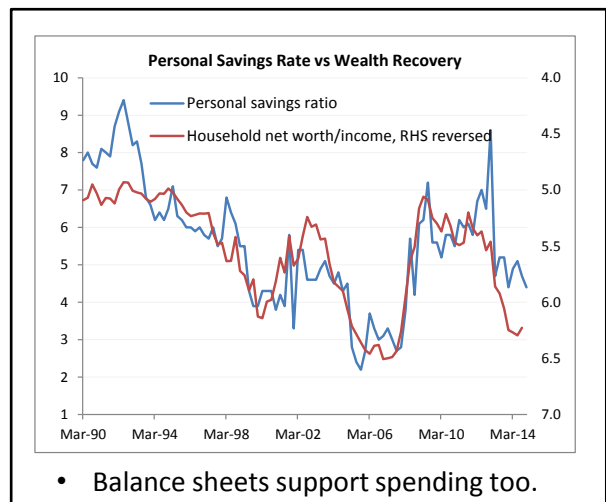
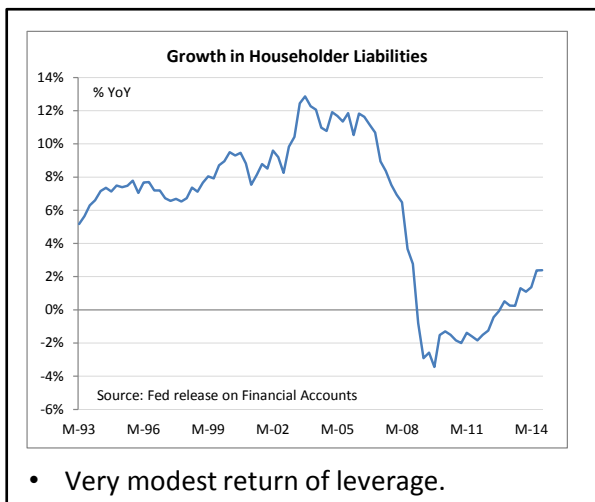
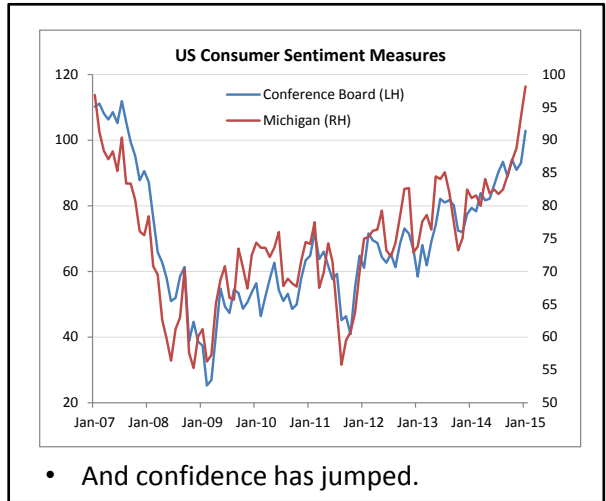
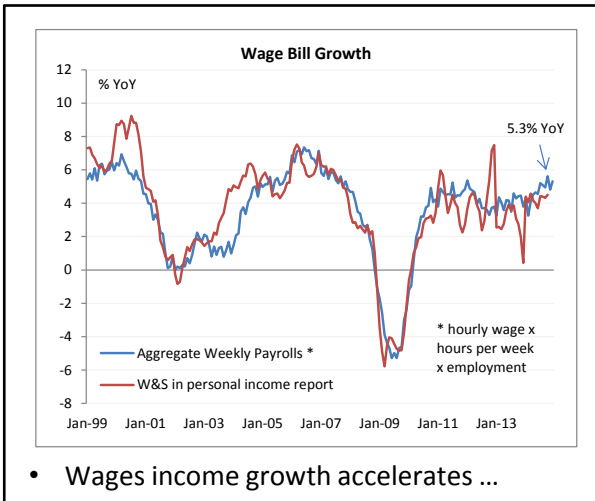
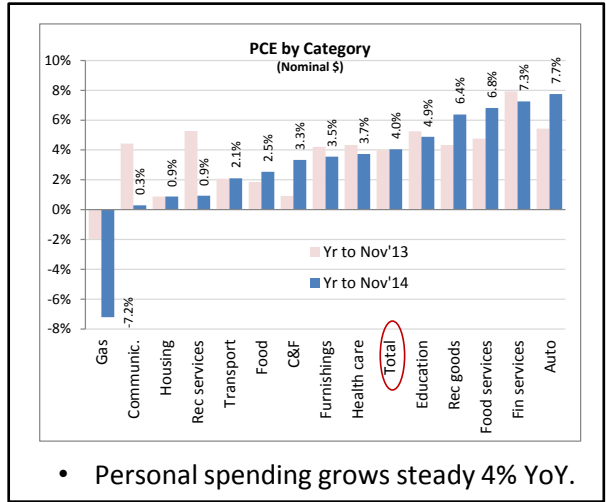
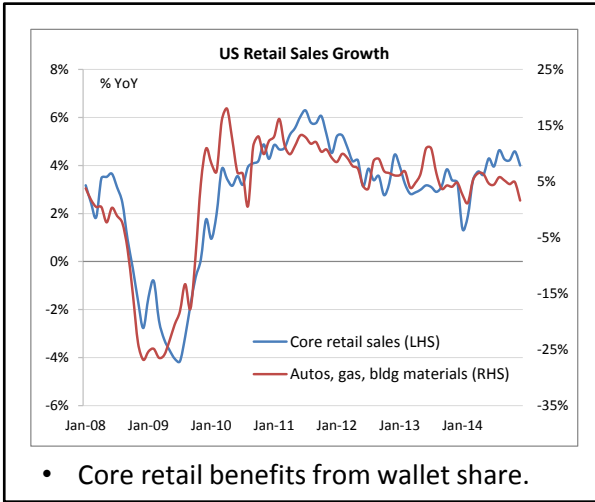
- Jobs growth accelerated in 2014.



HOUSEHOLD SECTOR

SUMMARY

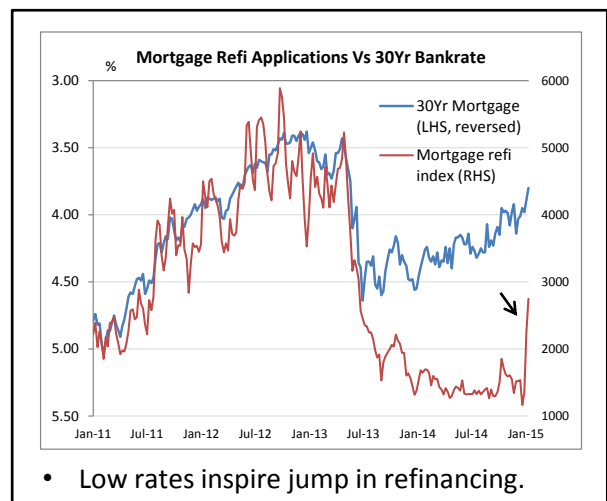
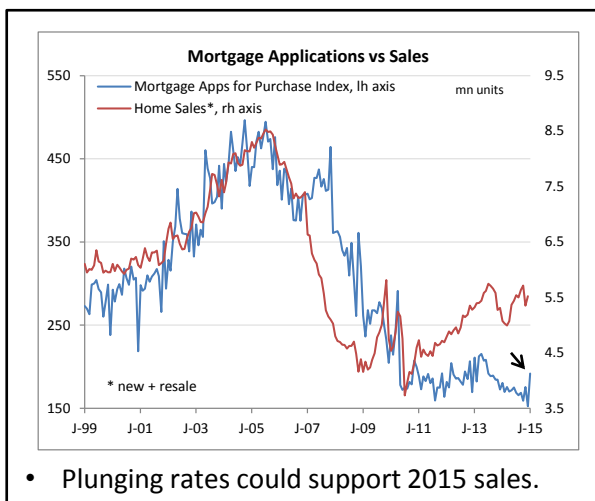
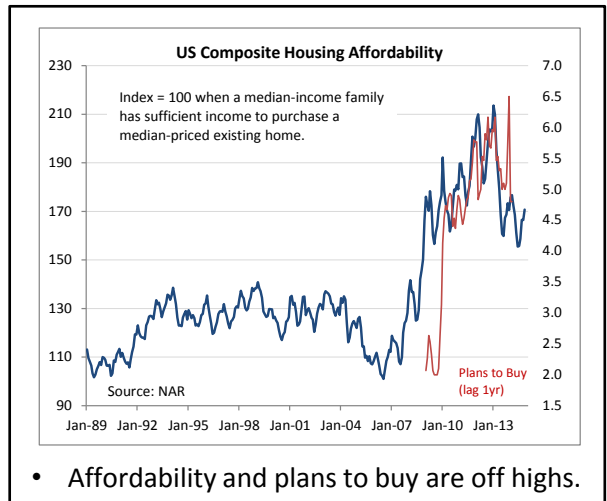
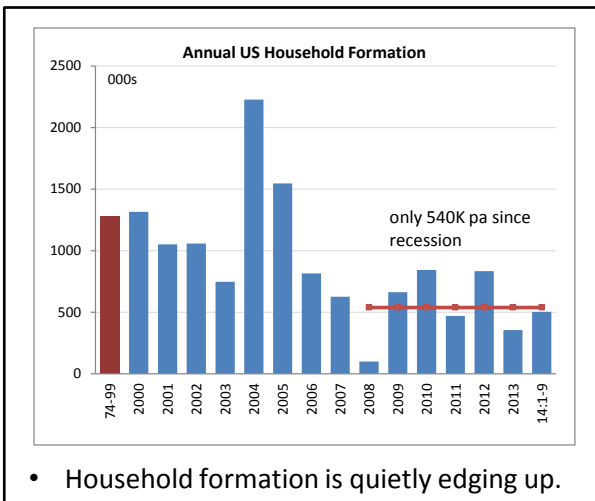
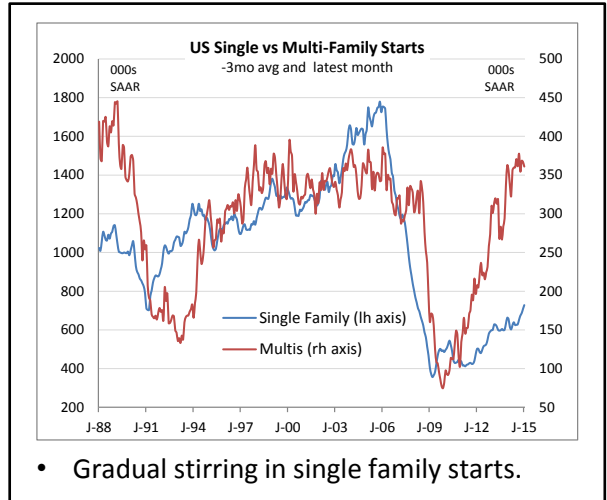
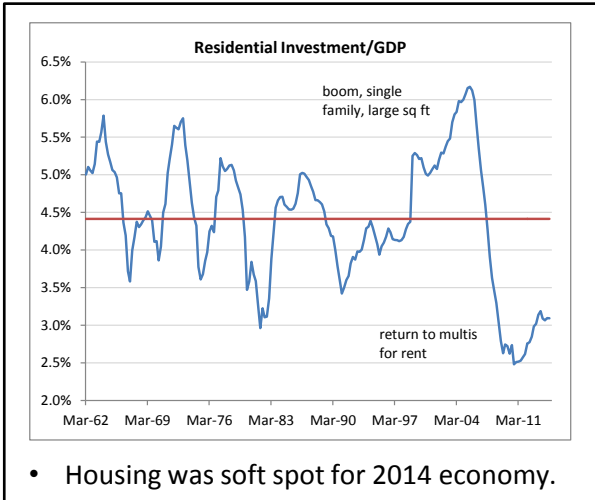
- XXX."



HOUSING

SUMMARY

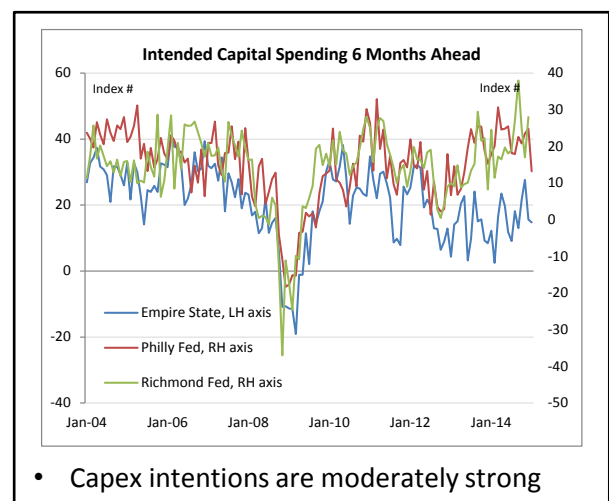
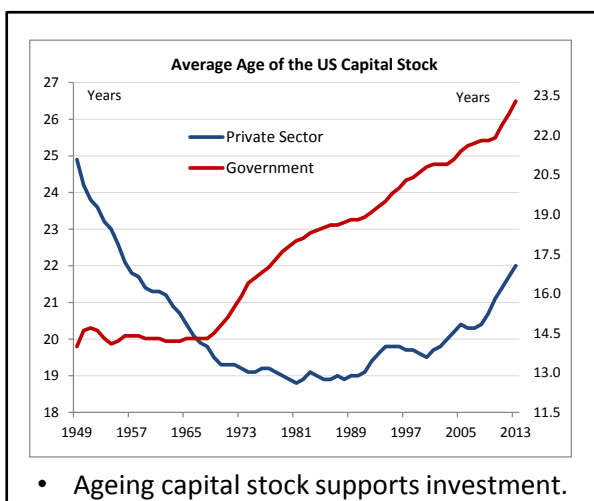
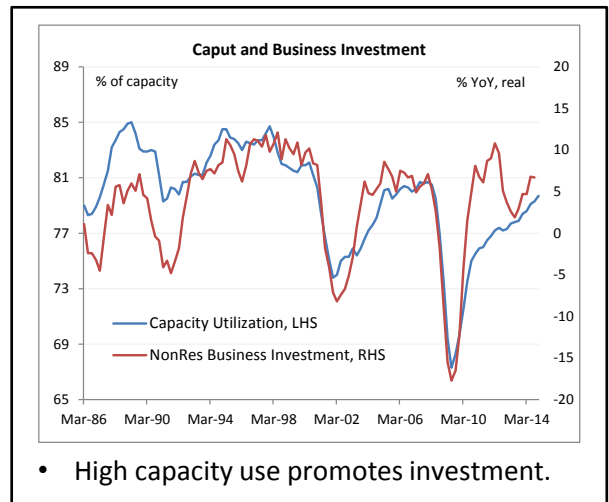
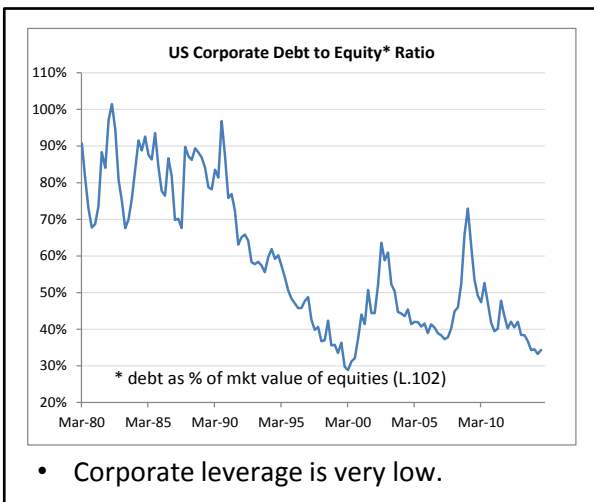
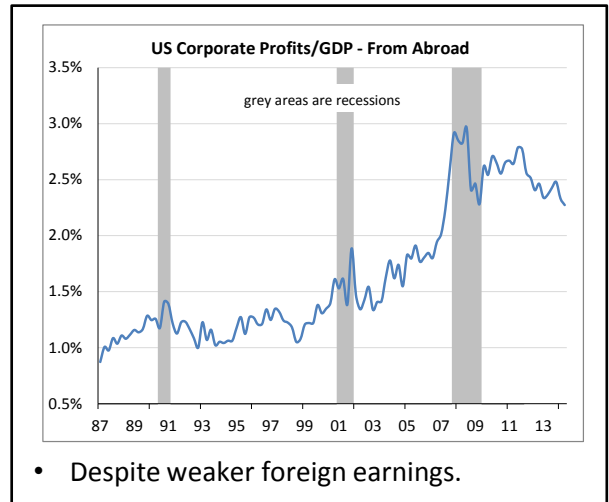
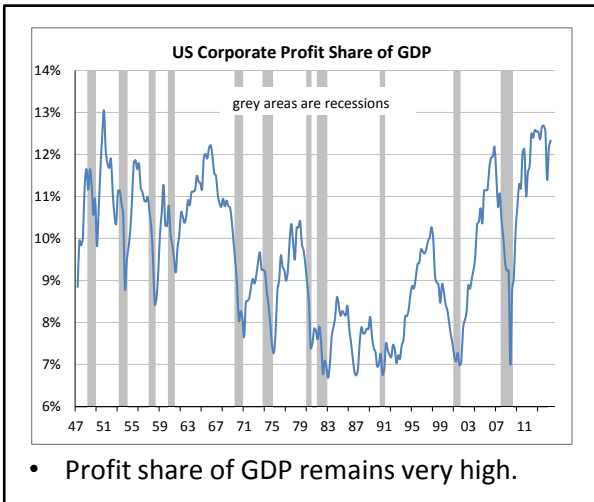
- Household formation gained slightly during 2014 but plans to buy a home cooled off. It is likely that housing activity improves during 2015, but remains underperformer versus prior cycles.



BUSINESS SECTOR

SUMMARY

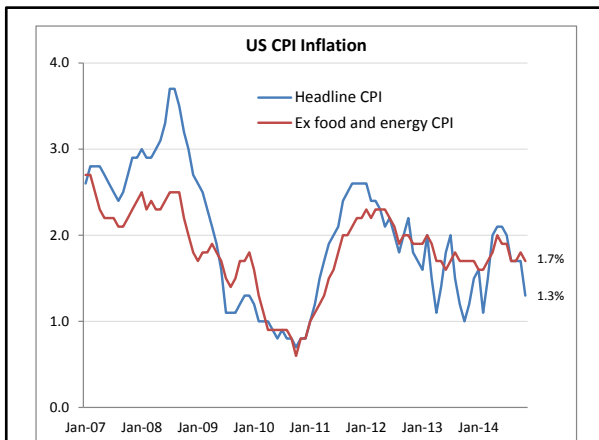
- Strong top line and contained costs have supported corporate sector throughout 2014 but corporates have been cautious in initiating new investments and are still in low-leverage mode.



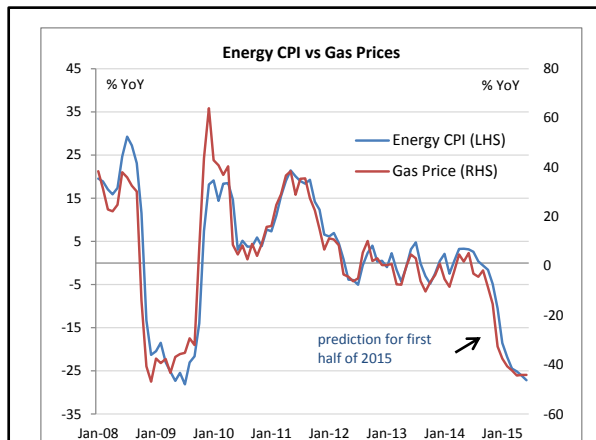
CREDIT AND INFLATION

SUMMARY

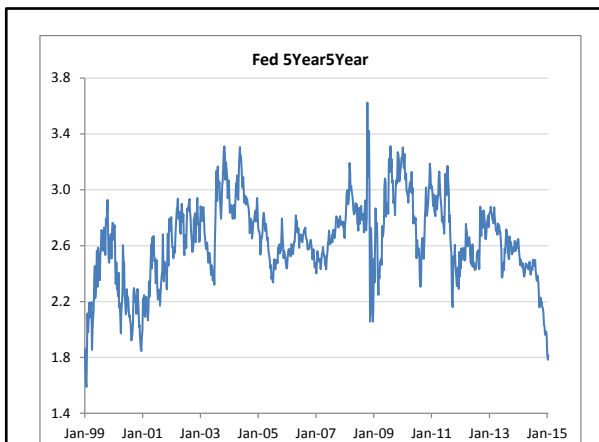
- Inflation will turn negative during 2015 because of plunging gas prices. Moreover, investors' expectations are now that inflation is still well below 2% 5-10 years from now. However, credit growth is accelerating.



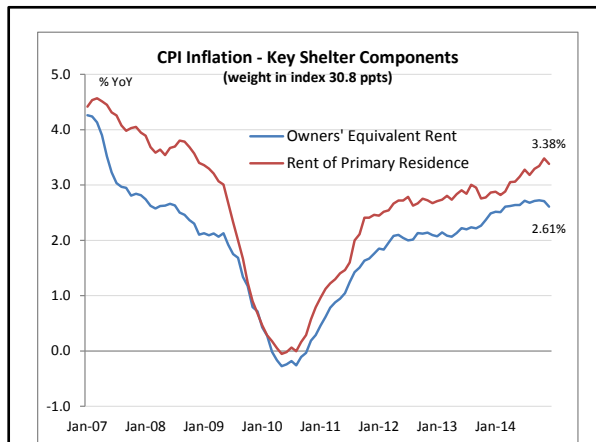
- US CPI inflation is weakening.



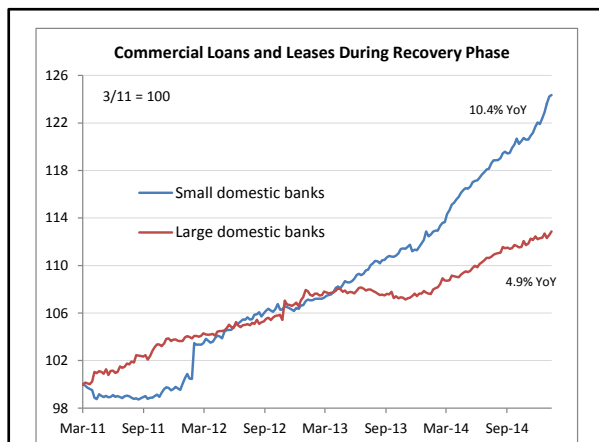
- Plunging gas prices = negative inflation.



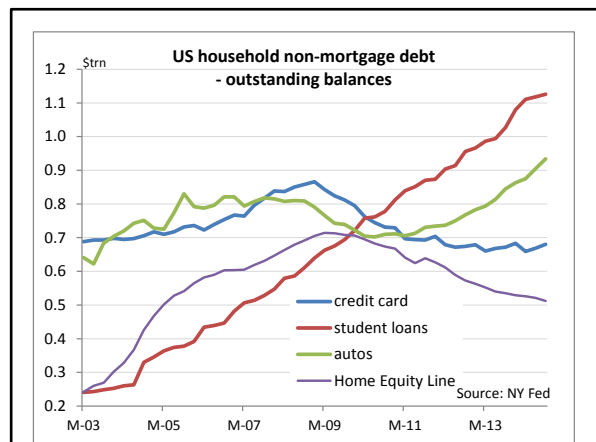
- Investors expect <2% inflation long term.



- Housing one area that inflation still rising.



- Credit growth has improved.

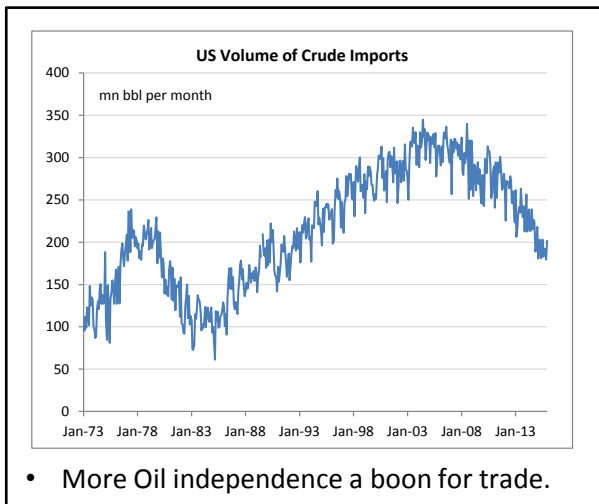


- Now look for households to borrow again.

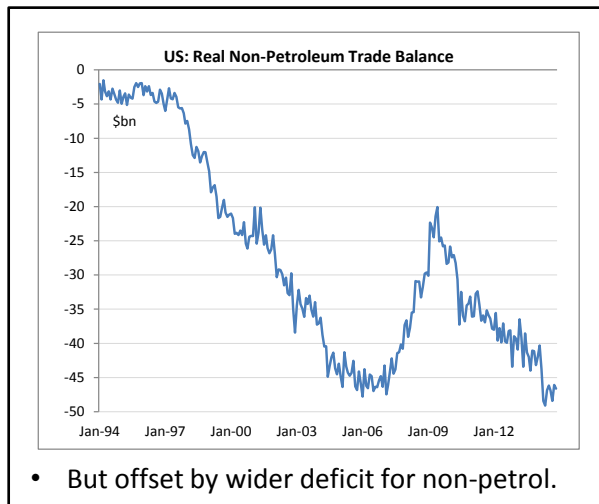
INTERNATIONAL

SUMMARY

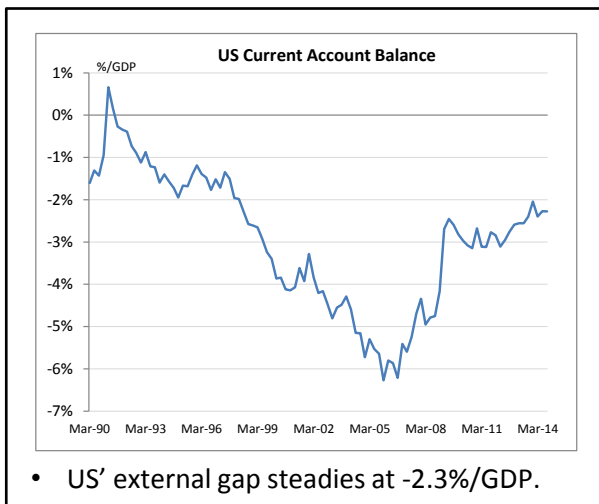
- The US trade gap deficit steadied at 2.3%/GDP as reduced Oil dependence offset by a weaker trade balance in other goods. Japanese and Europe quantitative easing should help all markets but China needs to ease.



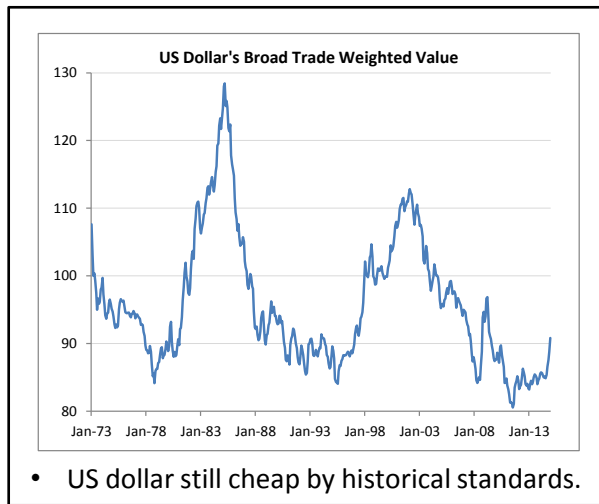
- More Oil independence a boon for trade.



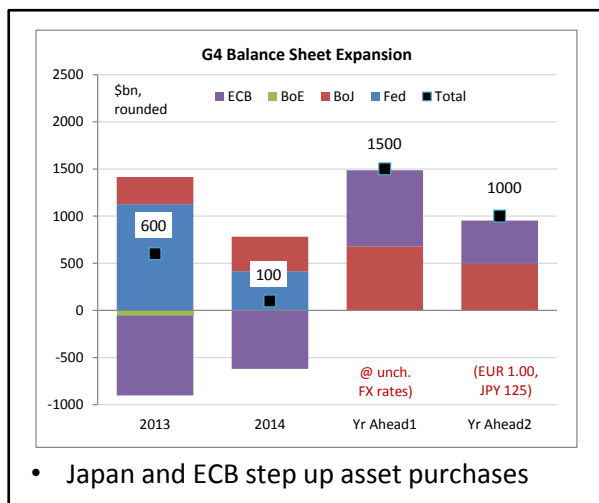
- But offset by wider deficit for non-petrol.



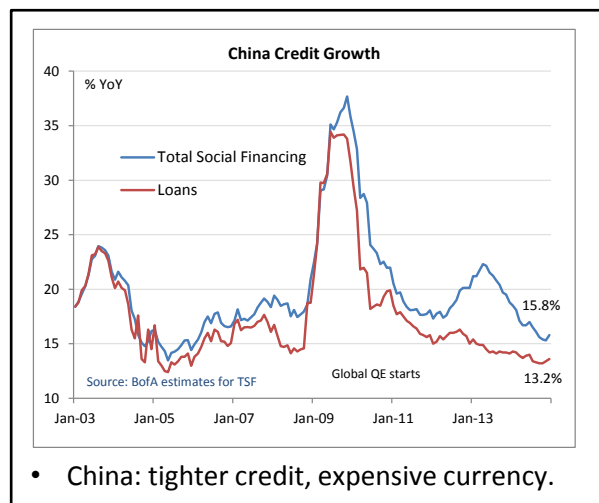
- US' external gap steadies at -2.3%/GDP.



- US dollar still cheap by historical standards.



- Japan and ECB step up asset purchases



- China: tighter credit, expensive currency.

RISK TABLE

SUMMARY

- Risks to asset markets originating domestically are low, although deflation during 2015 might retard business investment. Many of the risks emanate from abroad ... Japan and Europe are struggling to revive growth whilst China monetary conditions are very tight in China, in part due to a very strong currency.

UNITED STATES		10yr avg	Aug	Sep	Oct	Nov	Dec	Trend
Tight labor market causes wage inflation, Fed response								
Wage growth	YoY	2.8	2.5	2.3	2.2	2.2	1.6	
Underemployment	%	12.5	12.0	11.7	11.5	11.4	11.2	
Avail. per opening	Ratio	4.76	3.28	3.33	3.21	3.14	3.04	
Overreaching US economic sectors								
Savings ratio	%	4.8	4.7	4.5	4.6	4.4		
Loans and Leases	YoY	5.3	6.5	6.6	6.5	7.5	7.5	
Federal deficit	\$,12m	-746	-514	-483	-515	-436	-487	
US profit squeeze								
Wage bill	YoY	3.6	5.1	4.9	5.6	4.8	5.3	
Quits	Rate	1.8	1.8	2.0	1.9	1.9		
PPI	YoY	3.1	2.3	2.2	1.7	1.1	-0.4	
US deflation as QE withdrawn								
PCE - services		2.4	2.3	2.2	2.2	2.2		
CPI		2.3	1.7	1.7	1.7	1.3	0.8	
GLOBAL								
Sharp global slowdown								
DM PMI	Lvl	n.a.	56.0	55.6	54.2	53.7	52.6	
EM PMI	Lvl	n.a.	52.4	52.5	51.5	51.2	51.7	
Difference	Lvl	n.a.	3.6	3.1	2.7	2.5	0.9	
Oil collapse (Brent)	Lvl	86.3	103.4	98.6	88.0	79.6	63.3	
Chinese credit event								
China PPI	YoY	2.1	-1.2	-1.8	-2.2	-2.7	-3.3	
Credit Growth	YoY	20.1	16.1	15.6	15.4	15.3	15.8	
Exports	YoY	16.2	9.4	15.3	11.6	4.7	9.7	
Abenomics 'fail'								
Core-core CPI	YoY	-0.4	2.1	2.0	2.1	1.8	1.8	
Real earnings	YoY	-0.6	-3.1	-3.0	-3.0	-2.7		
Real exports	YoY	3.0	-2.3	2.3	4.3	2.2	6.0	
European deflation								
PMI	Lvl	n.a.	52.5	52.0	52.1	51.1	51.4	
Core CPI	YoY	1.4	0.9	0.8	0.7	0.7	0.7	
Loans to NFCs	YoY	n.a.	-2.2	-2.0	-1.8	-1.6	-1.3	