Compass

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Wealth and Investment Management
Global Research & Investments

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Market outlook: Normal service will be resumed

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Yet another bout of volatility is testing investors' patience. This one, however, likely marks the beginning of a return to normality, not a divergence from it. When the dust has settled, the Fed's decision to nudge interest rate expectations upwards may be seen as a signal that they, like us, think the US economy is increasingly able to stand on its own two feet. It could be a bumpy ride, but this prospect will eventually prove better for stocks than bonds.

Fed up? We have to deal with it – and it needn't be bad news

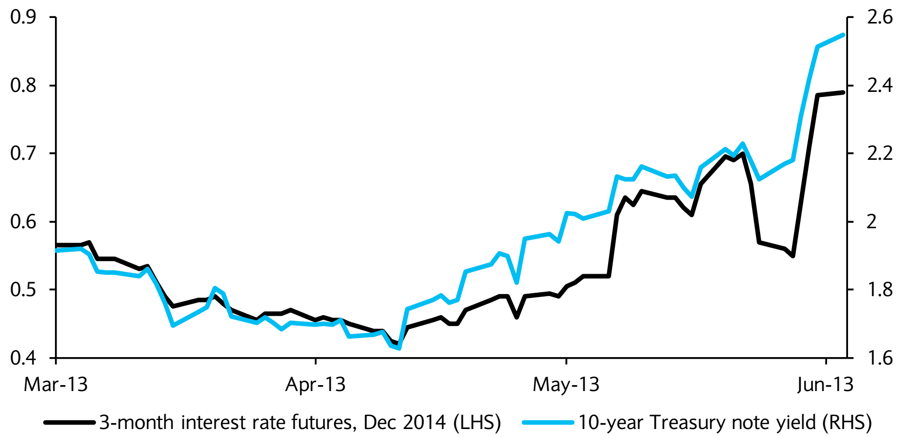
We noted last month how the uncertainties facing investors seemed to be resolving into a single question, namely: is recovery all just the result of central bank support, or is there some substance behind the stock market's rally? That question is being addressed a little sooner than we'd thought as the Federal Reserve (Fed) has pushed interest rate expectations up, but our conclusion remains the same: normalising monetary conditions will eventually prove more of a strategic headwind to bonds than stocks.

The Fed's suggestion that quantitative easing (QE) "tapering" will likely begin in the months ahead – our economists think September is the most likely month for bond purchases to be trimmed – has triggered sell-offs in most asset classes. In fact, neither the Fed's comments, nor the markets' response, are a big surprise. The medium-term prospects for US economic growth have brightened as the US consumer's resilience has been underscored by recent employment and balance sheet data, and as the tumbling budget deficit has reduced the need for a big, medium-term fiscal tightening. At the same time, market nerves are understandable because many commentators are arguing that QE and low interest rates are all that stands between us and a resumed full-blown crisis.

The Fed's prospective "tapering" of QE means that higher interest rates lie ahead. Markets have begun to price this in.

The Fed's comments were focused on QE, but were always going to have an impact on interest rates. Long-term rates are affected directly: QE has helped keep bond prices high and yields low. Short-term interest rates, however, are also being affected, despite

Figure 1: US 10-year bond yield and December 2014 money rates (%)



Source: DataStream

Usually, the correlation between interest rates and economic growth is positive: higher rates can signal an improving economy

the Fed's own guidance suggesting that they see rates staying put through 2014. The rise in long-term rates has been so pronounced that it has pulled the front end of the yield and swap curve higher with it, and forward interest rates for late 2014 have risen sharply (Figure 1), to the extent that they are more or less pricing-in a policy move.

As noted, worried economists will argue that higher rates will de-rail the US and global economy. We're optimistic they won't. Usually, the correlation between interest rates and growth is positive: cause-and-effect runs from the economy to interest rates, not vice versa. The current situation is admittedly complicated by the range of emergency measures that have to be unwound ("unconventional" QE alongside "conventional" low interest rates). It is also complicated by the extent of the loosening that has occurred (the Fed has bought $2 trillion of bonds already, and the Fed funds policy rate at 0-0.25% is at its lowest in our working lifetimes). But this argues for a gradual, well-signalled normalisation, not a dramatic one. The Fed, after all, is not planning to stop buying bonds overnight – and the Bank of England, the Bank of Japan and the European Central Bank have are not signalled any normalisation as yet. Admittedly, the Bank of England stopped buying UK government bonds a year or so back, but the new governor's arrival may if anything usher in a slightly more lenient regime. In Japan, the central bank's latest experiment with QE has only just got going. The ECB has not been trying to "print" money, but has little reason yet to signal any hawkish intent.

Lessons from earlier instances of monetary normalisation after recession and/or crisis-driven looseness are mixed. Equity and fixed income markets were volatile after a surprise Fed tightening in 1994; an episode that in several respects echoes the current one (the end of an emerging markets boom; the turnaround in the dollar), but when the dust settled, equity growth resumed, both relative to bonds and in absolute terms. Tightenings in 1999 and 2004 were more quickly shrugged off.

Policy normalisation has long been the biggest obstacle we've seen in the road ahead. Recurring fears of a US double dip, euro implosion and/or a crash landing for China's economy have seemed overstated, but we've always thought investors would need to address the monetary question at some stage. The economic forecasts in the table below may not show robust growth, but they do show the global economy – and within it, the key US economy – continuing to avoid stall speed.

Investment conclusions

We have been able to take some avoiding action. In mid-June we cut our recommended tactical weightings in High Yield and Emerging Market Bonds to underweight (with High Yield coming down to neutral, and an Emerging Markets underweight being extended), and raised our position in cash and short-term bonds (to neutral). The creditworthiness, and duration, of High Yield bonds is not a major concern to us at this stage, nor are the local economic prospects in the emerging world – despite visible setbacks in Brazil, China, South Africa and Turkey. But if the days of easy money in the developed bloc are numbered, so too are the cheap "carry trades" financed by such money, and we have indeed seen emerging market bonds sell off sharply in the last month.

We already had a long-standing underweight in Investment Grade Credit and, while we are tactically neutral on government bonds, they have looked so expensive to us for such a long time that our strategic (long-term) weightings are small to start with. They still look dear, even after their sell-off. If trend growth in nominal US GDP – real output growth and inflation together – is likely to settle at around 4-5%, then the 10-year US Treasury note yield at 2.5%, albeit up from 1.4% last July, looks unsustainably low.

Stocks are vulnerable short-term, but are inexpensive and can eventually benefit from the better growth outlook the Fed sees ahead

Gold is particularly vulnerable as we transition to monetary normality. Many investors own it for its perceived ability to guard against the more inflationary – and dollar-debasing – consequences of QE. That ability, and those risks, have been overstated, and gold – which carries no yield – is exposed as a result. Most investors' holdings of gold should be in the low single digits as a percentage of their investment portfolio.

In the short term, stocks are, of course, vulnerable too. We've long preferred developed markets (on which we've been tactically overweight), but we've been no lower than neutral on emerging equities. Our Tactical Allocation Committee has been discussing possible setbacks for several months, but has so far sat tight. Stocks remain the least expensive of the big asset classes: prospective PE ratios remain materially lower than the levels suggested by profitability and the cost of funds (even allowing for higher interest rates). Emerging stocks, having underperformed since late 2010, look cheaper, but are more vulnerable to financing flows.

Stocks are volatile, and we may yet feel compelled to fine-tune our tactical stance, but for now we focus on the possibility that selling out could leave us stranded if the market rallies as we think it can. The Fed may be poised to take the punchbowl away, but we noted last month that equity investors can still have a good time sober. We see this as a good entry point for long-term investors whose weightings are sub-optimal to start with, and favour the US and continental Europe most, and the UK and developed Asia least, though even those markets seem likely to outperform local bonds.

Barclays' key macroeconomic projections

Figure 2: Real GDP and Consumer Prices (% y-o-y)

	Real GDP			Consumer prices		
	2012	2013	2014	2012	2013	2014
Global	3.1	3.0	3.8	2.9	2.6	3.0
Advanced	1.2	1.1	1.9	1.8	1.4	1.9
Emerging	5.0	5.0	5.6	4.6	4.6	4.8
United States	2.2	1.8	2.3	2.1	1.6	2.2
Euro area	-0.5	-0.5	1.3	2.5	1.5	1.3
Japan	1.9	2.1	2.1	-0.1	0.0	2.3
United Kingdom	0.3	0.9	1.8	2.8	2.7	2.4
China	7.8	7.4	7.4	2.6	2.6	3.5
Brazil	0.9	2.3	2.7	5.4	6.4	5.5
India	5.1	5.4	6.7	7.5	5.6	5.5
Russia	3.4	3.0	3.5	5.1	6.6	5.6

Note: Arrows appear next to numbers if current forecasts differ from that of the previous week by 0.2pp or more for annual GDP and by 0.2pp or more for Inflation. Weights used for real GDP are based on IMF PPP-based GDP (5yr centred moving averages). Weights used for consumer prices are based on IMF nominal GDP (5yr centred moving averages). Source: Barclays Research, *Global Economics Weekly*, 21 June 2013.

Figure 3: Central Bank Policy Rates (%)

Official rate		Forecasts as at end of			
% per annum (unless stated)	Current	Q2 13	Q3 13	Q4 13	Q1 14
Fed funds rate	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25
ECB main refinancing rate	0.50	0.50	0.50	0.50	0.50
BoJ overnight rate	0.10	0-0.10	0-0.10	0-0.10	0-0.10
BOE bank rate	0.50	0.50	0.50	0.50	0.50
China: 1y bench. lending rate	6.00	6.00	6.00	6.00	6.00
Brazil: SELIC rate	8.00	8.00	9.00	9.25	9.25
India: Repo rate	7.25	7.25	7.00	6.50	6.50
Russia: Overnight repo rate	5.50	5.50	5.25	5.25	5.00

Note: Rates as of COB 17 June 2013. Source: Barclays Research, *Global Economics Weekly*, 21 June 2013.

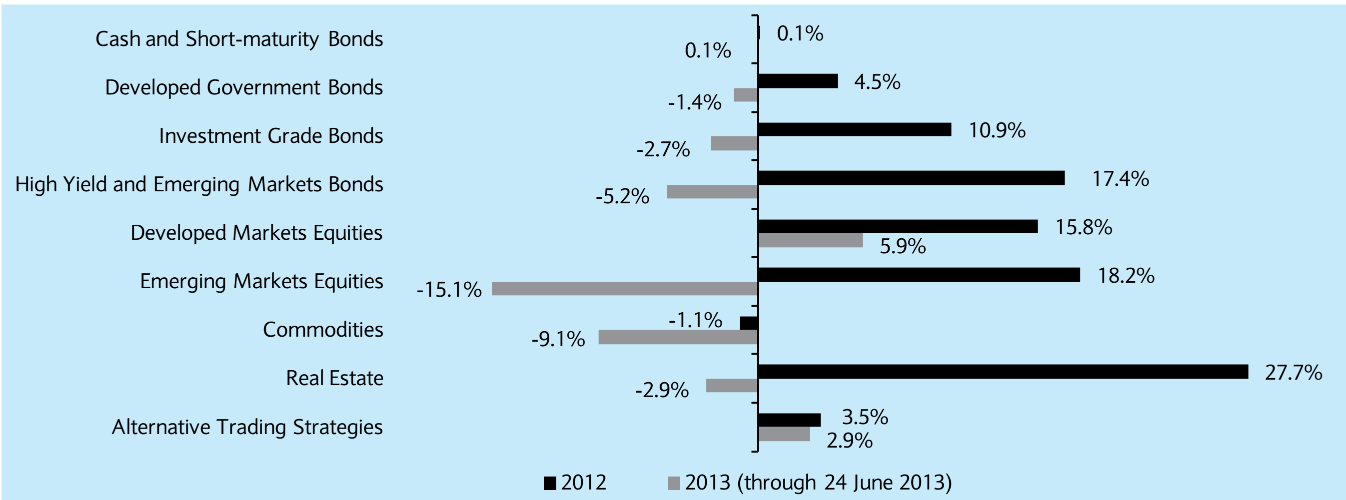
TAA: fixed income likely faces the biggest headwinds

Developed stocks have been hit by the Fed's guidance, and were overdue a correction to begin with, but the medium-term outlook for growth may be brightening and we have left our tactical overweight intact for fear of missing a likely rebound. Instead, in mid-June we cut our recommended weightings in High Yield and Emerging Market bonds to underweight, and raised our weighting in cash to neutral. We continue to advise a *strategically* underweight position in government bonds and a tactical underweight in investment grade credit (and cash), and remain neutral on emerging equities and on diversifying assets.†

Figure 1: Tactical Asset Allocation tilts and Strategic Asset Allocation Benchmark (moderate risk profile)

We are simplifying how we report our asset allocation views here. We now use qualitative descriptions of our Tactical positions relative to their Strategic benchmarks, ranging from 'strongly underweight' to 'strongly overweight'. This is a shift away from the percentage-based reporting method we used in the past. Our **Strategic Asset Allocation (SAA)** models offer a mix of assets that over a five-year period will in our view provide the most desirable mix of return and risk at a given level of Risk Tolerance. They are updated annually to reflect new information and our evolving outlook. Our **Tactical Asset Allocation (TAA)** tilts these five-year SAA views to reflect our shorter-term cyclical views. For more detail, please see our *Asset Allocation at Barclays* white paper and the February 2013 edition of *Compass*. Source: Barclays

Figure 2: Total returns across key global asset classes



† Diversification does not guarantee against losses.

Note: Past performance is not an indication of future performance. Index Total Returns are represented by the following: Cash and Short-maturity Bonds by Barclays US Treasury Bills; Developed Government Bonds by Barclays Global Treasury; Investment Grade Bonds by Barclays Global Aggregate – Corporates; High-Yield and Emerging Markets Bonds by Barclays Global High Yield, Barclays EM Hard Currency Aggregate & Barclays EM Local Currency Government; Developed Markets Equities by MSCI World Index; Emerging Markets Equities by MSCI EM; Commodities by DJ UBS Commodity TR Index; Real Estate by FTSE EPRA/NAREIT Developed; Alternative Trading Strategies by HFRX Global Hedge Fund. The benchmark indices are used for comparison purposes only and this comparison should not be understood to mean that there will necessarily be a correlation between actual returns and these benchmarks. It is not possible to invest in these indices and the indices are not subject to any fees or expenses. It should not be assumed that investment will be made in any specific securities that comprise the indices. The volatility of the indices may be materially different than that of the hypothetical portfolio.

Changing the itinerary: EM commodity currencies

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Investors in search of exotic destinations this summer may find the slopes of Sochi more attractive than the beaches of Copacabana. Of the three main EM commodity currencies (BRL, ZAR, RUB), RUB has better fundamentals.

Emerging market (EM) currencies have been under selling pressure since May amid mounting expectations that the Fed would start tapering its quantitative easing programme sooner than previously expected. This has led to a rise in US yields and stoked concerns about the pace of flows into EM assets. Moreover, the year-to-date fall in commodity prices, the decoupling of this asset class from equity markets and calls about the end of the commodity super-cycle led investors to review the return expectations on commodity currencies. In EM FX, this currency segment is represented by Russia's rouble (RUB), the South African rand (ZAR) and the Brazilian real (BRL).

Normalisation of US monetary policy will make life for EM currencies a lot harder

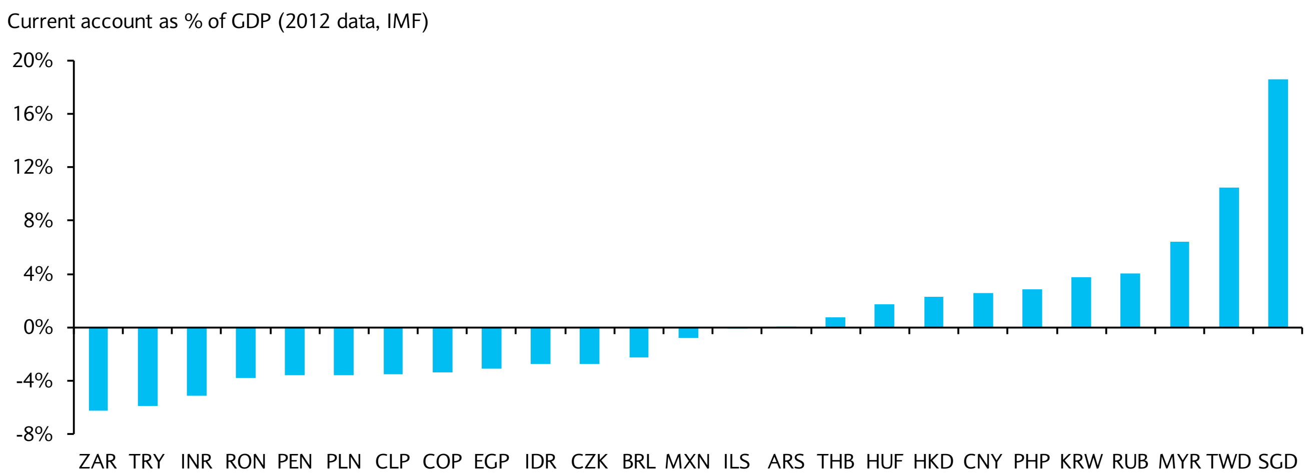
In our view, it is not prudent to put all commodity currencies in one basket. Not all commodities are likely to embark on a structural downtrend (such as those RUB is exposed to). Moreover, differentiation will matter more from now on and there are differences in the domestic outlook and fundamentals of the three currencies.

Beyond the commodity angle, we are less optimistic about the prospects of the EM currencies as we move towards an environment of USD strength and rising US yields. Against USD, ZAR is most at risk; BRL is somewhere in the middle; RUB remains a currency with potential support. All three should, however, perform better against the Swiss franc (CHF), the euro (EUR) and the Japanese yen (JPY) than against USD.

ZAR: From global beta to domestic alpha

ZAR – previously a high-beta currency with an ability to benefit from benign global sentiment – has been battered by ongoing domestic uncertainty, such as labour strikes. Despite being the worst performer in EM FX this year (down by 15% against USD), we do not see its current weakness as a buying opportunity.

Figure 1: RUB looks the least vulnerable of the three to liquidity concerns, while ZAR is the most exposed



Source: Barclays, EcoWin, IMF

Material external funding needs pose further risk to ZAR…

First, we think that the period of rapid GDP growth is over and that South Africa will only marginally outgrow the US both this year and next. Second, the prospect of the Fed tapering asset purchases is haunting EM assets and makes ZAR particularly vulnerable, given its external funding needs. With one of the largest current-account deficits in the EM space (Figure 1) – and a history of large portfolio inflows (bonds, in particular) – ZAR may weaken further should concerns about the provision of global liquidity intensify and investors further scale down their positions in EM assets.

Thirdly, the commodity angle is not particularly upbeat either, both in terms of global supply-demand dynamics or the domestic outlook. While the country has plenty of geological potential, it faces significant problems due to the increasing instability in the mining sector. In particular, clashes between supporters of the two main labour unions may continue to hamper the production of precious metals in the years to come.

…while outlook for its commodity exports is not benign

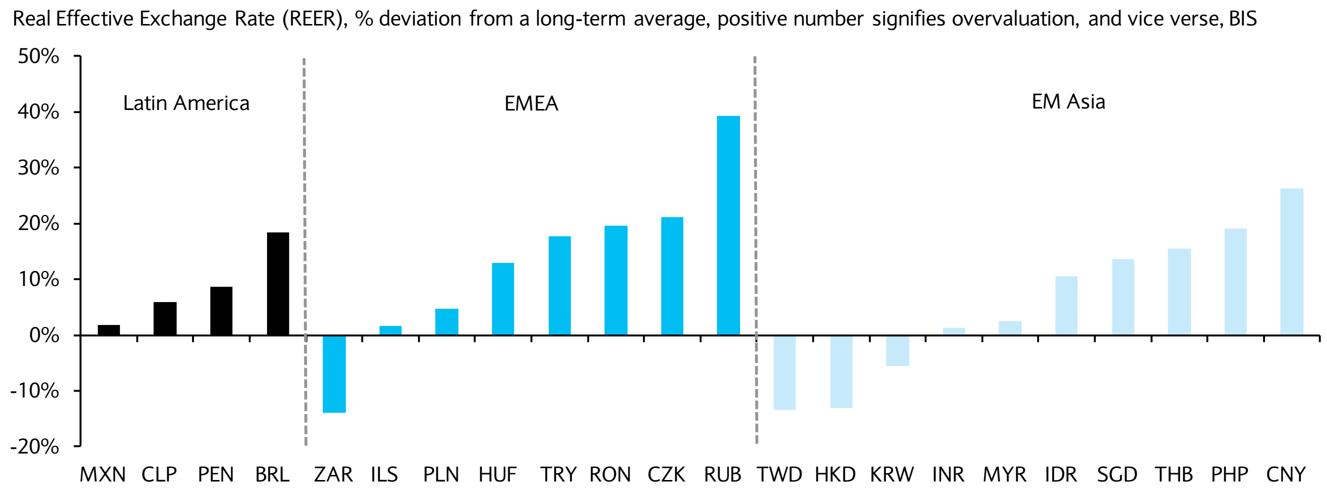
We think that gold prices (South Africa's main commodity export – 10% of total) may trend lower as global economic growth picks up: the sharp fall seen already following the FOMC's June meeting is a reminder of how exposed it is to monetary normalization. The outlook for platinum prices (9% of SA exports – Figure 3) looks much more constructive to us given its stronger end-user fundamentals, but even there South Africa's industrial unrest may constrain mining output and its ability to capitalise on that strength. The favourable medium-term outlook for iron ore and coal output could also be disrupted by strikes and political uncertainty in the short-term. Moreover, for iron ore, increasing supply capacity from other regions (such as Australia) should cause prices to decline in the coming years. Ongoing demand from Asia should underpin coal prices, however.

As a result, ZAR remains one of our least favourite currencies in the EM space. This remains the case despite its more attractive valuation (which is no surprise given its fall over the past quarters). As Figure 2 shows, the trade-weighted rand is cheap. But a weak economy, risks associated with its external funding needs, the generally soft outlook for its commodity exports and political risks make the ZAR outlook challenging.

BRL: The carnival is over

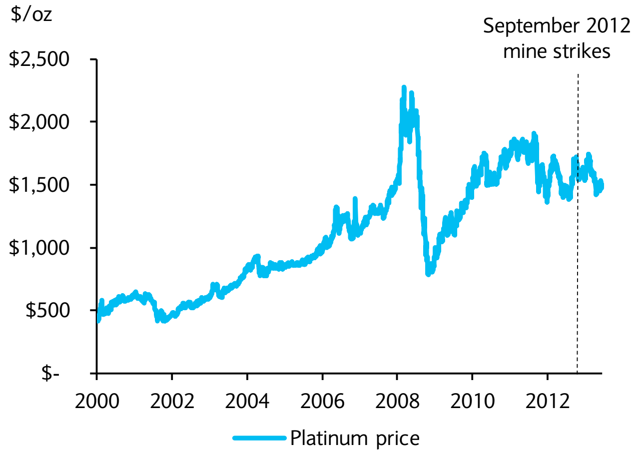
The big party on the beaches of Copacabana is over. BRL, in line with most of the EM currencies, sold off during the recent EM FX meltdown and would have probably been even weaker had the local authorities not intervened.

Figure 2: ZAR cheapened, but for good reasons, while RUB and BRL look expensive



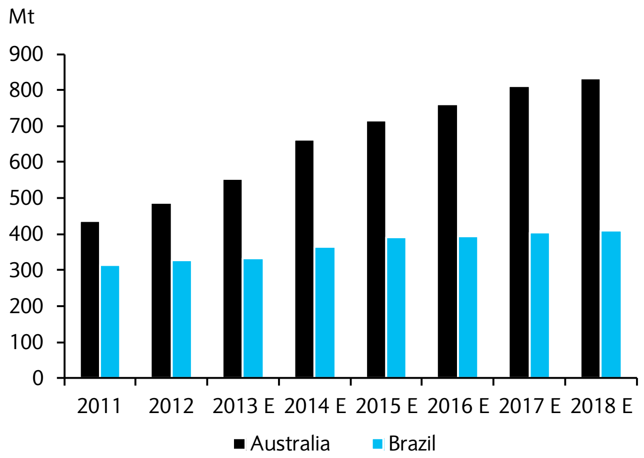
Source: Barclays, EcoWin, BIS

Figure 3: Historical world platinum price



Source: Johnson Matthey

Figure 4: Brazil's and Australia's global ore exports



Source: Bree, UNCTAD

The Brazilian economy appears to be running of out steam. Following its average growth rate of around 4% between 2002 and 2010, output slowed sharply to 2.7% and 0.9% in 2011 and 2012 respectively. Although growth is expected to pick up to 2.7% this year, the recovery is not strong. Among other things, stubbornly high inflation (a notable factor in a world where inflation is generally falling) continues to eat into domestic real incomes. As seen over recent weeks, rising prices have translated into domestic protests.

One reason for the high inflation is a loss of credibility of the Brazilian central bank which, over the course of the last year, cut rates despite price pressures. On a positive note, the central bank has now taken steps to regain its credibility – it has hiked rates by 0.75 basis points so far this year and further tightening is likely to come. Although this has been positive for the bank's credibility, the move is likely to limit economic recovery.

Brazil's deteriorating fiscal situation may warrant a sovereign downgrade

Moreover, due to uninspiring growth and large public spending, the fiscal situation has been deteriorating. As a result, our economists see a high probability of Brazil being downgraded early next year – this is not likely to add to the attractiveness of BRL.

The outlook for Brazil's commodity exports is mixed. Iron ore (Figure 4), oil and soybeans account for nearly 30% of Brazil's total export values. While we expect Brazilian iron ore exports to modestly rise over the coming years, the rising global supply and modest rate of demand growth from China makes the outlook for ore prices fragile. Brazil's oil supply has risen substantially over the past decade and may increase in the medium and long term. However, we expect Brazil to be a key component for demand growth, and rising domestic consumption will likely weigh on Brazil's overall impact on the global oil market going forward. For agricultural commodities, Brazil's soybean production accounts for about 31% of global supply, making it the world's biggest producer. Given that it accounts for such a large proportion of global soybean output, the increasing frequency of adverse weather locally could pose upward risks to prices. Demand from China (importing about 70% of Brazil's soybeans) should also remain robust.

All in all, the uninspiring growth, deteriorating fiscal situation, current account deficit (though not as high as in South Africa or Turkey) and the mixed outlook for its commodity exports makes us cautious on BRL. BRL is not cheap based on an inflation-adjusted basis (Figure 2) because of the high inflation of the past years. However, rising interest rates and the recovering central bank's credibility may limit its downside.

RUB: Not amazing, but better than others

In many respects, Russia could be seen as the flip side of Brazil. While the Central Bank of Russia (CBR) was the only big EM central bank to hike rates in the second half of the last year, Brazil was easing. This year, the roles have reversed and, with Brazil hiking rates, the CBR is expected to cut. While a fall in real wages weighed on Brazilian domestic growth, domestic consumer demand is currently one of the key drivers of Russia's output (with real wage growth in positive territory).

Outlook for RUB's commodity prices better compared to ZAR & BRL

The outlook for commodity exports for both countries is different: while we retain a constructive outlook on oil (Russia's main export), iron ore prices are likely to trend lower as noted. Moreover, unlike Brazil and South Africa, Russia is running a current account surplus (largely attributable to oil). This makes RUB the least exposed of the three major EM commodity currencies to concerns about global liquidity.

In terms of its commodity exposure, oil and oil-product exports account for over 50% of total export values. Russia's oil production accounts for nearly 12% of global supply. While oil output has increased over recent years, domestic demand has also risen, causing net exports to increase only modestly. Looking ahead, Russian net oil exports may actually decline in the coming years as domestic consumption continues to pick up. This may tighten the global market balance. In the medium term, we remain positive on oil prices as supply growth is unlikely to match the increase in demand.

Russia's fiscal position is not a concern for RUB (compared to BRL), but rising spending on social security is offsetting rising revenues: the budget balance is broadly neutral.

Although we expect RUB to struggle against USD as investors remain concerned about EM assets in general, we see scope for it to outperform both ZAR and BRL (Figure 5). From the commodity angle, prospects for Russian exports are brighter. Russia has a current account surplus, faces fewer political risks and is in a relatively better fiscal position than South Africa or Brazil (at least for now).

It is not only about which currency to buy…

USD no longer the funding currency of choice for EM longs

Once investors find an EM currency (commodity-driven or not) on which they have a degree of conviction (a difficult task amid the current EM sell-off), their work is not over. In our view, the choice of which developed currency to sell is becoming more important. We believe the trend of recent years – for USD to be used as a funding currency – is over. The robust US economy, rising US yields and attractive funding costs elsewhere argue for a shift. We prefer funding EM longs via CHF, EUR or JPY in the G10 FX space due to their low funding costs and expected depreciation. That said, we do not see an urgent need to go long EM FX as a bloc given the current market volatility.

Figure 5: RUB looks the best positioned among the major commodity currencies

	Brazil	South Africa	Russia
Economy	Low trending growth: low productivity	Slow growth: risks of waning demand & labour unrest	Stabilising growth: driven by consumer demand
Monetary Policy	Tightening: but rate hikes due to high inflation	Neutral: inflation rising but need to support economy	Easing: inflation expected to fall, supportive for economy
Current Account & Budget Balance	Mild current account deficit, deteriorating fiscal position	Twin deficit (both current account and budget balance)	Current account surplus, broadly neutral budget balance
Commodities	Iron ore prices to fall, but benign outlook for soybeans	Gold to struggle, domestic production for others at risk	Oil prices to remain underpinned
FX Valuation	Expensive - high inflation erodes real value of BRL	Cheap, but for a reason (domestic risk and weak fundamentals)	Expensive, but in part justified by the outlook for oil prices
Central bank activism	Active: history of interventions	Central bank does not tend to intervene	Mixed: limited activism

Source: Barclays

China's liquidity crunch

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After years of excessive credit growth, China's economy is being repositioned for an era of less-generous liquidity support. The recent spike in interbank market rates is an indication of how serious policymakers are about tackling the country's financial imbalances – not least in the shadow-financing system. Breaking the addiction to credit will be not be easy, but it will be worth it.

Here comes the squeeze

"The tough decision has to be made. Gone is the liquidity largesse of yesteryears. The market has to face up to the reality that the credit-fuelled euphoria is simply not sustainable. We now have to do what's right. It'll all be for the better, trust us."

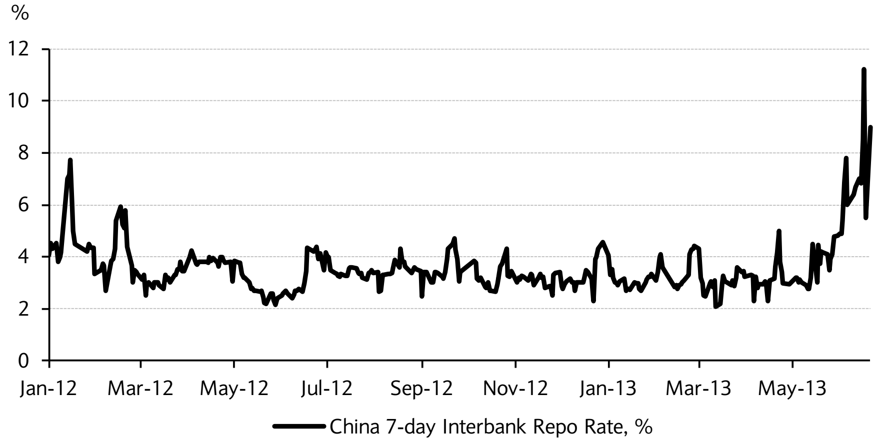
Words like these could have come from the US Federal Reserve as chairman Ben Bernanke prepared the market for the eventual QE3 exit. We think they are also the kind of words that could have come out of China, where the squeeze on liquidity has already begun, and one such exercise by the government has proved particularly interesting.

Just when investors were fixated on the US FOMC, interbank liquidity was drying up in China

While global investors were squarely focused on the outcomes of the 19 June Federal Open Market Committee (FOMC) meeting in the US, China's interbank repurchase (repo) market was – relatively quietly – illustrating what can happen when policymakers decide that enough is enough. In this market, banks agree to sell and then repurchase securities with other banks , after a specified time, at an agreed discount rate.

On 20 June, as Asian markets were digesting the hawkish FOMC statement, China's 7-day repo rate jumped to 11.2% from just 6.4% a week earlier, in what was the highest daily fixing since 2003. High repo rates indicate that some banks are willing to pay more to get short-term liquidity from others, and so can be seen as an indicator of how much cash is in the interbank market. A spike on this scale can be seen as a sign that China's level of liquidity not only fell, but fell sharply.(We should say immediately that we do not expect US rates, when they start to rise, to do so quite so sharply!).

Figure 1: China's interbank rate has spiked recently



Source: Bloomberg, Barclays

Not just post-holiday blues

Apart from the holiday effect – China had a 5-day weekend from 8-12 June – the liquidity squeeze appears to have been deliberate. Specifically, the People's Bank of China (PBOC) allowed the liquidity crunch to happen as a warning to some domestic banks against taking on too much balance sheet risk via excessive lending.

PBOC's refusal to relieve the liquidity crunch has a punitive tinge to it

Amid expectations that the PBOC would quickly relieve the sharp rise in the interbank repo rate by injecting liquidity into the system, the central bank kept the market waiting until much later in the week. By delaying its liquidity injection, the PBOC was warning banks that it will not support resurgent credit expansion in some parts of the economy. Indeed, the PBOC's delay in relieving that the liquidity crunch seemed to have a punitive tinge to it.

In particular, the authorities appear to be targeting some of the banks that have overextended themselves. The smaller banks have had a tendency to borrow from the short-term interbank market in order to finance their exposure to wealth management and other high-yielding products. Overall, they are seen as being conduits in the shadow-financing system, which has grown significantly against the wishes of the central bank.

Lurking in the shadows

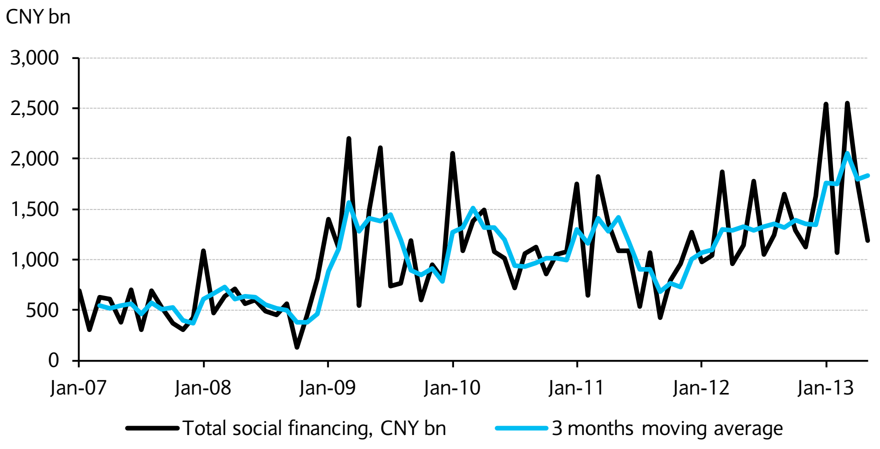
Total social financing (TSF) – which measures the overall liquidity in the system, including the non-bank sector – showed that shadow financing has been building up more intensively over the past year. On a 3-month rolling average basis, the current level of TSF (more than CNY 1.8tn) is considerably higher than it has been over the past few years.

Growth of credit outside of the formal system is a particular concern for the policymakers

The fact that credit outside of the formal financial system continued to grow sizably – despite little official monetary easing during the period – came as a particular concern for policymakers. Hence, it is perhaps not too surprising that the PBOC reacted the way it did throughout the period – refusing to inject liquidity into the system despite a liquidity crunch that saw interbank market rates soar to 30% intraday at one point.

By engineering a squeeze on the interbank funding, the PBOC's ultimate goal is to slow the growth of shadow financing – by targeting an important funding lifeline of the smaller banks. The chain of logic goes as follows.

Figure 2: Total social financing has been on an uptrend



Source: Bloomberg, Barclays

To begin with, despite repeated official urgings, the smaller banks remain involved in the relatively murky process of circumventing official banking regulations and helping to perpetuate credit growth outside of the banking channels. While these banks may not be directly extending the shadow financing themselves, there is a sense that they have been actively perpetuating it via various creative instruments.

These would include bank acceptance bills, which allow banks to act as guarantors for short-term debt instruments issued by companies. While these are considered off-balance sheet items for the banks – and therefore do not show up as normal bank loans – the banks are still liable if the issuers default.

In other cases, banks may have been acting as middlemen for selling trust loans, (a process whereby a trust company receives funds from wealthy individuals or companies) to invest in ventures that promise high yields. However, this remains a relatively unregulated part of the financial flows, and subject to significant risk.

Two hands to clap

It takes two hands to clap: for every supplier of high-risk loans, there is a pack of yield-hunters on the other end

While much can be said about how some of the banks are complicit in aiding the growth of shadow financing, the simple truth is that such instruments are popular because there is genuine demand for them. It takes two hands to clap and, for every supplier of high-risk loans, there is a pack of yield-hunters on the other side of the transaction.

Even though the ample supply of global liquidity in recent years has kept a lid on yields in most parts of the world, for China, domestic financial repression has made the situation worse.

Specifically, in what is a still a controlled financial system, the interest that households receive for depositing their money in the banks remains tied to benchmark rates. Banks cannot readily offer higher rates to attract depositors if they choose to. Avenues for investment outside of China also remain largely closed, restricting those with the financial means to invest overseas.

Given the limited ways for those with excess cash to invest, it is no surprise that, among other euphoric investment recipients such as the still-buoyant property market, the hunt for yield has also fed the growth of shadow financing.

Awaiting the reforms

It takes more than just liquidity squeeze to root out shadow financing

Given the role that financial repression plays in the growth of shadow financing, it will take more than a liquidity squeeze by the PBOC to root out the issue.

To that end, it is positive to see that top officials remain committed to resolving some of the structural financial imbalances. For one, financial liberalization appears to be a key plank of the reform agenda set out in May.

Specifically, there are some expectations that the PBOC may raise the ceiling for banks' deposit rate to 1.2 times the benchmark, compared to 1.1 times currently. While the deposit rate will still be pegged, the new measure would give banks wider berth in competing for deposits.

Further financial reforms are crucial too

Apart from that, there have been more active talks about further capital account liberalization. In particular, a program called QDII2 may be launched to allow qualified individuals to invest in overseas securities. As discussed, allowing investors to seek opportunities abroad will help to curb enthusiasm for high-yielding, but largely unregulated, trust products that form a significant portion of shadow financing in China.

All these measures will take time, to be sure. However, judging from the robustness of the PBOC's warning to the market – via the interbank system – the government appears to be building up a strong impetus for reform.

Of dilemma and trauma

Reforms are not without risks…

Tackling financial imbalances in the system is not without risk. For instance, when it comes to liquidity, the PBOC wants to see enough of a squeeze to serve as a strong signal of its hawkish intentions. At the same time it cannot afford to ignore the fact that too much of a squeeze could perpetuate the economic slowdown.

…especially given the slower growth rate

Going by the latest data (Q1 2013), Chinese GDP growth has fallen below 8% for four consecutive quarters (for the first time in 20 years). Q2 GDP growth – due to be published in mid July – is also likely to be lacklustre by Chinese standards. Indeed, our researchers have revised down their growth forecast for 2013, from 7.8% to 7.4%.

Despite the fact that headline inflation remains subdued, at around 2%, the central bank has refrained from lowering rates. In fact, the last time the PBOC adjusted its benchmark rates was in mid-2012, during which period it cut the lending and deposit rates by a conservative 0.56 and 0.50 percentage points, respectively.

At the broad level, such restraint suggests that policymakers are relatively comfortable that, while growth will be slower than before, the economy is not about to decelerate uncontrollably. However, it also reflects their trauma about the impact of hyperstimulus, highlighted by the shadow-financing problem.

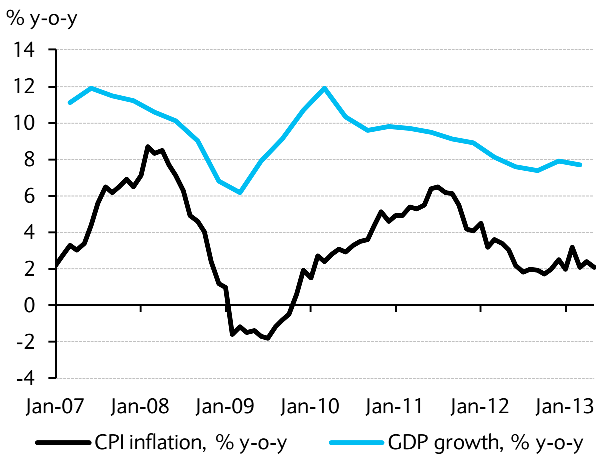
The next step for China will not come easy…

The next step for China's growth will not come easy. Gone are the days when the world's second-largest economy can clock double-digit growth in a seemingly effortless manner. The country must now face the realities of the trade-off between short-term growth and long-term sustainability.

…but well worth the effort

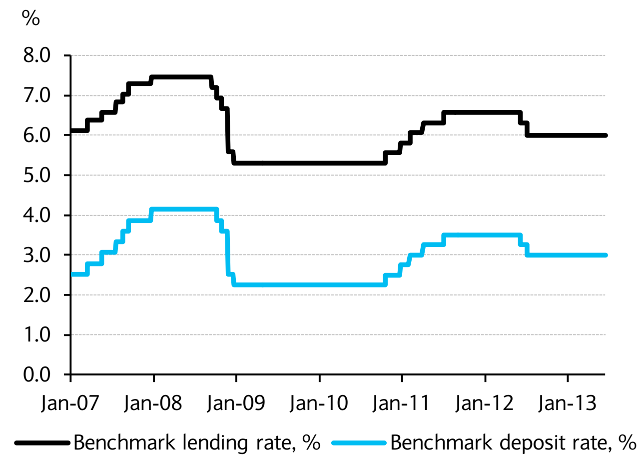
China's new policymakers appear to be taking the view that going 'cold turkey' is worth it if it means curing the economy of its addiction to credit, and rebalancing spending away from frothy fixed investment (including real estate) towards more subdued but solid consumption. We concur. It may be a bumpy ride, but China remains one of our favourite long-term emerging market investments.

Figure 3: Both growth and inflation have come down



Source: Bloomberg, Barclays

Figure 4: Benchmark rates have been on hold recently



Source: Bloomberg, Barclays

What is risk (II)?

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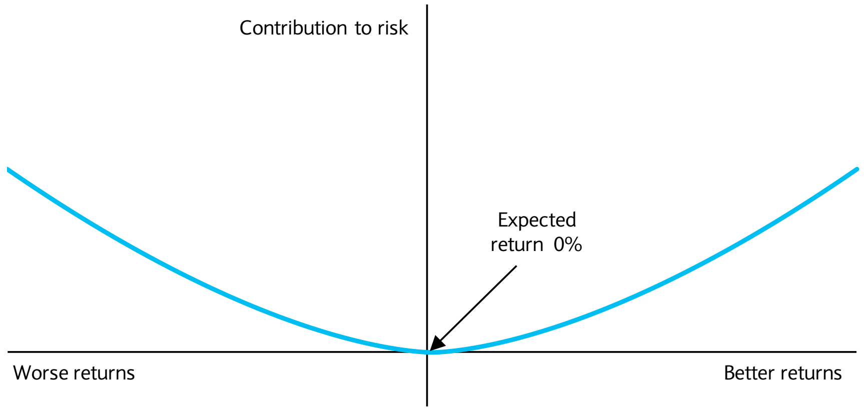
It is a truism of investing that achieving higher returns requires taking more risk. On average those who take risk are rewarded for doing so – but 'on average' provides no guarantees and there remains the possibility that the outcome will be worse than expected. Determining whether the average expected reward is sufficient to compensate for the risks taken requires an understanding of precisely what is meant by risk.

Following on from last months' Compass where I explained why risk is not the same as volatility, in this edition I describe our *Behavioural Risk* measure in more detail.

To recap: standard deviation is a poor measure of risk. To see why, consider Figure 1. This shows how investors would evaluate the risk of possible future returns if they really did interpret risk as standard deviation. As shown, there would be no contribution to perceived risk associated with the expected outcome (here 0% to keep things simple). Any possible outcomes less than this, however, add to the perceived risk of the investment. The worse the outcome, the more it adds to the perceived risk – for example, the possibility of getting -1% instead of 0% increases the risk by a small amount; -5% by somewhat more; and the thought of -10% causes the investor considerable stress.

Figure 1: Implied psychology of risk as volatility



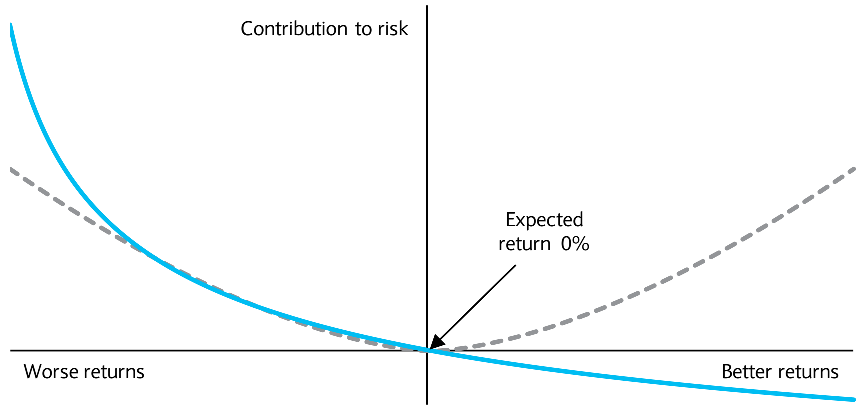
Source: Barclays

However, note that the curve is symmetric around 0%. This means that the possibility of getting *plus* 5% instead of 0% actually *adds* to the risk of the investment – in fact it adds the same amount to perceived risk as getting -5%. And as returns get better and better they add more and more to the measured risk of the investment! Clearly, assuming that good outcomes increase the risk to investors is unrealistic … and yet this assumption still underpins the majority of optimisation techniques used in the industry. This definition of risk means that any technique used to minimise risk will penalise potential good outcomes as much as it will potential negative outcomes. Investors' risk budgets will be used up protecting against potential outcomes that they just do not see as risky.

Reflecting risks that matter

Our behavioural risk measure is, by contrast, a much more psychologically accurate and intuitive response to risk. It is based on psychologically plausible assumptions from research into the psychology of risk and financial decision making. Figure 2 shows the intuition behind this measure without going into the mathematical formulation (for which see our Asset Allocation White Paper). As before, potential outcomes that are worse than expected, add to risk, and at an increasing rate. However, outcomes that are better than expected actually *detract* from the perceived risk of the investment. Investments with potential upside thus *increase* the risk budget so real risks can be taken elsewhere in the portfolio.

Figure 2: Actual psychology of risk



Source: Barclays

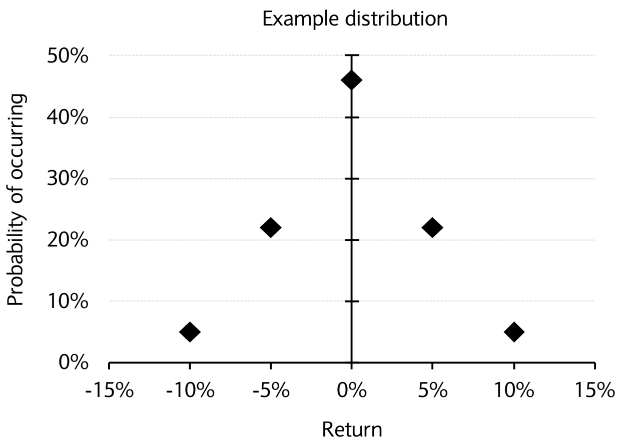
Another difference between the psychological approach to risk and the traditional volatility measure is more subtle but just as important: for most of the downside the two curves are fairly close to each other. However, the psychological measure gets steeper at a faster rate as outcomes get worse and worse. This means that extra emphasis is placed on those possible outcomes that people most fear, the potential for catastrophic losses in the left tail of the returns distribution. Using this measure means that portfolios are optimised to reflect the risks that are most important to investors, but also to take on the upside variation that they would rather embrace than avoid.

Accounting for fat tails

This last aspect of the behavioural risk measure is extremely important, since it enables us to overcome a further significant failing of standard deviation as a risk measure: it cannot fully measure the risks of distributions of different shapes. In particular, the distributions of the possible future outcomes of many investments, tend to have features that cannot be captured by standard deviation. Firstly they are typically not symmetric: instead they are usually somewhat *negatively skewed*, meaning that large negative outcomes happen slightly more frequently than large positive outcomes. And secondly they exhibit *fat tails*: extreme outcomes, whether negative or positive happen more often than is predicted by using standard deviation as the risk measure.[1]

[1] We have only to think of the absurd claims that September 2008 was a 'one in three thousand year event' to see the failure of standard risk measures to account for the likelihood of extreme movements, and extreme downward movements in particular.

Figure 3: Standard deviation can't detect fat tails



Source: Barclays

Because the behavioural risk measure is deliberately asymmetric and downward focussed, and because it places greater attention on the far left tail, it accounts for both negative skewness and fat tails. That is, a distribution of possible future outcomes that has these common features will be measured as being *more risky* on our behavioural measure, whereas standard deviation will not pick up these features at all.

To illustrate this briefly, examine the two simple distributions in Figure 3. The one on the left is designed so that all the variability is picked up by standard deviation: it is perfectly symmetric around 0% and does not have fat tails.[2] It has just five possible future outcomes: the most likely is the average (expected) outcome of 0%, which has a 46% probability of occurring; the outcomes of -5% and 5% are both equally likely, each with a 22% chance of occurring; and least likely (each at 5% chance) are the two extreme outcomes of -10% and 10%. This distribution has a standard deviation of 4.6%.

The behavioural risk of this distribution is also 4.6%, since there are no fat tails or skewness to compensate for. If the distribution of outcomes follows the theoretical ideal of *normal* then behavioural risk is identical to standard deviation. However, is reality this is seldom the case.

Let us examine a simple variation on this distribution, one that introduces fat tails.[3] This distribution has the same mean, or expected outcome, of 0%. However, the good and bad outcomes are shifted. Instead of getting either -5% or 5%, these two are now closer to the average: there is the same 22% chance for each, but now on -1.3% and 1.3%. And the extreme outcomes, though occurring with the same probability, are now much more extreme: there is a 5% chance of getting either 14.3% or -14.3%. This distribution has very fat tails, and because investors naturally focus on the extreme negative outcome when evaluating risk, we should very naturally expect that this second distribution is riskier than the first.

However, these two distributions have the same standard deviation! Any traditional portfolio optimisation based on standard deviation as a risk measure would treat them exactly the same, as though they have the same risk for the investor.

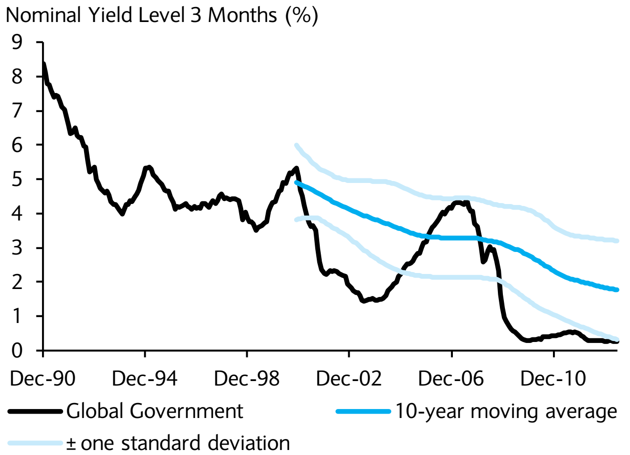
[2] It follows what is known as the *normal* distribution, though as noted it's actually rather uncommon in reality!
[3] For simplicity we'll ignore skewness here, but behavioural risk accounts for differences in skewness just as easily as differences in extreme outcomes.

Our behavioural risk measure, by contrast recognises that the danger of -14.3%, rather than -10% matters more to investors than the other changes in the distribution, and therefore appropriately indicates an *increase* in risk. Indeed doing the calculation for a low risk tolerance investor shows that the risk increases to 4.6% from 4.8%. This risk increase means that the optimisation process will penalise the fat tail investment more, and reduce the optimal holding, making more space in the portfolio for investments with less tail risk.

To build portfolios that give investors the best possible returns for the risk they need to take, it makes no sense to strive to suppress outcomes that aren't actually risky (good/positive outcomes), or to ignore outcomes that really matter to investors (the extreme negative outcomes). Our use of behavioural risk enables us to ensure that our asset allocations fully reflect the risks that count, and therefore deliver greater efficiency in our solutions.

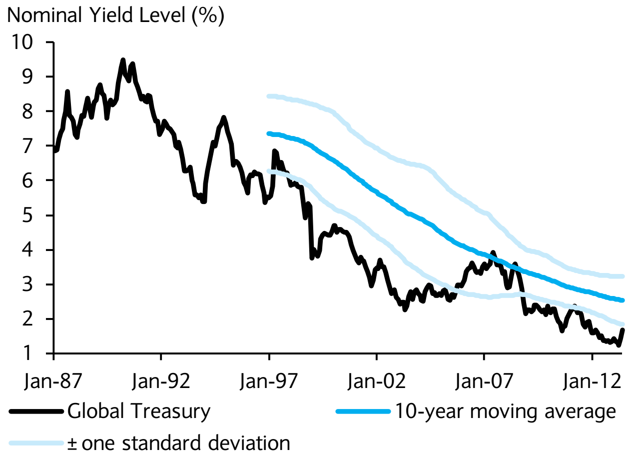
Interest rates, bond yields, and commodity and equity prices in context*

Figure 1: Short-term interest rates (global)



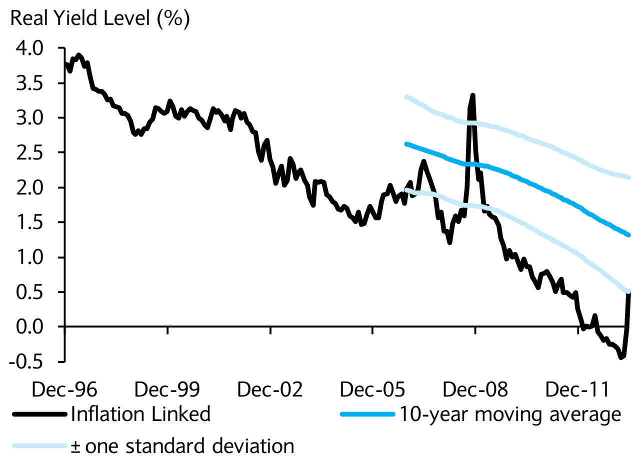
Source: FactSet, Barclays

Figure 2: Government bond yields (global)



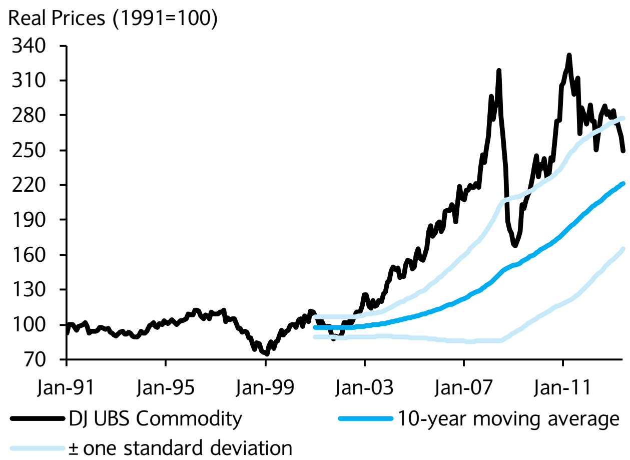
Source: FactSet, Barclays

Figure 3: Inflation-linked real bond yields (global)



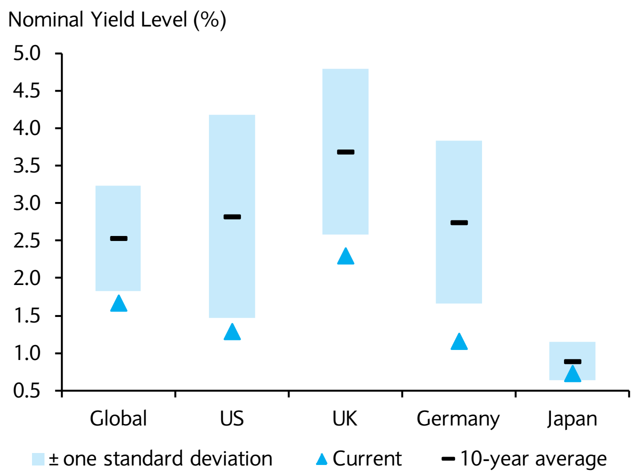
Source: Bank of America Merrill Lynch, Datastream, FactSet, Barclays

Figure 4: Inflation-adjusted spot commodity prices



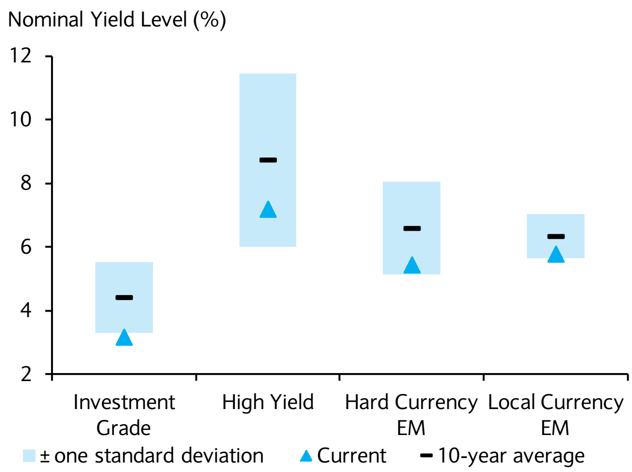
Source: Datastream, Barclays

Figure 5: Government bond yields: selected markets



Source: FactSet, Barclays

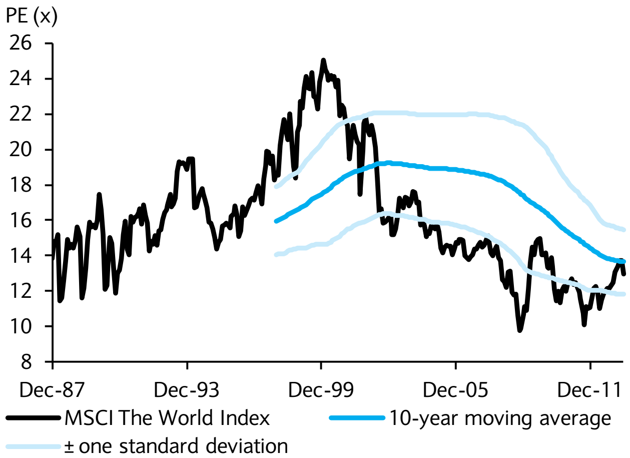
Figure 6: Global credit and emerging market yields



Source: FactSet, Barclays

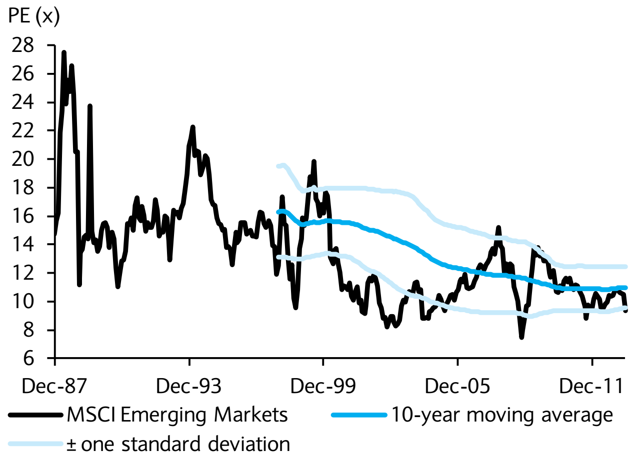
*Monthly data with final data point as of COB 24 June 2013.

Figure 7: Developed stock market, forward PE ratio



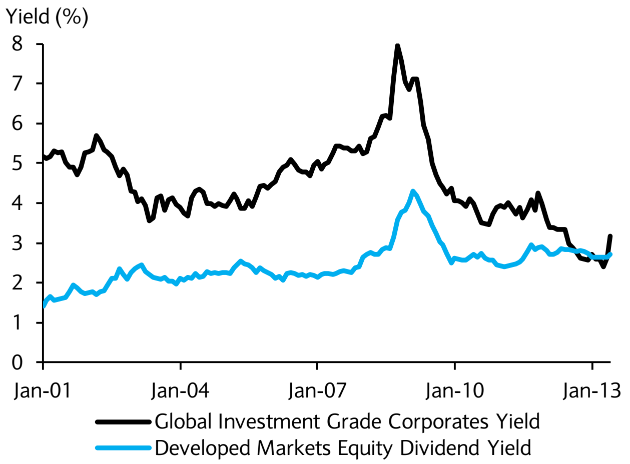
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 8: Emerging stock market, forward PE ratio



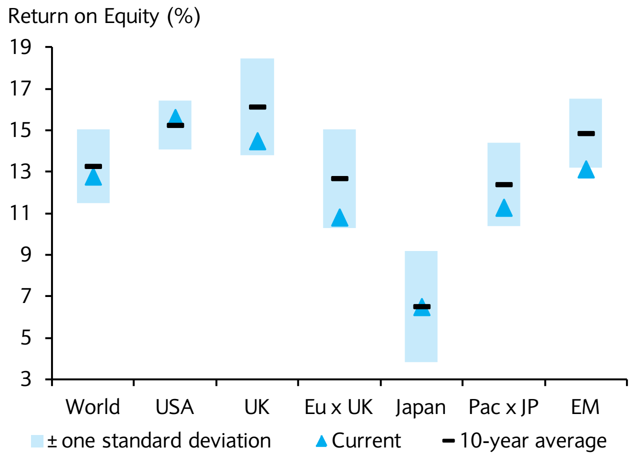
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 9: Developed world dividend and credit yields



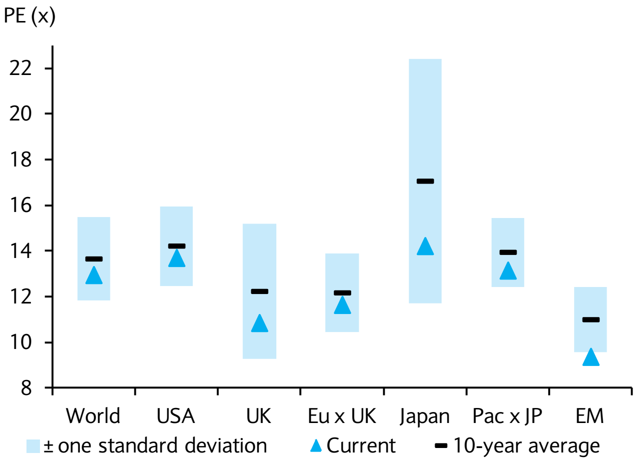
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 10: Regional quoted-sector profitability



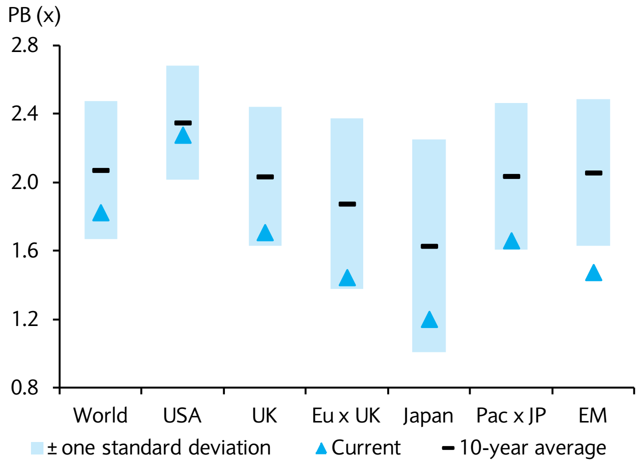
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 11: Global stock markets: forward PE ratios



Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 12: Global stock markets: price/book value ratios



Source: MSCI, IBES, FactSet, Datastream, Barclays

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