CalPERS

CalPERS Trust Level Review STATE OF THE ECONOMY

Period Ending December 31, 2015

ECONOMIC SUMMARY

US economy softens on capex and trade, China worries increase

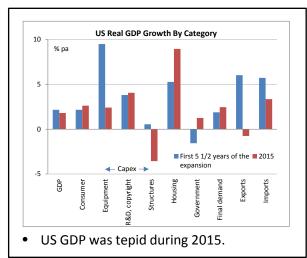
- The US economy grew by a little under 2% during 2015, below the business cycle expansion average.
- In a world of slow labor force growth and low productivity, this was still enough to produce a 0.6 point decline in the unemployment rate (to 5.0%) and an encouraging 1.3 decline in the underemployment rate. Employee compensation also accelerated somewhat to reflect tight labor supply, although a shortage of workers with the right skills also meant that businesses had to restrain their plans.
- The US household sector remains in great shape with low leverage and strong growth of after-inflation disposable income. By and large, though, cautious households have saved rather than spent the windfall benefits from lower prices for gasoline and imported consumer goods.
- Lower Oil prices and higher domestic supply were responsible for an estimated \$150 billion reduction in the US petroleum trade deficit last year. However, the US economy was arguably a net loser from cheaper oil last year due to sharply lower energy sector investment. As time goes on, the net benefits to the US will become more apparent in GDP.
- Housing is a promising driver of future growth based on the improvement in household formation, diminished stock of vacant homes, steady affordability, and elevated plans to buy. However the positive contribution to GDP from housing is now more than offset by the weakening trend in business capex, due in part to the energy and aircraft sectors, spreading later in the year to other sectors.
- Moving into 2016 the wall of worry about asset class returns includes, domestically, how a profits recession
 and less policy certainty in a Presidential election year will affect hiring and business investment.
 Internationally a sharp acceleration of capital outflow from China makes it more difficult for them to maintain
 an accomodative policy stance. The risk in Europe is around whether new governments will reverse some of
 the successful fiscal austerity of the past few years.

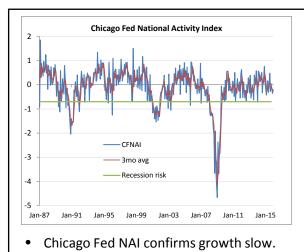
Positive	Same Trend	Negative
- Persistent improvement in US labor market	- Slow but stable US growth	- Weak capex
Underutilized labor and low participation are the only laggards in jobs market strength.	US economy delivered another year of slow growth, circa 2%.	It's been mining and aircraft, may bleed into other sectors this year
- Housing cycle on the uptick	- Benign inflation	- Too tight labor markets
Starts, sales, formation, prices and plans-to-buy improved, while affordability remains OK.	Core services inflation 3% but weak energy, food and core goods keeps Fed on slow path.	Available persons to fill job openings very tight at 2.5 exacerbated by skills mismatch.
- Household incomes and balance sheet		- Profits recession
Strong real disposable income drives risk buffer and a domestic savings pool for asset markets.		Soft top line growth and more challenging costs could weaken hiring.
- Global trade imbalances manageable		- Long term budget outlook
US deficit in 2-3%/GDP range whilst Euro area, Japan and China all at 2-3% surpluses.		CBO report says new President will confront a steep budget blowout after 2017.
		- China
		Aggressive capital leakages and high debt make it difficult for China to right its slowing ship.
		- Other tail risks
		Including US election, political pushback in Europe, Middle East politics and EM transitions.

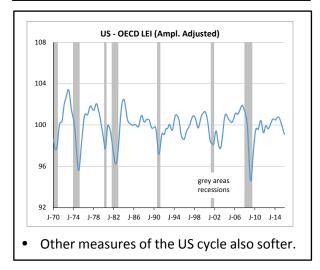
US ECONOMY IN AGGREGATE

SUMMARY

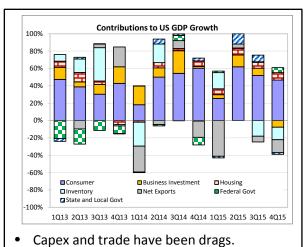
• The US economic expansion slowed during 2015 on the back of weak exports and capex. A cautious consumer and moderate acceleration in housing were insufficient to offset.





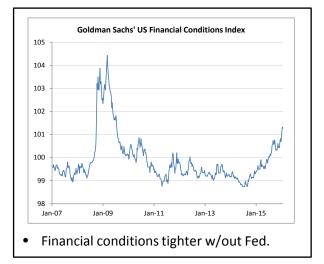


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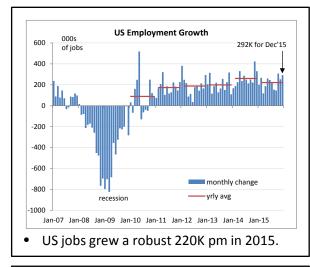
Industrial sector especially soft.

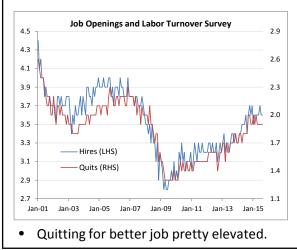


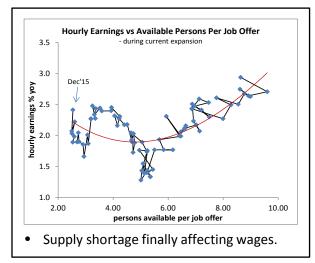
LABOR MARKET

SUMMARY

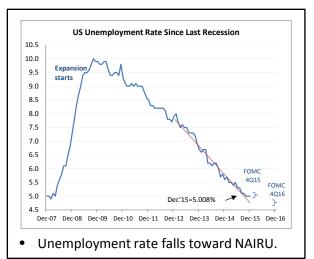
• Labor market is starting to hit supply constraint, so "wages times employment" is still doing well. Still room for improvement in (a) part to full time switch and (b) motivating more potential workers to seek a job.

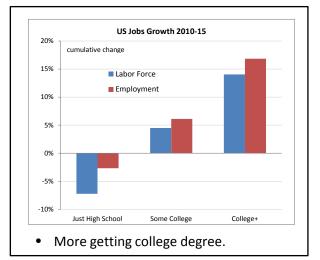


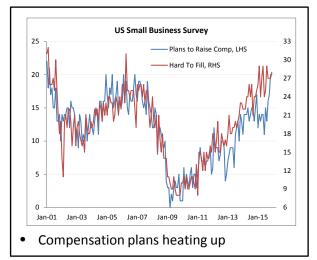








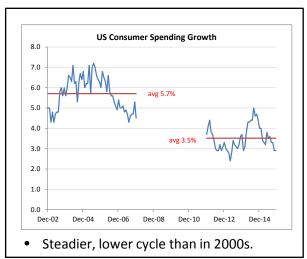


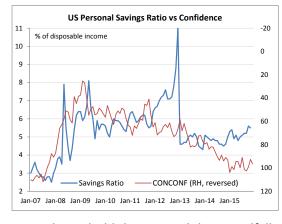


HOUSEHOLD SECTOR

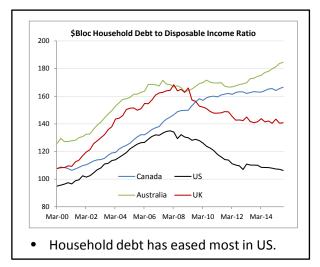
SUMMARY

• 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.

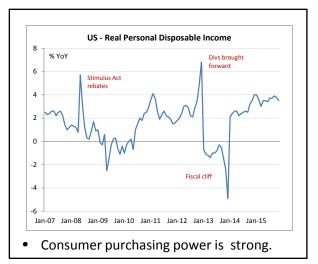


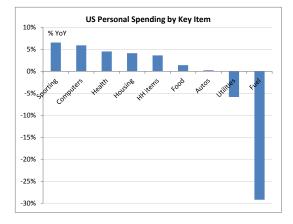


But households have saved their windfalls.

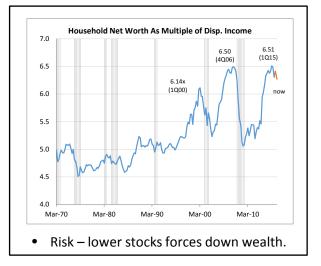








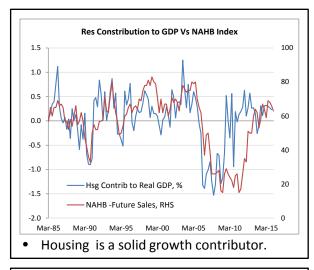
Significant changes in wallet share.

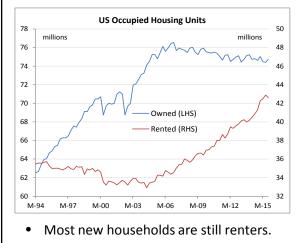


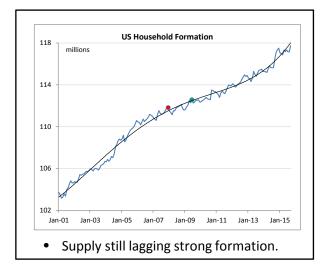
HOUSING

SUMMARY

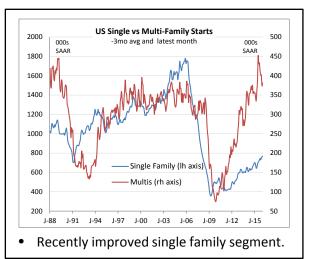
 Fundamentals of the housing market remain promising ... reduced vacancies, willingness to buy and an emergent supply response.

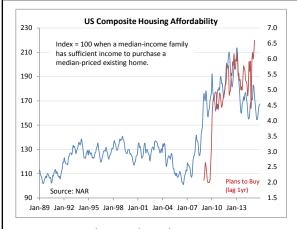




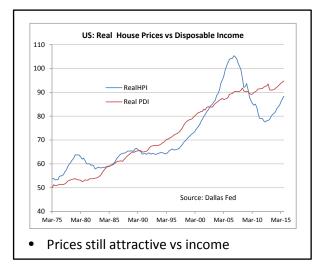


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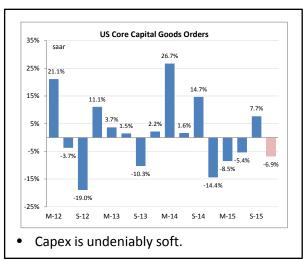
However plans to buy this year are strong.

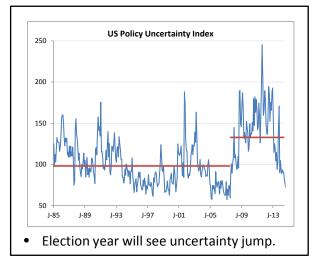


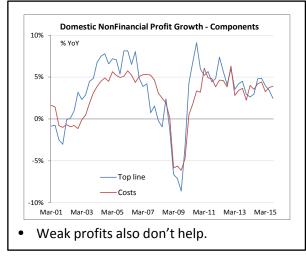
BUSINESS SECTOR

SUMMARY

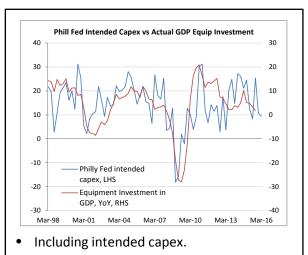
• The business investment share of GDP is still high but the outlook for 2016 is not encouraging ... weak profits, less certainty and higher borrowing (and possibly labor) costs.

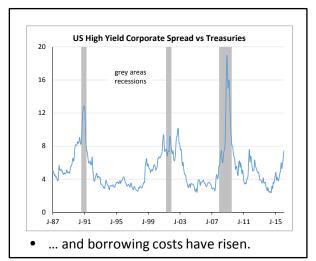


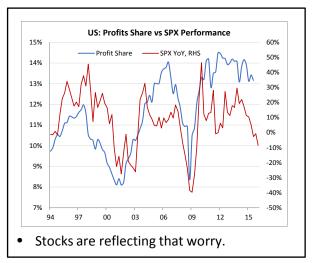




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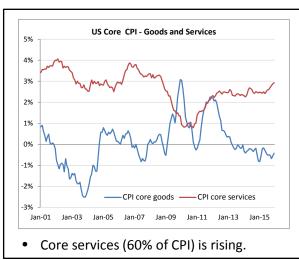


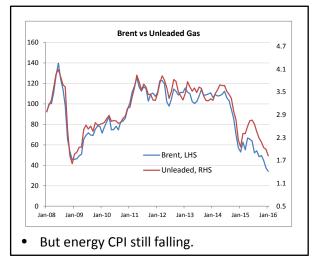


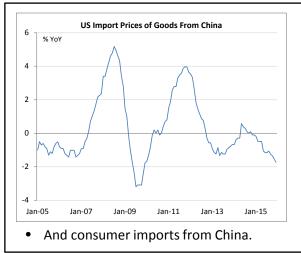
INFLATION

SUMMARY

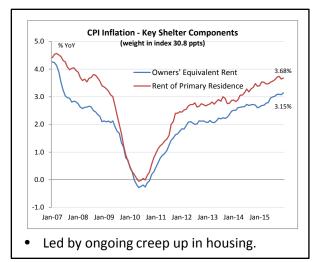
• US CPI inflation is below 1% and could get into the mid 1's by end 2016. But depending on when gas and food prices stop falling, and if and when the dollar stops rising, there is a clear risk that inflation stays below 1%.

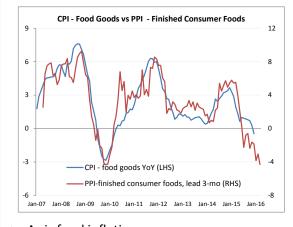




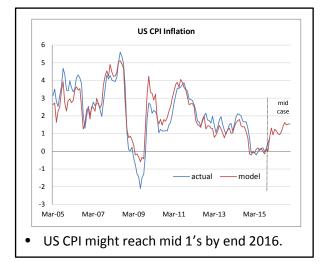


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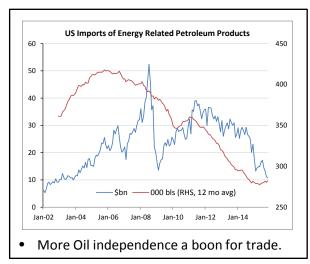
As is food inflation.



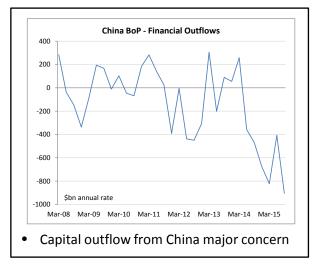
INTERNATIONAL

SUMMARY

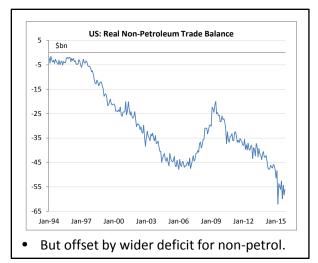
• US oil self sufficiency and high household savings rate have kept the US external deficit manageable ... so far. Any further USD upside may be against EM rather than DM currencies given China's struggles.

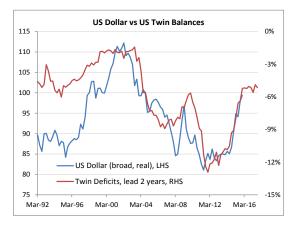




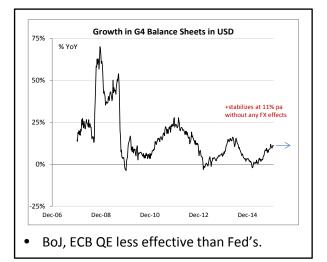


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Could falter if 'twin deficits' were to weaken.



RISK TABLE

SUMMARY

- Whilst the US domestic economy remains well balanced, one worry is the tight labor market, another is a profits recession for US corporates amidst higher borrowing costs and political uncertainty.
- A major China risk is capital flight, proxied here by loss of reserves.

UNITED STATES		10yr avg	Jul	Aug	Sep	Oct	Nov	Dec	Trend
Tight labor market ca	uses w	age inflati	on, Fed res	ponse					
Wage growth	YoY	2.8	1.9	2.0	2.0	2.2	2.1	2.4	
Underemployment	%	11.7	10.4	10.3	10.0	9.8	9.9	9.9	
Avail. per opening	Ratio	4.76	2.53	2.59	2.51	2.61	2.50		
Overreaching US econ	iomic s	ectors							
Savings ratio	%	4.9	5.1	5.2	5.2	5.6	5.5		
Loans and Leases	YoY	4.9	7.4	7.4	7.1	7.5	7.6	7.7	
Federal deficit	\$,12m	-746	-488	-424	-439	-454	-461	-478	
US profit squeeze									
Wage bill	YoY	3.6	4.1	4.1	3.8	4.5	3.9	4.3	
Quits	Rate	1.8	1.9	1.9	1.9	2.0	2.0		
PPI	YoY	1.7	-0.8	-0.8	-1.1	-1.6	-1.1	-1.0	
US slows to 'stall spe	ed'								
Leading index - 6m	saar	0.3	3.7	4.0	3.2	2.8	2.8	1.3	
Chicago Fed NAI	3-mo	-0.37	0.04	0.06	0.04	-0.16	-0.19	-0.24	
Durables orders	YoY	3.2	-4.0	-5.0	-7.2	-1.8	-0.8	-7.7	
GLOBAL									
Sharp global slowdov	wn								
DM PMI	Lvl	n.a.	54.7	55.1	54.0	54.1	54.6	53.8	
EM PMI	Lvl	n.a.	50.1	49.6	48.9	49.7	50.1	49.5	
Difference	Lvl	n.a.	4.6	5.5	5.1	4.4	4.5	4.3	
Chinese credit event									
China PPI	YoY	0.9	-5.4	-5.9	-5.9	-5.9	-5.9	-5.9	
TSF growth	YoY	19.8	12.3	12.4	12.5	12.3	12.2	12.4	
Res floor space sold	YoY	14.8	15.8	17.8	14.2	10.1	7.5	6.0	
Exports	YoY	15.7	-8.3	-5.5	-3.7	-6.9	-6.8	-1.4	
FX Reserves	Ch.	21	-43	-94	-43	11	-87	-108	
Abenomics 'fail'									
Core-core CPI	YoY	-0.4	0.3	0.4	0.6	0.4	0.6	0.6	
Real earnings	YoY	-0.7	0.5	0.1	0.3	0.4	-0.4		
Real exports	YoY	0.4	-0.6	-4.0	-3.8	-4.6	-3.0	-4.4	
European deflation									
PMI	Lvl	n.a.	53.9	54.3	53.6	53.9	54.2	54.3	
Core CPI	YoY	1.3	1.0	0.9	0.9	1.1	0.9	0.9	
M3 money growth	YoY	4.7	6.6	6.0	6.0	6.4	6.4		
, 0			positive		neutral		negative		