SIERRA

SHARD FUND

A JOURNEY ACROSS FINANCIAL MARKETS

January / February *2016 | Issue 1*

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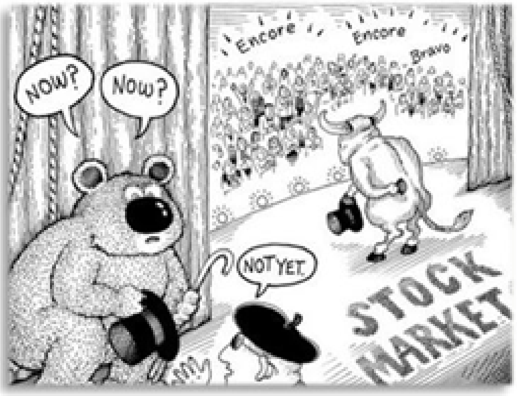
Are you puzzled?



"Nobody should be puzzled as to whether a market is a bull or a bear market after it fairly starts. The trend is evident to a man who has an open mind and reasonably clear sight, for it is never wise for a speculator to fit his facts to his theories. Such a man will, or ought to, know whether it is a bull or a bear market, and if he knows that he knows whether to buy or to sell. It is therefore at the very inception of the movement that a man needs to know whether to buy or to sell." – Jesse Livermore 1877-1940

Hello and welcome to the most exciting year in financial markets in quite some time. If you don't know us, we are a group that trades real money and discusses markets openly in monthly (used to be weekly) publications i.e. staying accountable while keeping score. For those of you that know us, we are sorry we stayed in the dark for a while but sometimes change is necessary to move forward. For this and future issues I will introduce a fictional character, a narrator of sorts, who will be presenting our work. Borrowed by Nassim Taleb, enter the practitioner of uncertainty, the young gun who is relentlessly trying to make sense of what is going on out there and profit from it. Talk is cheap, thus most of what he does has to transform into a tangible idea or action. Of course, nothing he writes is or should be taken as a recommendation in any way. It's just personal views and reflections.

So (going into character), for the first issue of 2016 I feel responsible to address the elephant in the room by asking you "Are you puzzled?" Actually, I am asking you and myself, because it is essential to understand the importance of the quote next to the cartoon. Right now we are at a tipping point (at least it feels like that) and hence our thoughts must be clear and concise. Writing this hopefully informs you as to what has been happening around the world and what I think might happen, while it also allows me to step out of my body and mind and read the full narrative I have managed to construct. Does it make sense? What assumptions have I made? What are the flaws in my thinking? If you think you have something to add after reading this, please get in touch. This is a sharing exercise and I've gone through the research of many people out there to try and understand what is going on and write this issue.

So, January and February are over, which means most people will stop pretending their New Year's resolutions meant anything. As for financial markets, the score is clear, it was the worst ever (like forever) first week for the S&P 500 (-6%), closing January at -5.1% and currently (29 Feb close) being at -5.5% YTD and -9.5% from its all-time high at the end of May 2015. The faith of other stock indices was much worse and even the bounce at the second half of February can't mask that. The ones listed in the table and many more have already gone into bear market territory with more than 20% drawdowns. Meanwhile, bonds almighty keep grinding higher despite the fact the Fed raised interest rates in middle of December. Don't you find this interesting? One does not have to be a bond trader/strategist to know that if a central bank raises the target interest rate, then all other rates should (in theory) follow. It sounds logical, yet from mid-December until now (29 Feb close) the 10 year treasury yield has actually

	Indexes	Since Peak	YTD
ASIA	Nikkei 225	-23.5%	-15.7%
	Hang Seng	-33.2%	-12.8%
	S&P/ASX 200	-18.6%	-8.2%
EUROPE	DAX	-24.4%	-11.7%
	CAC 40	-17.5%	-6.9%
	IBEX 35	-28.5%	-12.3%
	FTSE MIB	-27.8%	-18.0%
	FTSE 100	-14.9%	-2.5%
USA	Dow Jones	-9.3%	-6.2%
	S&P500	-9.5%	-5.5%
	Nasdaq	-19.0%	-10.0%
	Russell 2000	-20.0%	-9.0%

* as of 29 Feb close

dropped by almost 60 bps (basis points) from 2.33% to 1.74%, with an intraday low of 1.53% on 11 Feb. Puzzling, right? Not for the Chief Economist of (the) Goldman Sachs who confidently believes that the benchmark yield is going back to 3% by the end of the year. That might be the case, however there are 10 more months until then and let's not forget that Goldman already closed 5 of their top 6 trades of 2016 earlier this month. Right now yields on US treasuries are nose diving and there must be a reason for it. This will be a recurring theme throughout this issue. As I will present, there are numerous factors pointing that something is going on. I don't claim I have (or there is) a definitive answer, yet I also don't accept the average opinion of a bank CEO at Davos that 'everything is just fine' with the world. I'm sorry, Jamie Dimon, but not everything is fine, just ask your compatriots at Deutsche who reported a USD 7 billion loss in 2015 and whose bond yields and CDS spreads are soaring. Meanwhile, Deutsche's stock price is down 50% since August and 29% YTD. Elsewhere in banking lala land, US Regional banks are down 14% YTD, Japanese financials $DXJF (60% consists of diversified and regional banks) are -26% while the market also started to care about the ever growing non-performing loans (18% of gross loans; World Bank) in Italian institutions. Most Italian banks are down 20-50% since the start of the year and at one point in January the stocks were halted limit down (max allowed down move for a day). Their CDS spreads have gone up by 60% or 120% for Banca Monte dei Paschi di Siena SpA. Following standard CDS pricing models, this suggests the perceived probability of default of those banks has increased severely in the past month. Don't forget that markets are pricing if probability of default (or recession) is rising and not how much the absolute level is.

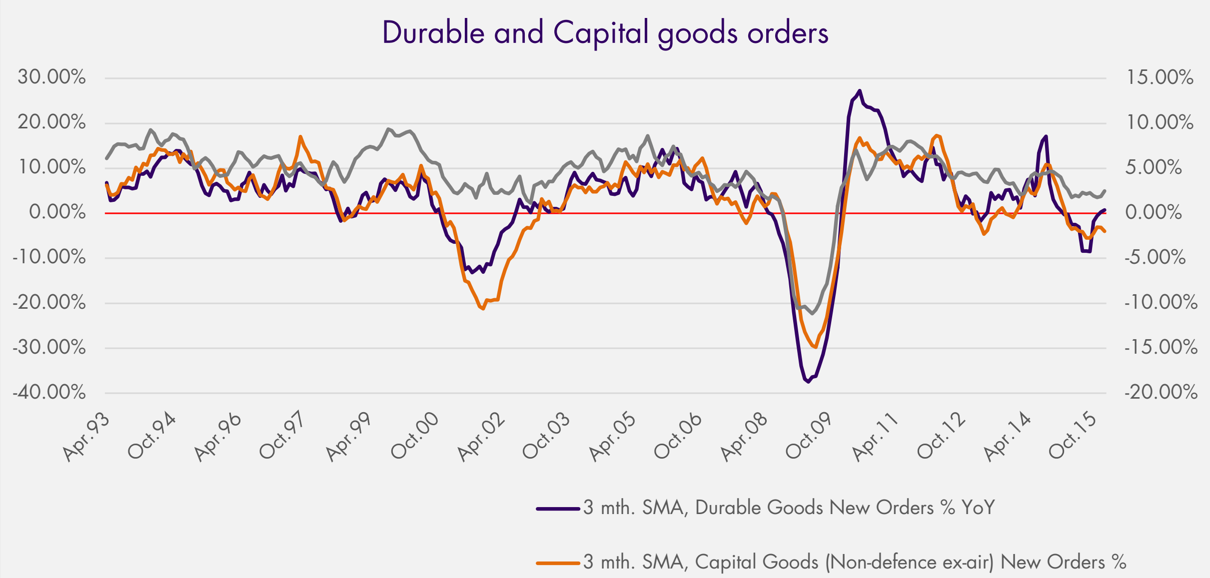
...never forget that the world is flat and risk is global and interconnected.

It's true, the big move in the banks happened a month ago and I am looking backwards here, but I really want to stress this out as it is important and we humans tend to forget quickly and get complacent. That is all good, but 'why now?' you might ask and I am asking myself. Those nonperforming loans in Italy have been growing steadily since 2009 (8% back then) and Deutsche bank hasn't suddenly gone from a spectacular bank to a complete mess, so that is not much of a catalyst for a sudden meltdown. Just like something being 'cheap' or 'expensive' (in P/E or other terms) is not a catalyst for market moves. Again, something more must be at play here and never forget that the world is flat and risk is global and interconnected. Let's not be like the CNBC pundit who in 1997 screamed 'Who cares about the Thai baht' (quote mentioned by Art Cashin in a RVTV interview). The world cared.

GLOBAL MACRO

I stumbled upon an economics textbook recently and one particular paragraph about aggregate demand slapped me in the face. The discussion was about recessions and the following indicators were given as a sign of demand caused slowdown: Decline in corporate profits, commodity prices, interest rates, and demand for credit. Also, from a historical point of view the measures that work in that environment were noted to be: Swapping your holdings in cyclical companies (consumer discretionary, technology, financials etc.) for defensives (utilities, telecoms, consumer staples); reduction in commodity and speculative (high yield/ junk) securities holdings; and an increase in holdings of long dated government bonds. If you've just followed the textbook (our portfolio is allocated similarly) you would have killed it. So, based on that and what we are seeing there is a high possibility that we were (and still are) in the most textbook slowdown (with rising probability of a recession) in recent decades. Let me explore why that might be the case.

Let's just go through the framework I like looking at and try to see where the predominant drivers of the US and world economy are headed. Some of the indicators I look at are related to consumption (by individuals, companies and governments), economic activity, profits, income and debt. It is easy to draw a linear relationship of what drives what but I accept reflexivity and prefer to think of those in a more interconnected way. Note that I haven't mentioned employment. Following the framework I am using, employment is a 100% lagging indicator that reflects everything else happening in the economy. So, by looking at other dynamics it would be easy for me to understand where employment is likely to be going.

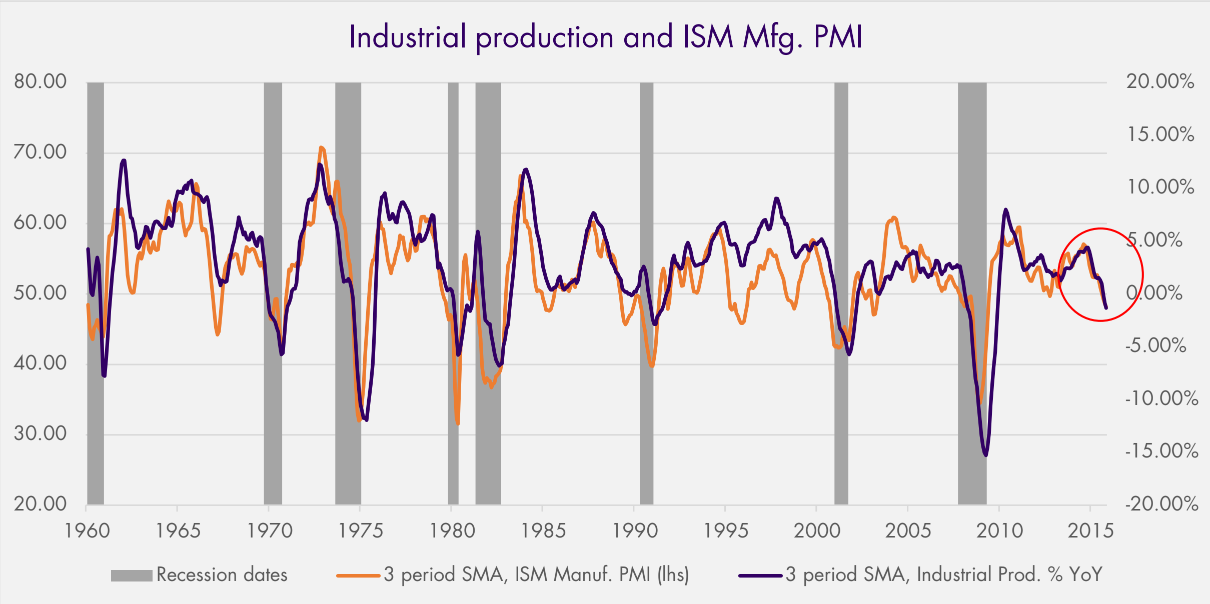


Source: Federal Reserve Bank of St. Louis

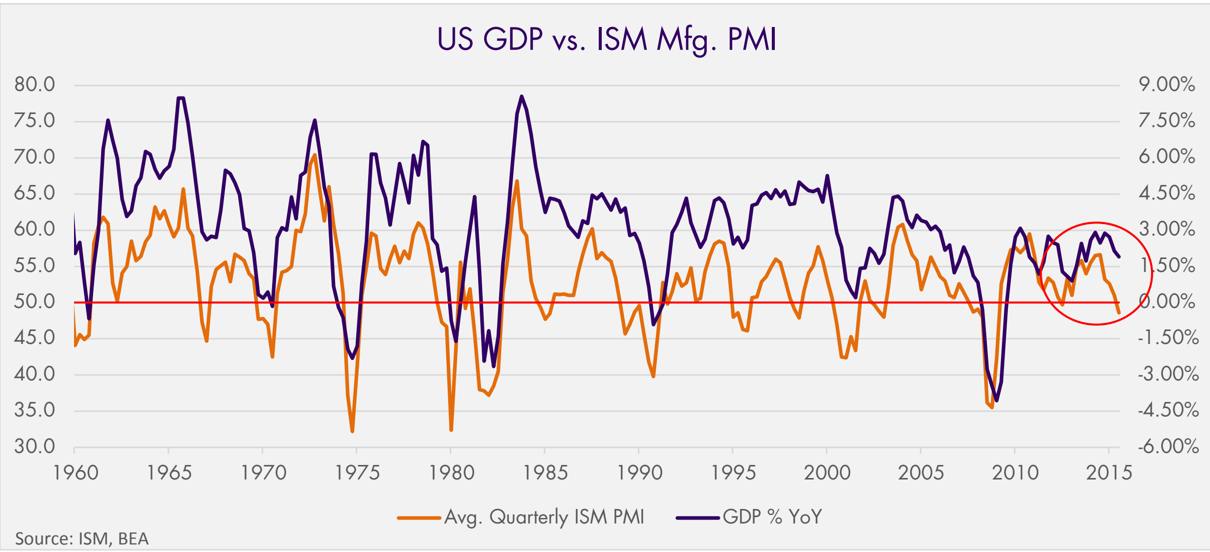
Regardless of the starting point, currently most major indicators are slowing (less positive or more negative on YoY basis) in a group as opposed to having 1-2 outliers while the rest of the economy is booming. This has large implications for the market because many indicators (PMIs, Profits, Consumption) map very well with returns on the S&P 500.

On the consumption side the situation in the US is still positive but it is slowing as evident from both personal consumption expenditure (PCE) and its components - durable goods orders and retail sales. Businesses have been particularly sluggish in that regard having a negative and further slowing growth (YoY) in capital spending for 11 consecutive months until the slight rebound in January.

More aggregate measures of economic activity like Industrial production and Manufacturing PMI have already gone negative. Look how closely those 2 indicators fit. The US economy has not been reliant on manufacturing for quite some time, however, I find the activity in that sector particularly insightful as it is very sensitive to the business cycle. In other words, even though the US is a services economy, the industrial sector captures downturns pretty spot on.



Notice how since the 60s every time industrial production goes below 0% on this smoothed (3 period SMA) chart, there has been a recession. Industrial production peaked at +4.7% (YoY) in November 2014 and has cratered since then to -2% in December 2015. It's fair to say that January was a solid month for US economic data and durable goods, retail sales, PCE and even industrial production showed some strength and yet the cyclical trend points downwards and a lot more positive data points are needed to change that. The official recession dates are actually determined after the fact so one could argue 'the patient is already dead and we are just waiting for the doctor to call it.' I am not necessarily in that camp, however, I am mindful of the evidence in front of me.



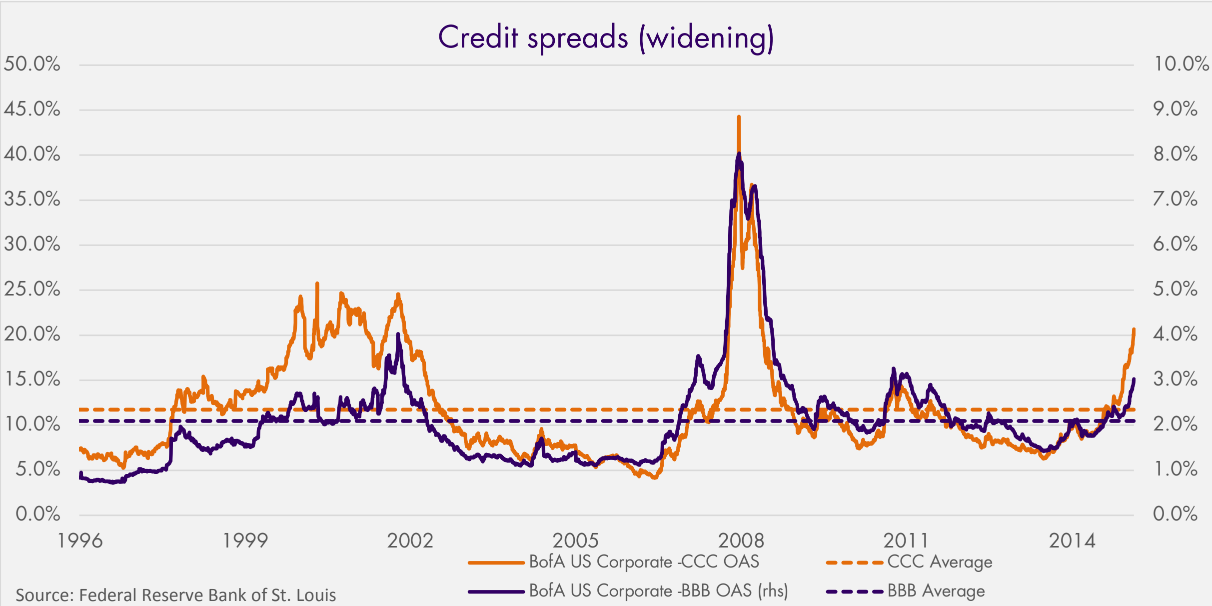
Source: ISM, BEA

Company profits in the whole economy (not just listed companies) have been slowing throughout 2015 and declined (YoY) in Q3. While we are waiting for the Q4 number the S&P earnings could paint us a rough picture. So far more than 85% of companies have reported and S&P revenues and earnings are both down YoY for a third consecutive quarter. Previously the excuse was "Energy" but right now most other sectors contribute as well to this dire picture. Noteworthy is the back test showing that 2 consecutive quarters of broad economy declining profits have led so far to at least 20% drop in the S&P 500 in the next 12 months without the necessity of a recession (Chart).

Sector	Q415 Rev. % YoY	Q415 EPS %YoY
Consumer Discretionary	4.5%	12.5%
Consumer Staples	-0.9%	-2.2%
Energy	-33.6%	-73.3%
Financials	-0.5%	-8.9%
Health	8.6%	7.9%
Industrials	-7.1%	-4.4%
Materials	-15.6%	-18.8%
Technology	-0.8%	-2.3%
Telecoms	12.1%	25.5%
Utilities	-11.6%	-1.8%
S&P 500	-4.2%	-6.6%

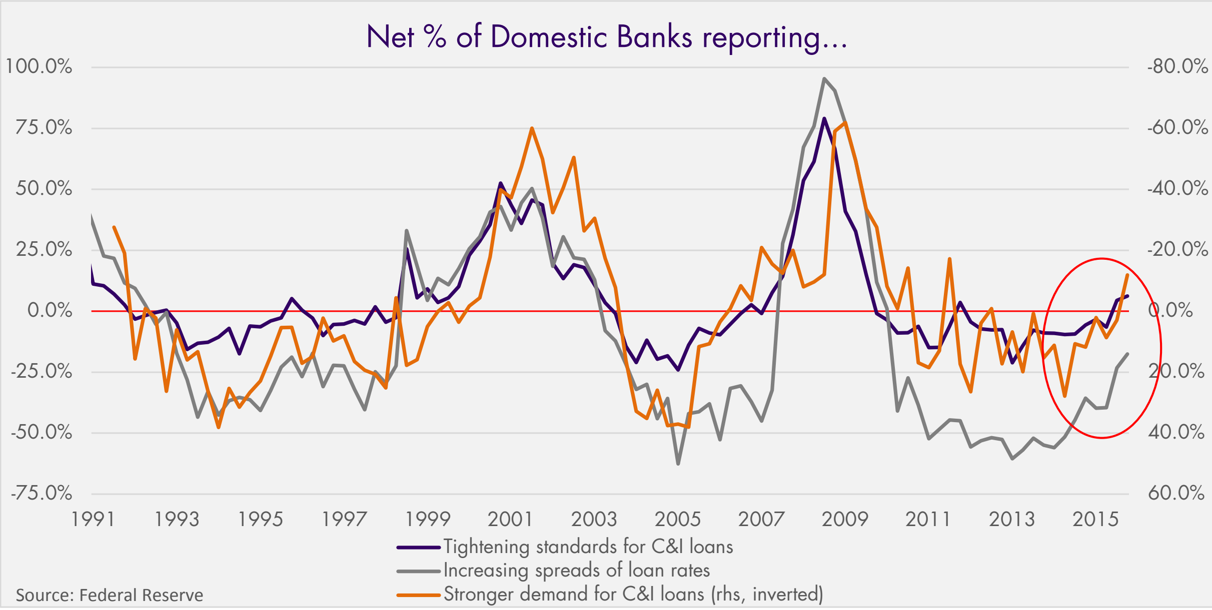
Source: FactSet

So far in this unofficial chain of (reflexive) events we've had slowing consumption and economic activity, and declining profits. This brings us full circle to the debt side of the equation. Falling profits (on average) make it harder for companies to service debt and costlier to take on (issue) more due to a perception of higher risk by creditors. Thus, delinquencies rise, credit standards tighten and spreads widen. It even rhymes. This is followed by downgrades, defaults and more widening of spreads. It's kind of a vicious cycle that feeds on itself and once it starts it has to go all the way until it reverts, or at least that is what recent history suggests. Look at the spreads (yield above the risk free int. rate) of high yield and junk corporate bonds. They've already passed their period average and are at or above 2011 level. The other 2 times that happened there was a recession in the US. Companies can already feel the pain of rising spreads as it becomes harder for them to borrow with the rational expectation of paying the interest. Coincidental or not, January was the slowest month for bond sales in more than 10 years, which comes at a time when corporate debt is hitting all-time highs.

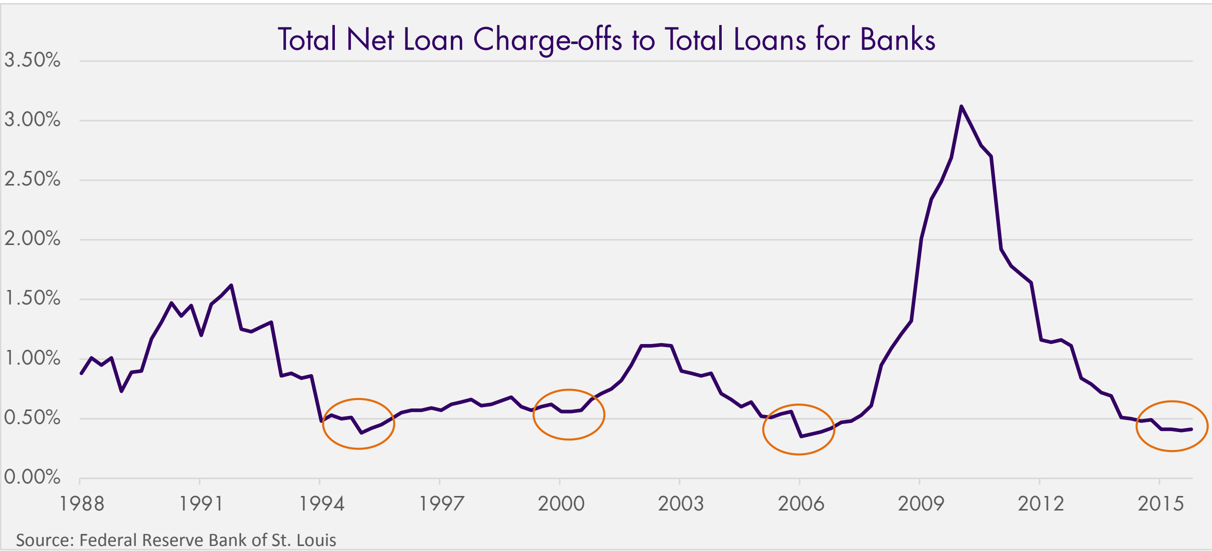


The demand and supply side of debt is not encouraging as well. I looked at the Fed's recent release (January 2016) of the "Senior Loan Officer Opinion Survey on Bank Lending

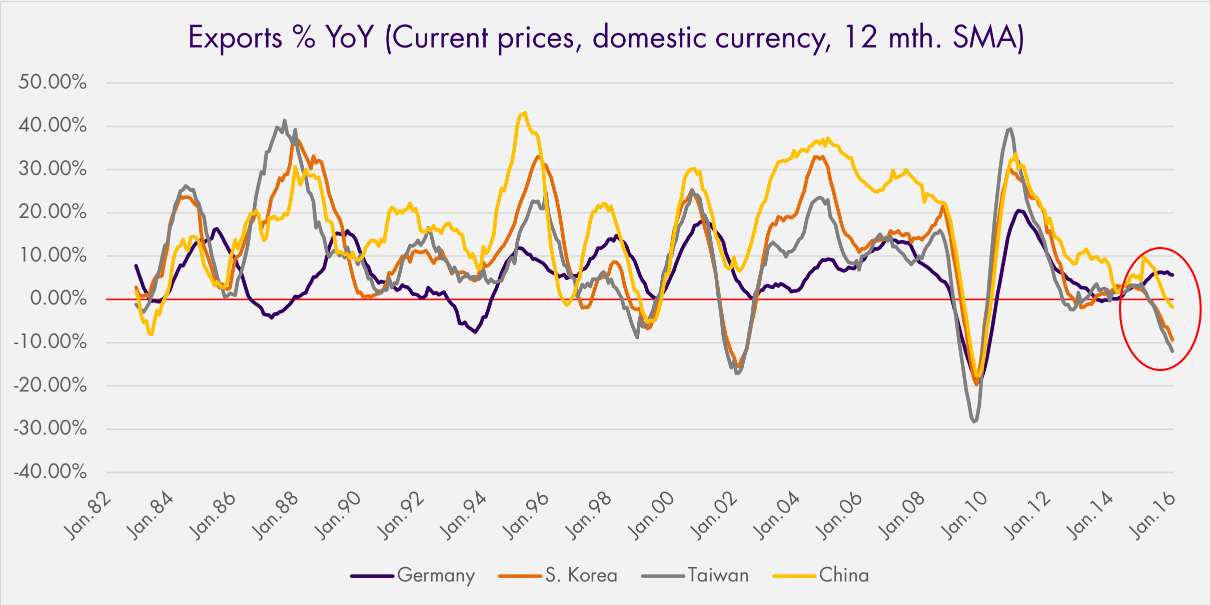
Practices" where indicators are split into 3 categories – small firms; medium and large firms, consumer. For each firm indicator we constructed an equally weighted series made of the data for small, medium and large firms. The results speak for themselves. US banks have been tightening standards for C&I (commercial and industrial) loans for the past 2 quarters, while demand has just cratered in the last quarter by more than 10%. Lastly, the trend in spreads is consistent with the corporate bonds spreads and indicates that the number of banks reporting falling spreads is quickly decreasing (albeit still superior), which is leading to the recent positive slope of the series.



All this is happening while banks are at the bottom of total net loan charge-offs. From here history suggest there is only one way to go. How do you think a falling demand (profits) and rising charge-offs (costs) will reflect banks' bottom lines? Maybe that's what the market is pricing. This is why financials (especially banks) are an extremely cyclical sector that follows closely the business cycle and is one of the first sectors to turn. Just look at those lines (last couple of charts). Even unsmoothed they are beautifully cyclical without breaks in the main trend.



If you want to see how the world as a whole is doing, look no further than the export numbers by the big exporters. To generalise the state of global trade, I've selected 4 countries that are well known exporting powers. If the world is buying less cars from Germany (with a substantially cheaper Euro) or less electronics and semiconductors from Taiwan, Korea and China then I might find it harder to believe the world as a whole is blossoming. The first snapshot of global trade came last week when the World Trade Monitor announced the value of goods that crossed international borders last year fell 13.8% in USD. It's true that the USD has strengthened in that period, so in theory if there was no change in volumes, the total value would have declined anyway. However, don't forget that foreign companies, for good or bad, constantly borrow in USD so they need positive USD revenue.



I think I should put a big disclaimer on this chart and even on the whole presentation. What I am trying to present here is the general trend in global markets by using some of the indicators I rely on. I start from the top and go down. From here my job is to isolate the worst places from those showing less slide or even positive momentum. That gives me a tradable universe of stocks, bonds, currencies and commodities to go long or short.

FINAL THOUGHTS

I recently read the book Superforecasting, where it's described how regular people are forecasting with great accuracy various events. The interesting part is how granularly they tend to break down seemingly complicated questions and amend their forecasts basis point by basis point, with each new information piece that arrives. This gets quite close to trading. I naturally thought it would be pretty cool if these people were to forecast continuously the probability of a US recession.

Let's assume we don't know much (this may actually be true) about the US or the world economy. The facts are that the US has had 14 recessions since (and including) the Great Depression. The average period between recessions has been roughly 59 months (4 years and 11 months) with an average recession duration of 13 months. Currently we are 80 months and counting from the end of the previous recession. We recently received the Q4 Prelim US GDP numbers which were positive, so if we were to bet on a recession, it would be at least 4 months from today (assuming a negative Q1 & Q2), thus making the growth of the current non-recession period at 84 months. If Q1 is positive, then it makes it

dates		months		GDP	S&P 500 perf.	
Start	End	Duration	Since Previous	Decline	Decline	Growth
Aug 1929	Mar 1933	43	21	-26.7%	-86.1%	
May 1937	Jun 1938	13	50	-18.2%	-54.5%	321.7%
Feb 1945	Oct 1945	8	80	-12.7%	-17.0%	100.7%
Nov 1948	Oct 1949	11	37	-1.7%	-26.6%	35.9%
Jul 1953	May 1954	10	45	-2.6%	-14.8%	88.8%
Aug 1957	Apr 1958	8	39	-3.7%	-20.7%	116.3%
Apr 1960	Feb 1961	10	24	-1.6%	-13.9%	55.7%
Dec 1969	Nov 1970	11	106	-0.6%	-36.1%	107.2%
Nov 1973	Mar 1975	16	36	-3.2%	-48.4%	74.2%
Jan 1980	Jul 1980	6	58	-2.2%	-21.6%	93.0%
Jul 1981	Nov 1982	16	12	-2.7%	-28.5%	50.7%
Jul 1990	Mar 1991	8	120	-1.7%	-20.4%	264.5%
Mar 2001	Nov 2001	8	120	-0.3%	-50.5%	427.4%
Dec 2007	Jun 2009	18	73	-4.3%	-57.7%	105.1%
Feb 2016	?	?	80	?	*-15.2%*	220.1%
Average		13	59	-4.3%	-30.4%	147.2%

87 and so on. Out of the past 14 expansionary periods (being the 14th now) this is the 4th longest (with the 1st, 2nd and 3rd being 120, 120 and 106 months respectively). From these facts, I would put higher than 50% chance of a recession, however since we assumed lack of current affairs knowledge, I would not bet heavily on one (say over 80%). I would be aware that if I am NOT betting on a recession though, I am essentially saying that we are indeed in one of the greatest growth periods of all time! Which after incorporating the facts mentioned earlier, seems to be a bold bet.

This simple research can be extended to the S&P 500 performance. From trough to peak, the S&P 500 performance currently stands at 4th place (again) with 220.1% gain, almost fully in line with the growth periods. Interestingly, there has been only four periods where the S&P has declined -15.2% (the current peak/trough performance) or more after hitting an all-time high. One of those periods was the flash-crash. So, buying the market, is essentially saying that will be the 5th such period in the almost 100 years S&P500 historical data used for this analysis.

Do note that recession is defines as per NBER, which is not necessarily two consecutive quarters of contraction in GDP.

I hope you understand me correctly. I am not trying to sell a "doom and gloom, buy gold, hide underground" thesis. No, no and no. While gold has actually worked this year (+16.4% YTD), there are plenty of other things you could buy to express a thesis of rising probability of a cyclical slowdown (nothing is certain). That is not the end of the world. On the contrary, it's a necessary step before we go back to the cyclical upturn when I lever up and buy the Tesla's and the FANGs (Facebook, Amazon, Netflix, Google). There are plenty of positive developments happening in the world at the moment and it's not only ISIS and diseases, however, when it comes to markets, the next 6-9 months are likely to be turbulent and negative for many stocks.

P.S. I do believe Fed's forecasters can make use of the Superforecasting book as well.

Most important thing, protect capital, be patient to take advantage of bull market!

Special thanks to the twitter community for the hard (and smart) work 24/7/365.

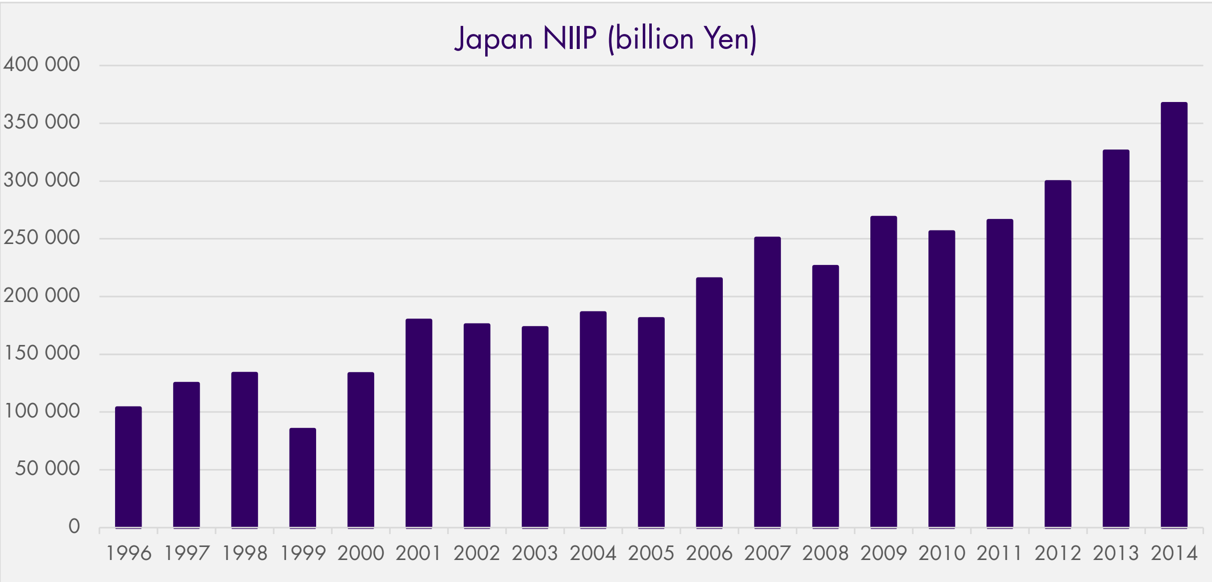
If you want to check out something extra positive happening in the background, just read the Economist's latest Technology Quarterly, or watch this video on scientific developments. If this doesn't make you smile and love life and science, I don't know what will.

TRADE IDEAS

Ah, the Yen! I remember the days when I ecstatically sang "It's raining Yen" to the infamous music of the Weather Girls, while the currency was relentlessly dropping in value against almost everything out there. It was so easy a baby could do it. However, the situation has changed, or at least that is what I would argue.

My experience with the Yen has reinforced my belief that an aspiring trader should quickly learn the basics from textbooks and go out there to see how the game is played. Ever since the shock in October 2014 I noticed how the Yen appreciates in value when there is pain in the market. It might be blatantly obvious for experienced traders but it took me a while to put the puzzle together.

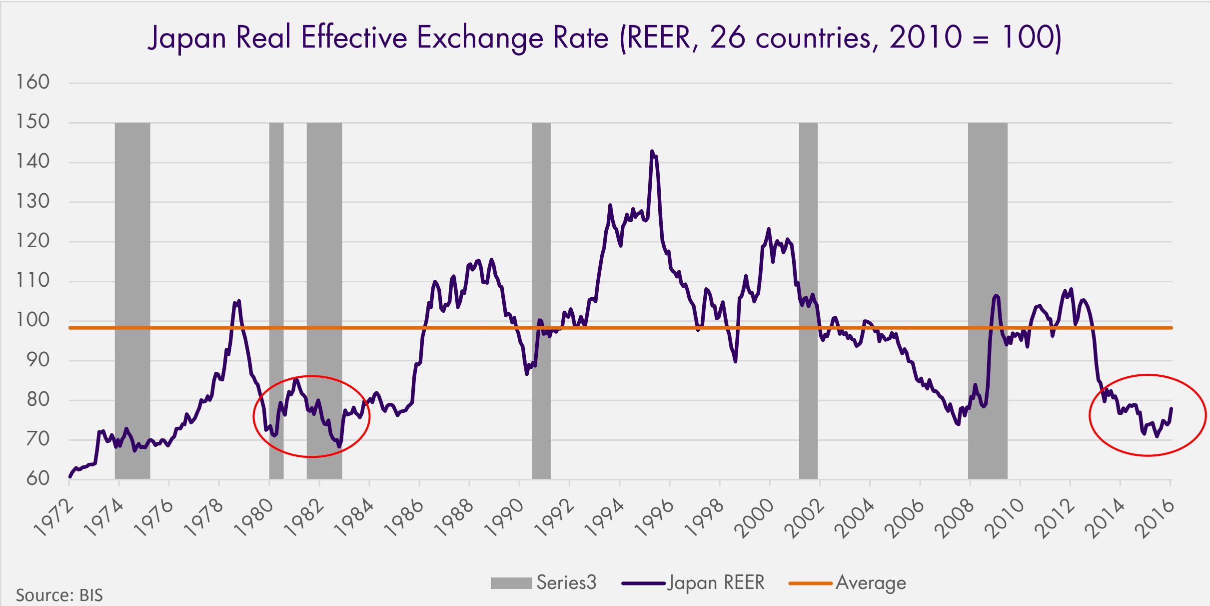
As I am analysing Japan's currency dynamics and watching a relatively unknown side of Manchester United make fun of an established Arsenal team I am thinking about how it was supposed to be 'different this year' for Arsenal. It's not different this time, neither for Arsenal nor for Japan and the trends I am observing. Starting from the top, Japan is the largest net creditor of the world with a Net International Investment Position (NIIP) of almost JPY 370 trillion (USD 3 trillion, 75% of GDP) at the end of 2014. The second country in that league is Germany with half that amount (and only 35% of GDP) so you can appreciate the magnitude of Japan's dominance in that ranking.

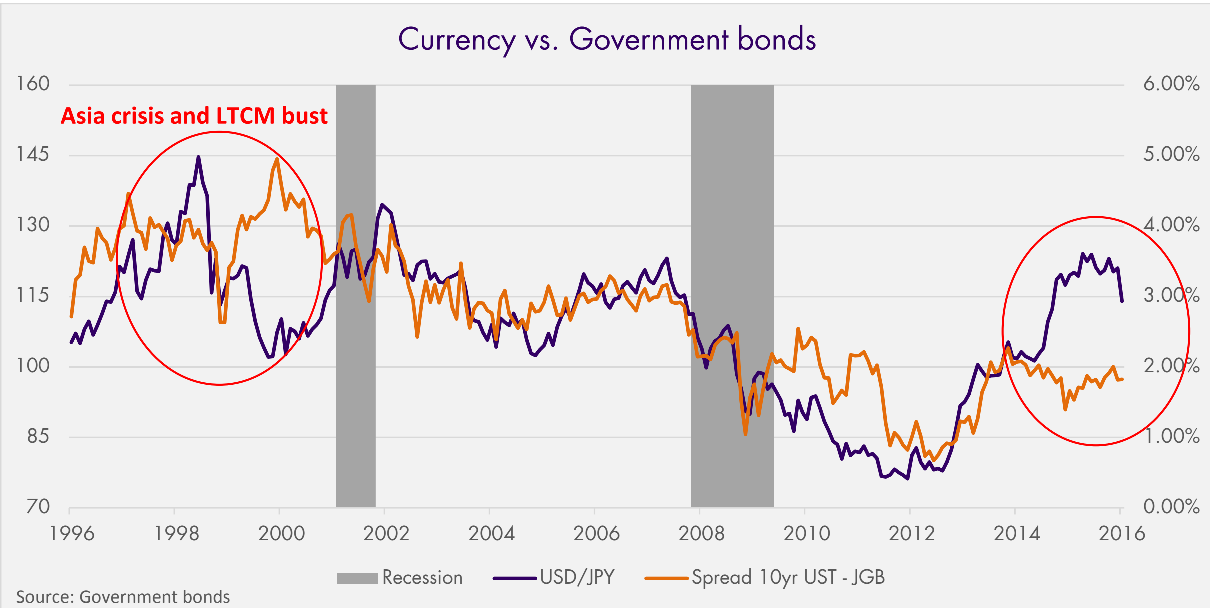


Source: Japan Ministry of Finance

All that money, predominantly owned by Japanese pensioners, is out there looking for yield while interest rates at home have been at 0% for the past 20 years and have just been pushed in negative territory by Kuroda San (Yen up 6% vs. USD since then). The carry trade is on and high yielding currencies like the Turkish lira (TRY), Brasilian real (BRL) or Australian dollar (AUD) have been the beneficiaries. While looking at it, I've been shocked by the amount of innovative and leveraged products offered in Japan to satisfy the search for yield. If you think financiers in the US are crooks, take a look at Japan. I will give you just one example and move forward. The largest Japanese REIT fund (investing in real estate assets) is the Shinko US REIT invested in US real estate. US funds with

similar size (USD 13 billion) yield around 3-5% while that baby returns a hefty 22% in dividends. That's right, there is no mistake. Other similar Japanese funds not only invest in risky assets but also put a 100% more leverage by swapping the asset's currency in the futures market with a high-yielding one like the Mexican peso or the Turkish Lira. It's really astonishing.
So, due to this enormous external position, the Yen tends to follow yield opportunities and risk. When the environment is getting riskier and/or the opportunity for returns is decreasing, the Japanese bring some of the money back home. It's better to pay the bank couple of basis points (assuming negative int. rates) than to lose half your capital in a crisis. Looking at the chart, I don't expect US government yields to start trending up, so unless Japan steps up its negative rates policy, that spread is going down and there appears to be only one way for the yen.



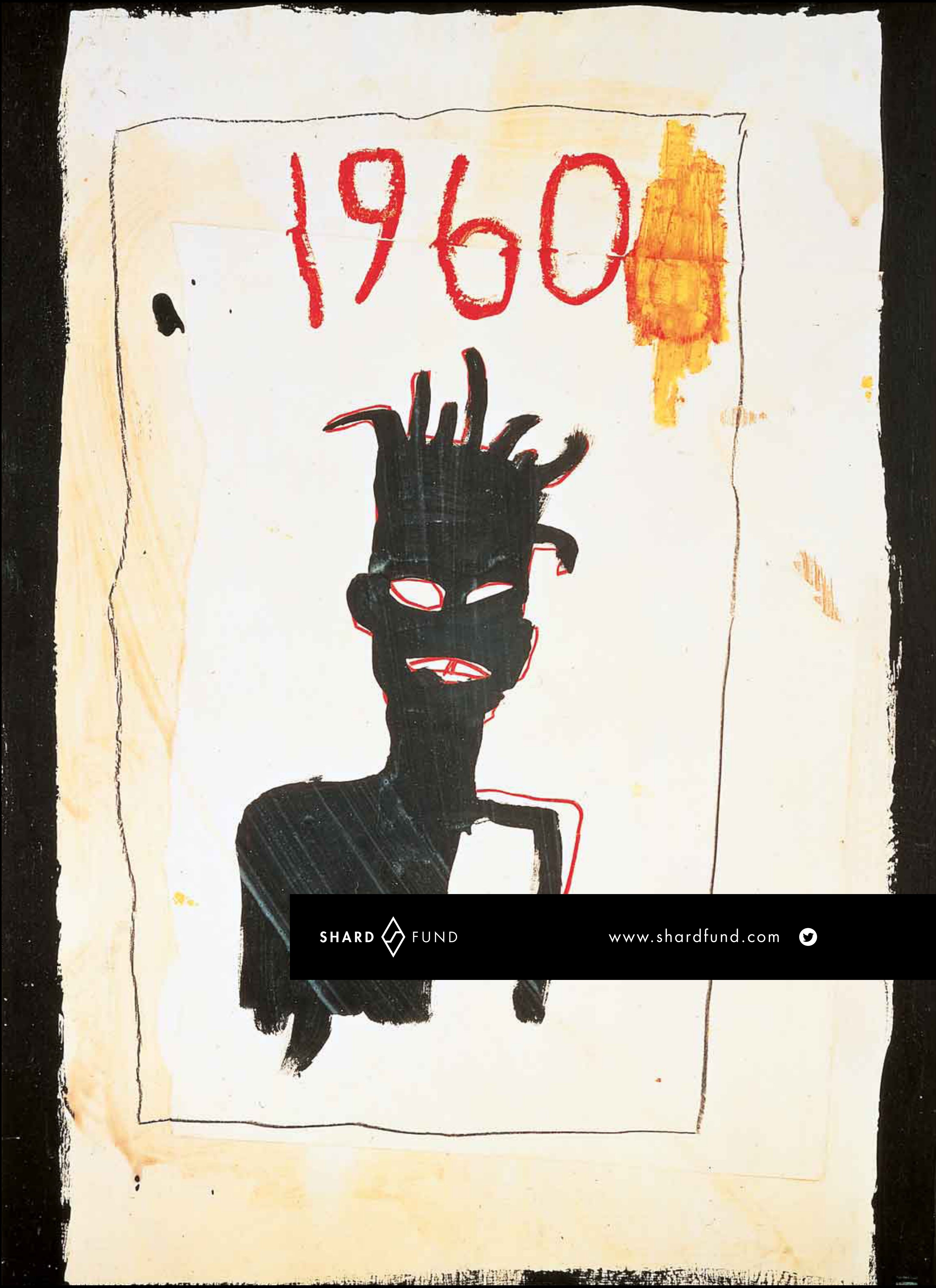


However, let's forget about the US dollar for 1 second. I mentioned many other currencies. For instance, at the end of January I tweeted about GBP/JPY breaking its support and reversing a well-established trend since early 90s. Given the rising risks of #Brexit and the tendency of the Yen to strengthen in panics, I think this cross could go to 120 or below. Looking at it even more broadly, here is the real effective exchange rate of Japan that takes into account inflation against 26 countries (BIS). So, basically the yen has just touched the lowest point since early 80s (in real terms) and appears to have reverted. There is a long way up even to the all-time average not to mention targets beyond that.

One unintended consequence of those imbalances has been the moves in the Nikkei. Rarely the epicentre of financial stress, the Nikkei has underperformed the S&P 500 in the tech crash, the global financial crisis and the Euro crisis, which shows how leveraged and cyclical Japan has been due to those imbalances. On the way up, Nikkei crushes its competitors, while on the way down it's the sucker of the group.

With that in mind, I am short Chinese Renminbi vs. Yens (CNH/JPY). This pair acts as USD/JPY in normal times with the added cherry on top if the Chinese decide to do something about their overvalued currency (rapidly or gradually). In addition, I have moved some of my GBP cash into yens. So far the trend in GBP/JPY has been more stable and I expect that to continue to be the case, given the trends in previous global slowdowns, at least until the summer and the #Brexit vote.

DISCLAIMER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