The Month Ahead Feb 2016: Prop me with the probabilities.

Risk assets are off to real bad start in 2016 with world equities down -10.3% YTD, the second worst start in 20 years (2009 was the worst with market down -19% during the same period). Commodities continued its multi-year decline down another -11% YTD and even dollar has reversed half of its gains in 2015 down -2.8%. Safe havens in government bonds in the developed markets were up 4-5% across US, Europe and Japan bond market so is gold (+12%)

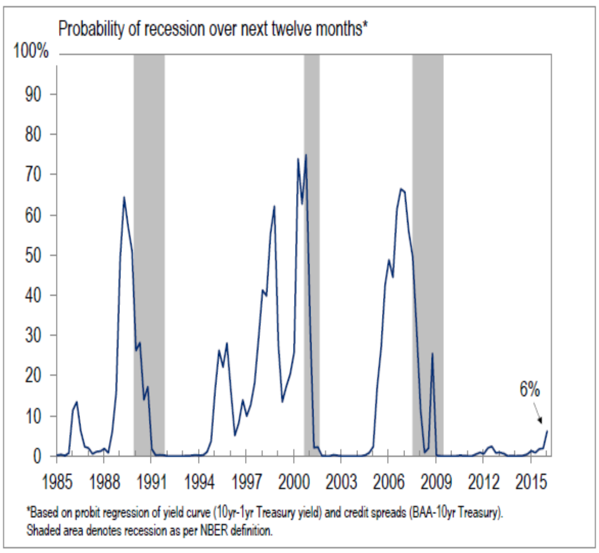
A continuum of late 2015 issues are plaguing market spanning from the fear of an impending recession, the fallout of low oil price, china's moribund economy and equally more frightening its haphazard policy responses and tightening of financial conditions. Add to this litany of woes is market fear that central bankers are running out of monetary tools to engineer more QE.

We will address two key issues: the risk of recession and what's left in the central banks arsenal they can use.

On the former, we have already addressed that in our 2016 strategy piece in which we are unequivocal that headline grabbing talk of recession is misplaced. Looking at consensus forecast of GDP and even veering to look at more simplistic traditional measures like employment, there are no indication we are heading into a recession aside from Russia and Brazil. **We are assuaging investors and standing firm in this view** extending our analysis by looking at statistically tested data that might foretell impending recession. In this process, we stripped off sentiment as it can be a desultory beast of greed and fear and focus on nonchalant hard data. We are quoting several bodies of works from Citibank, JP Morgan and Goldman Sachs.

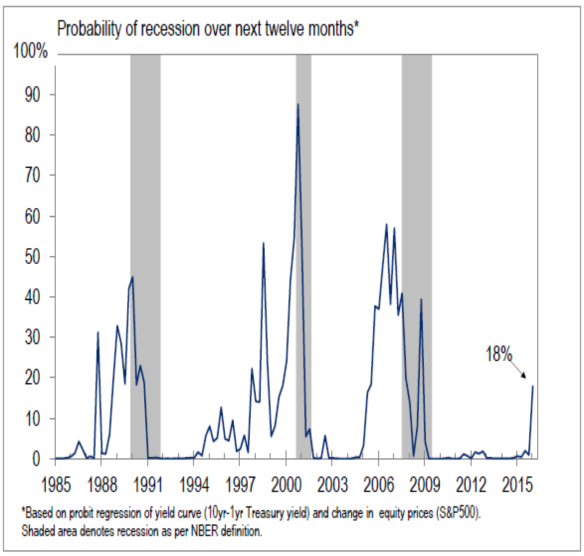
In Citi's analysis, they have incorporated two approaches. The first approach is regressing treasury yield and credit spreads on the assumption that fixed income markets tend to price recession risk ahead of other asset classes. The other approach is to incorporate changes in S&P500 on the notion equity market leads economy 6-9 months ahead. In both of their approaches, the probability of recession in the next 12 months is only 6 and 18% respectively. Even for the higher probability of 18% which they have incorporated the normally more harrying change in stock price, this method have on several occasion produced false positive (ie false alarms).

Citi 6% probability of US recession if based on Fixed Income



Source: Haver and Citi Research

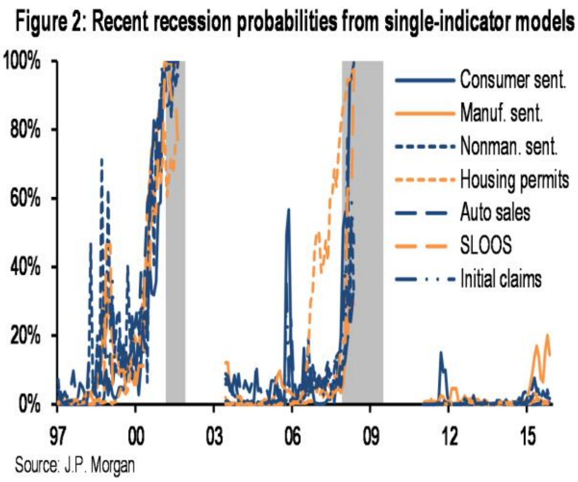
Citi 8% probability for US if include equity markets



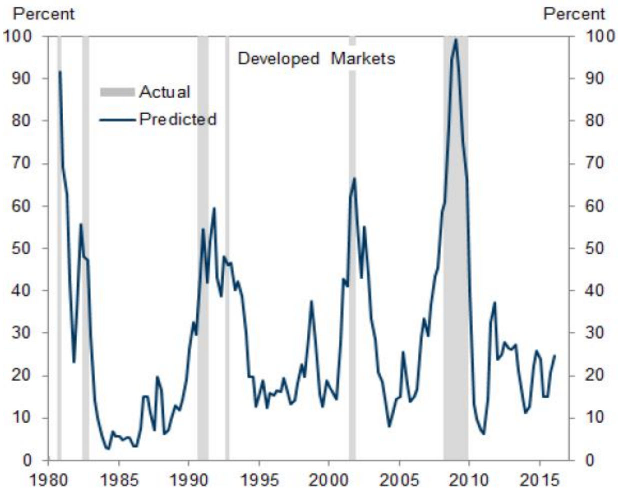
Source: Haver and Citi Research

The other approach from JPM uses a larger data sets including consumer and manufacturing sentiments, housing and auto sales, job market and lending conditions. Their analysis shows the probability is below 23%. Goldman Sachs taken their model even further looking at cross country rather than a single country incorporating several variables growth, output gap, yield curve, equity and housing markets and growth in credit. Recession risk for DM as a whole is low even two years out but risk are high for Japan, Switzerland, Canada, and Norway. For the latter we can understand given its commodities driven while Japan's inescapable demographics supersede any quick fixes from monetary policy unless structural reforms continue.

JPM US recession risk < 25%



GS DM's recession risk rising <25% in a year out.



GS cross-country recession risk analysis

Estimated Recession Risk Over Next Four Quarters

	Latest Recession Probabilities					
	1Q		4Q		8Q	
	Current	Average*	Current	Average*	Current	Average*
Australia	4	14	13	23	21	35
Canada	55	19	84	35	93	58
Switzerland	76	28	90	45	95	62
Denmark	2	24	9	40	16	55
Euro area	7	19	24	33	38	49
Japan	8	22	42	39	62	57
Korea	1	8	8	12	18	18
Norway	50	14	81	33	88	48
Sweden	1	18	6	25	14	35
UK	1	14	3	19	3	26
US	7	15	18	24	23	34
DM	9	17	25	28	34	41

* 1980-2015

We ran another countercheck to our sanguine view of the economy by updating our recession checklist. We are again comforted that only 5 of the 18 signals are indicating recessionary risk. There is no froth in equity market valuation though undoubtedly markets aren't cheap but are just shy of fully valued. Sentiment indicators are not complacent while there are few signs of corporate excessive behaviour aside from higher M&A activity. The clearer red flags are elevated risk premias accorded in the credit markets but as we have quoted the above work by Citibank, the signals from credit markets are indicating low probabilities of an impending recession.

	Mar-00	Oct-07	Recent Peak April	Now
Global Equity Valuations				
Trailing PE	33	17	19	17
Fwd PE	24	14	16	14
DY	1.3	2.1	2.4	2.8
CAPE	48	30	22	18
Global Equity Risk Premium	1.0%	3.3%	5.2%	5.3%
US Yield Curve (10Y minus 2Y)	-0.5	0	1.5	1.2
Sentiment				
Global Analyst Bullishness (std dev)	1.7	1.0	-0.6	-0.1
US Panic Euphoria Model	1.09	0.42	0.0	-0.49
Global Equity Fund Flows Previous 12m*	$300bn	$50bn	$100bn	$55bn
Corporate Behaviour				
Global Capex Growth (YoY)	8% (1999)	11% (2007)	2% (2014)	-2% (2015)
M&A (Previous 6m as % of Mkt cap)	6.1%	4.2%	3.1%	4.4%
IPOs (Previous 12m as % of DM Mkt cap)	0.70%	0.40%	0.31%	0.29%
Profitability				
Global RoE	12.2%	16.1%	11.6%	11.2%
Global EPS Growth, Previous 12m change (peak to trough)	14% (-38%)	14% (-57%)	2%	-6%
Balance sheets / credit markets				
Asset/Equity (US Financials)	16x	16x	10x	10x
Net Debt/EBITDA (US ex Fins)	1.8x	1.4x	1.4x	1.5x
US HY Bond Spread	600bp	600bp	470bp	780bp
US IG Bond Spread	175bp	175bp	120bp	200bp
# of sell signals	17.5/18	13/18	4.5/18	5/18
MSCI AC World Peak to Trough Fall	-51%	-56%	-17%	?

Source: Citi Research. *US data used before 2004.

If we revert back to our conventional way of assessing economic momentum by marking incoming data with a nowcaster model, latest data continues to point 2.1% GDP print for 1Q16. Jan global PMI releases show little change in output indicators, some improvement in new orders and improvement in employment outlook. None of them are below 50 level which will indicate negative growth. Further breakdown of manufacturing and services PMIs confirm a healthy global environment.

J.P. Morgan global PMI summary

		Sep	Oct	Nov	Dec	Jan
Output	Total	52.7	53.1	53.6	52.7	**52.5**
	Manufacturing	50.5	51.6	52.2	51.5	**51.5**
	Services	53.3	53.5	53.9	52.9	**52.8**
New orders	Total	52.9	53.0	53.5	52.3	**52.5**
	Manufacturing	50.9	51.7	51.2	50.8	**51.4**
	Services	53.4	53.3	54.0	52.7	**52.7**
Employment	Total	51.9	51.3	51.6	51.8	**52.1**
	Manufacturing	49.5	50.5	50.4	50.6	**50.4**
	Services	52.5	51.5	51.9	52.1	**52.5**

Source: J.P. Morgan, Markit

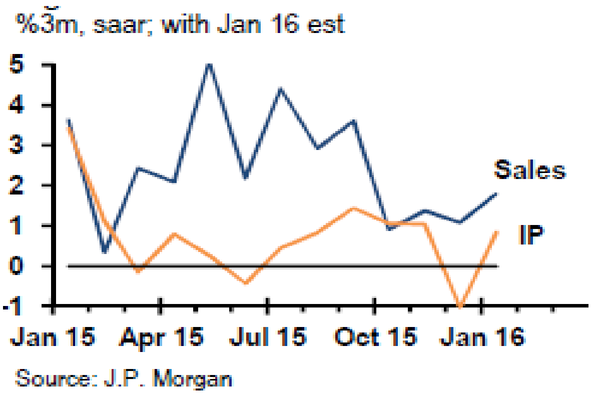
J.P. Morgan global PMI summary

	Oct	Nov	Dec	Jan
All-industry	**53.1**	**53.6**	**52.7**	**52.5**
Manufacturing	**51.6**	**52.2**	**51.5**	**51.5**
Consumer goods	53.9	53.1	52.8	53.7
Investment goods	50.4	53.3	51.7	51.5
Intermediate goods	50.5	51.0	50.5	50.0
Services	**53.5**	**53.9**	**52.9**	**52.8**
Consumer	54.4	53.0	49.4	50.7
Business	53.0	53.6	53.7	53.2
Financial	54.0	55.9	54.1	53.8

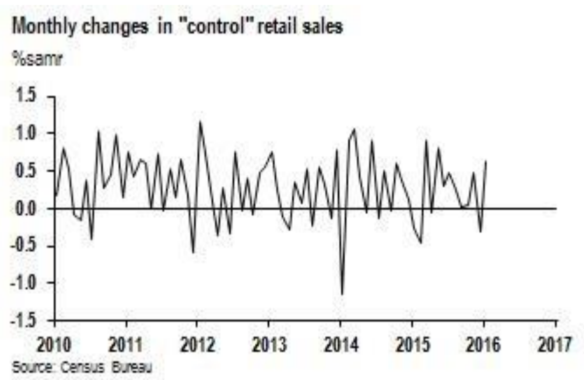
Source. J.P. Morgan, Markit

In fact, this week release of Germany 4Q15 GDP along with rest of Europe was comforting as most of them showed either improvement or no further deterioration on qoq basis. Global retail sales remain resolutely strong with 4Q15 retail sales up a solid 3% annualised gain, in line with previous three quarters. Latest US Jan retail sales reinforces this message that a healed employment market and incipient wage increase in DM, the growth in EM middle-income story and the oil dividends are secular trends that will underpin strong retail sales. US core retail sales in Jan were up 0.6%, the largest monthly gain since last spring, and in line with our thoughts that the decline in Dec data was due to weather aberration. Real consumer spending is up 0.4% therefore tracking a annualised gain of 3.1%. **What recession? One should really be asking.**

DM retail sales remains strong, IP should rebound



US core control retail sales rebounded in Jan



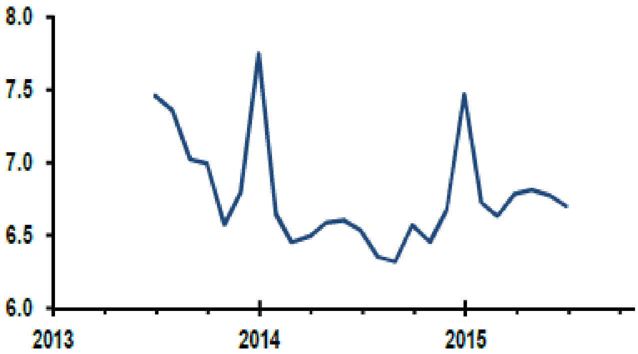
The second issue is central bankers in DM are hamstrung in their monetary policy arsenal. The partial answer to that is of course another acronym. **Welcoming "NIRP" – Negative Interest Rate Policy**. Central banks can deliver further QE if their economies are at risk of faltering by taking steps to decisively break the zero interest rate bound by pushing bank deposit rates into negative territory. Contrary to concerns that a NIRP policy could hurt banks and lead to depositors hoarding physical case, we already have seen NIRP deployed first by Switzerland, Denmark, Sweden, followed up by ECB and more recently BOJ, the tiered deposit systems and other accompanying tools would allow for considerably lower policy rates without undue pressure on bank profitability or creating a big incentive to move into cash.

Banks hold reserves at the central bank, either to meet legal requirements or to settle interbank transactions. In normal times the rate at which the central bank supplies these reserves determines money market interest rates. Currently there are excess reserves in the system, due to QE, FX intervention and central bank loans to banks. In this environment, money market interest rates are determined by the rate at which these excess reserves are remunerated. When the central bank wants money market interest rates to go negative, it will charge banks for excess reserves. This may have an impact on bank profitability, which increases when either the charge goes up or the volume of excess reserves increases. One way of limiting the impact on bank profitability is to tier the reserve regime, with different charging or remuneration rates on different tiers. The central bank ensures that enough reserves are in the tier with the lowest marginal policy rate in order to ensure that money market interest rates are as low as possible. Anything beyond this requirement will be "penalized" or rather encouraged to seek for a better avenue to be deployed via actual lending to the real economy etc. This can be done through directed lending schemes implemented by the central banks independently or in conjunction with the current government policy initiatives.

The experience in Switzerland and Denmark have shown the first two concerns about bank profitability and cash hoarding are allayed with no materials changes in cash holding in the system. The secondary objective of lowering cost of funds and therefore improving financial conditions were so achieved.

Figure 5: Bank holdings of notes and coin - Switzerland

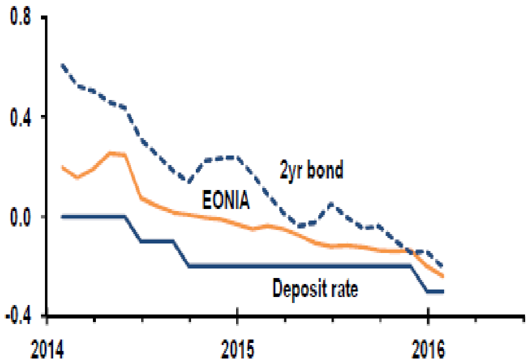
Chf bn, data on a consistent basis only available from mid 2013 onward



Source: SNB

Figure 3: Transmission of policy to wholesale rates in the Euro area

%



Source: ECB

The primary objective of NIRP is to motivate banks/financial institutions to find higher yielding opportunities for idle cash and to prompt corporates and individuals to borrow when they have viable investment opportunities. The feedback loop from this credit creation is better growth. We reserve judgement on the efficacy of NIRP for now. However, BOJ recent announcement to go NIRP has undeniably moved rates lower across the globe. Markets are starting to anticipate other central bankers could also move into this new regime. I am sure my children in 10-15 years time will be studying these unorthodox measures in their business/history classes. For now, we practitioners will have to simply observe and market to market the efficacy of such efforts.

DM 10 years Treasury yields

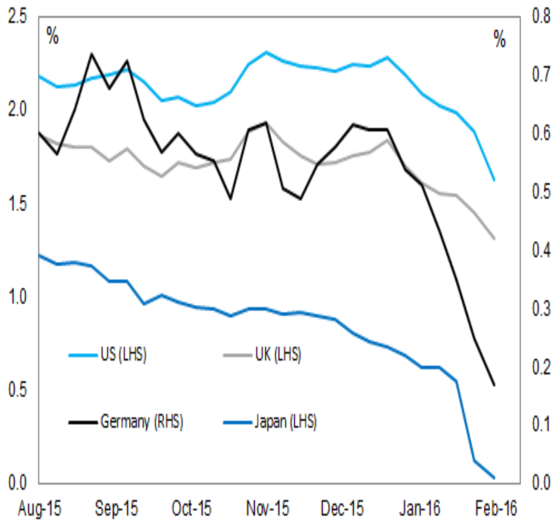


Table 2: How low can negative rates go?

Level of floor policy rate consistent with annual costs equal to 0.03% of total assets

		Under existing reserve regime	With tiered reserves, 25% of reserve stock subject to negative rate	With tiered reserves, 2% of GDP at negative rate
Euro Area	Now	-1.36	-4.64	-4.52
	After planned QE	-0.58	-2.15	-4.52
Japan	Now	-3.45	-0.60	-3.45
	After planned QE	-0.20	-0.35	-3.45
US		-0.20	-0.78	-1.30
UK		-0.35	-1.38	-2.69
Sweden	Now	-1.25	-5.00	-3.27
	After planned QE	-0.96	-3.84	-3.27

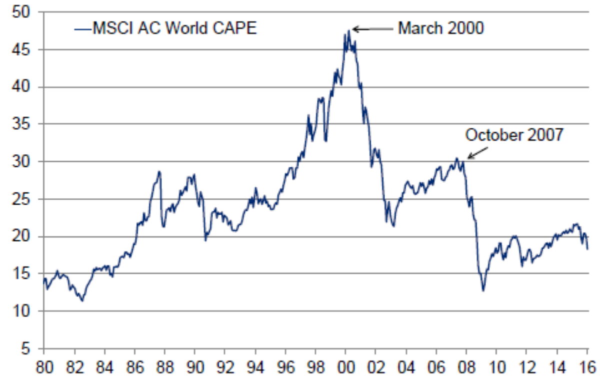
Notes: After planned QE refers to asset purchase schemes as currently announced. In the case of Japan, we refer to the position likely at end 2017 given purchases at Y80tn per annum until then, with no change in the reserve exemption from negative rates.

Source: J. P. Morgan

In the meanwhile, it is wise to acknowledge the adage "markets can stay irrational longer than one can stay liquid". Let's look at how irrational markets are.

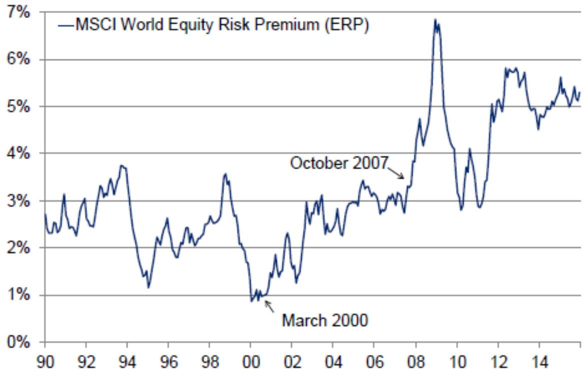
1. Equity risk premium is at such elevated high while valuation on a cyclically adjusted PE isn't.

Valuations are no where crazy



Source: Citi Research, Datastream *MSCI World data used before 2005

But risk aversion is as if we are doomed.



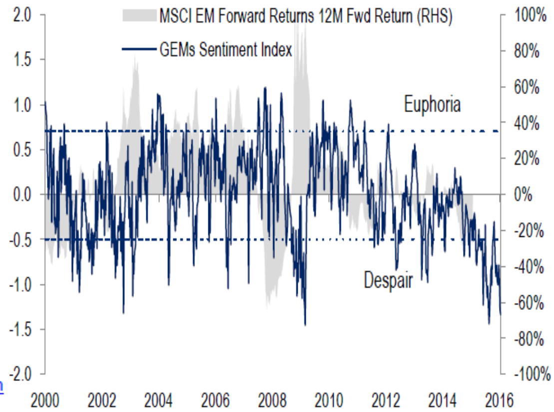
Source: Citi Research, Datastream

2. Panic in the Main Street and Peking Street just gotten worse since we last wrote end January. In fact, **GEM sentiment indictor is -1.34 close to the GFC low of -1.5. When sentiment indicator of -1.0 to -1.5, the probability of positive returns are 100% in 12months time!** Asia sentiment index is now -1.31, which saw the sharpest decline amongst all EM, and its low was -1.60 during GFC.

US in Panic

Source: Citi Research. For more details: US Equity Strategy- PULSE Monitor: Deep in Panic With an Even Better Valuation

EM even worse



Fortune favours the brave and maybe the slightly inebriate: Huat ah!

Figure 3. Returns Over Different Ranges of GEMS Sentiment Index

Range of Sentiment	Fwd 12M return: Data with +ve return	-ve return	% with +ve return	-ve return	Fwd 6M return: Data with +ve return	-ve return	% with +ve return	-ve return
-1.5~-1.0	11	0	100.0%	0.0%	10	2	83.3%	16.7%
-1.0~-0.5	67	23	74.4%	25.6%	65	43	60.2%	39.8%
-0.5~0.0	148	114	56.5%	43.5%	150	119	55.8%	44.2%
0.0~0.5	166	111	59.9%	40.1%	159	118	57.4%	42.6%
0.5~1.0	80	50	61.5%	38.5%	65	65	50.0%	50.0%
1.0~1.5	7	9	43.8%	56.3%	4	12	25.0%	75.0%

Source: Citi Research

Figure 8. Fwd 12M and 6M Returns Over Different Ranges of Asia Sentiment Index

Range of Sentiment	Fwd 12M return: Data with +ve return	-ve return	% with +ve return	-ve return	Fwd 6M return: Data with +ve return	-ve return	% with +ve return	-ve return
-1.5~-1.0	10	1	90.9%	9.1%	9	4	69.2%	30.8%
-1.0~-0.5	86	10	89.6%	10.4%	71	41	63.4%	36.6%
-0.5~0.0	178	38	82.4%	17.6%	172	101	63.0%	37.0%
0.0~0.5	177	45	79.7%	20.3%	166	102	61.9%	38.1%
0.5~1.0	68	33	67.3%	32.7%	63	58	52.1%	47.9%
1.0~1.5	8	14	36.4%	63.6%	2	22	8.3%	91.7%

Source: Citi Research

<u>Asset Allocation Strategy:</u>

As a firm, we do not believe an impending recession within the next 6 even 12 months is upon us. The market has over-reacted and we will be seizing this opportunity to add more risky assets.

Equities: Neutral (Europe and Japan – Overweight, US – Neutral and Asia/EM – underweight)

Over the past week, we have added call options on SPX and NKY as a safer way to deploy the above views. We have also added bombed out oil majors. Going forward, we intend to also reduce our index hedges against our active managers as we market to market economic developments and sentiment. But we certainly feel we are at the precipice of a market capitulation, the right kind of capitulation of course.

Bonds :. Overweight (no change)

Over the course of next 2 quarters, we would like to increase our DM government holdings as we believe the case of NIRP becomes more plausible for the likes of ECB and even the US. In the US, a variation could be reducing the OEIR rate bank earns now when parking this excess cash with the Fed.

In the near term, the capital structure trades have been penalised unduly and we intend to add more with our active manager.

Commodities: Underweight no change.

FX: Contrarian views long EUR and YEN but consensus short CNY(H)/USD

Our contrarian call to be long EUR and YEN proved to be the best idea YTD up 3.6% and 6.2% respectively.

Alternatives : Increasing for non-correlated to market returns

We are looking to add Quantitative managers that have very low correlation to both stocks and bonds and would begin allocations within the quarter.

Cash: Reducing cash.

Featured Picture/Quote:

Just in case you think that stock market are great predictors of recession because it is participants are the smartest people in the world….

“The equity market has predicted nine of the last five recessions” Paul Samuelson.

And to our fixed income investors readers, sad to tell you, you aint any better. 8 out of five recessions.

“Truth is that risk asset investors are just a bunch of fear and greedy noobs.” Edward Lim