

Compass

Market outlook

Dream and reality: emerging market currency returns

Why behavioural finance matters



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Market outlook

After a strong start to 2013, markets must now negotiate their way past the Italian electorate and the US government – which begins its sequestration debate on 1 March – if they are to maintain their upward trajectory. Meanwhile, as the new Chinese administration takes office in early March, we ask how far the rally has left to run.

Europe: austerely yours

Political uncertainty, ongoing austerity and lagging economies continue to overshadow Europe. Nonetheless, we see the (unsurprising) renewed volatility in continental markets as an opportunity to add to long-term holdings in one of our favoured investment regions.

Eurozone: mamma mia, there you go again

Following Italy's election deadlock, it is too soon to draw firm conclusions on the likely composition of the country's next government (let alone its policies). Nonetheless, while the election result is disappointing for investors, it needn't be transformative for portfolios. We see the volatility that the vote has caused as an opportunity to add to positions in selected risk assets, including eurozone stocks. Renewed volatility has long seemed likely, and eurozone politics has always been a possible catalyst.

While many media and market voices will argue forcefully that the euro faces a life-threatening crisis, we doubt that the situation is that stark. It may, however, be a while before this becomes apparent: volatility may not subside immediately.

Political fluidity in Italy is of course the norm, not the exception. The average life of an Italian government since 1948 has been a little over one year. The question now is whether the fiscal retrenchment and structural reforms undertaken by Mario Monti are put on pause, or move into reverse. We suspect it will be the former.

The election result shows Grillo's Five Star Movement to be the big gainers. The protest vote is not however enough to deliver a government that is sufficiently populist (or irresponsible) to embark upon renewed fiscal profligacy (and/or euro exit, though this may not be the part of Grillo's platform that attracted voter support).

The most likely outcome is some form of coalition involving at least one of the parties not led idiosyncratically, which will act as ballast. Bersani's centre-left grouping has most seats in both houses: it controls the lower house, but not the senate. This leaves Italy with a relatively small fiscal deficit (2% of GDP), a primary surplus, and a current account that is close to balance. Fiscal slippage is being tolerated by the euro partners in Spain and France, and if necessary would likely be tolerated in Italy too. The European Central Bank's promise of conditional support in the secondary markets, for a member government that requests it, is an important financial safeguard. As we have written here many times: there are no short cuts to a lasting solution to the euro crisis, but that doesn't mean that investors need remain on the edge of their seats while waiting.

Elsewhere, the Spanish government – not without its own difficulties over recent weeks – is still holding back from making a formal application for a bail out. Remember, once the European Central Bank (ECB) made that promise, the likelihood of member governments being able to secure funding rose sharply.

Net Balance with the Eurosystem / Target, €bn 850 650 450 250 50 -150 -350 -550 Jan-07 Jul-07 Jan-08 Jul-08 Jul-09 Jan-10 Jul-10 Jan-12 Jul-12 lan-09 lan-11 Iul-11 lan-13 Finland France Greece Ireland Germany --- Netherlands Italy Portugal Spain Luxembourg

Figure 1: TARGET2 balances show stability creeping back into euro area deposits – at least, prior to the Italian vote

Source: Institute of Empirical Economic Research of Osnabrück University

Figure 1 shows that intra-euro tension has eased over recent months. The cross-border balances in the TARGET2 system (the EU's interbank payment system) seem to have peaked last summer and have been slowly subsiding as deposits have stabilised. These balances – and of course Italian and Spanish bond yields – will be watched carefully.

Meanwhile, eurozone economic data remain patchy, but with a stabilising bias – indicators from the periphery and France remain subdued, but the best-established cyclical indicator in the zone, the German Ifo survey, has again surprised positively. We expect eurozone GDP to be flat this year, but that would be a small improvement on 2012 – and a better outturn than we think is even now priced-in to equity markets.

Investment advice: Current volatility notwithstanding, we think that stocks in the eurozone – and across the wider continental market – can outperform the rest of the developed world this year. The continent may be the slowest-growing region economically, but markets are driven by outturns relative to expectations, not absolute GDP growth. As noted, we think that investors' expectations of corporate profitability are still too low, and those of renewed euro instability too high, even after the rally in stocks to date. Continental bonds can outperform too, because they include Italian and Spanish debt where a modestly risk-on climate may eventually foster renewed spread narrowing. In Europe, as in the rest of the world, however, we strongly prefer stocks to bonds.

UK: downgraded, but not out

Poor growth data have not prevented UK inflation from continuing to exceed target. They have, however, deterred the Bank of England from trying to do anything about it. The bank now expects UK inflation to continue to exceed its target into 2015, which would take its track record of underachievement in this respect to a round decade.

The foreign exchange markets have noticed. Even before Moody's downgraded the UK's credit rating, sterling had been weakening. The decline has been bigger than the UK's inflation differential, and the result is a *real* exchange rate that looks a little more competitive than it did. With two of the UK's important export markets – the US and Germany – looking more animated and the bulk of the fiscal hit to growth beginning to fade, the stage is set for modest cyclical improvement. Growth in 2013 will be supported too by the fading of the one-off working-day effect that hit output in 2012.

In the meantime, we note that the employment data was telling a somewhat less downbeat story to begin with, and that the government deficit – while not falling as quickly as planned – has fallen by two-fifths since its 2009 peak (Figure 2). The first-ever downgrade of the UK's sovereign credit rating may, therefore, have occurred at a time when the outlook is in fact brightening. The sound you may now hear in the background is that of a stable door being closed as the horse gallops away.

Pound Sterling, bn Persons mn 22.2 -20 22 First-ever UK sovereign downgrade occurs now -40 21.8 -60 21.6 -80 21.4 -100 21.2 -120 21 -140 20.8 -160 20.6 -180 20.4 Jan-04 lan-06 Ian-08 Ian-10 lan-12 Government balance, rolling 12 mths, £bn (LHS) Full-time employment, mn (RHS)

Figure 2: Closing the stable door: UK government balance and employment

Source: Datastream, Barclays Research

Investment advice: we have been less positive on UK securities than on those in continental Europe, and indeed on developed markets generally. If anything, our wariness of UK government bonds (gilts) has increased in the last month, while our sentiment towards stocks has improved.

Our caution on gilts has nothing to do with the UK government's creditworthiness, and everything to do with valuation and inflation risk. Even Moody's does not expect the UK government to come close to defaulting on its nominal obligations; an Aa1 rating is still the second-strongest rating there is. But most gilts are trading well above par value, and yields are firmly below current and prospective inflation rates (the UK's track record on inflation remains the worst among the old G7). If UK growth revives a little – and risk appetite with it – investors in gilts face potentially considerable mark-to-market volatility.

The currency still looks vulnerable, near term, but talk of a sterling "crisis" is premature. There is no fixed peg that needs to be defended, and the currency was inexpensive to begin with. Moreover, the scale of the recent disappointment on growth, the order of magnitude of the inflation in prospect, and now the fiscal deficit itself are, in our view, not large enough to trigger a major sell-off. Much bad news is likely already in the price, and we expect sterling to recover against the euro in the second half of the year.

In the meantime, investors worried about foreign exchange risk and familiar with derivatives might consider hedging – or simply ensure, as we advise, that they hold a balanced portfolio that includes a healthy weighting in blue-chip equities. Those stocks needn't be listed overseas: large UK listed-companies are among the most international on the global exchanges. While their prices, therefore, are quoted in sterling, they are driven by the global markets that generate the bulk of their profits.

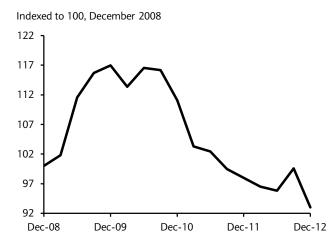
The UK has been one of our least favoured stock markets. This remains the case, but the cheaper currency will help boost the UK's relative earnings momentum, and its lack of appeal has faded a little. Of course, even while underweight the UK in an equities-only context, we have strongly preferred UK stocks to gilts and cash.

US sequestration: a speed bump, not a pothole, for markets

As we go to print, US equities are on track to post a second consecutive month of gains. The advance has been broad based, with large and small companies alike enjoying investor attentions. (The S&P 500 Index rose 1.44% for the month, while mid- and small-capitalisation stocks gained 1.17% and 1.06%, respectively.¹) Investor risk appetite has been fed by a strong US corporate earnings season, with fourth-quarter profit up an average of 6.9% on revenue growth of 3.5%.² Accompanying the results and rising equity prices – indeed a catalyst for the rise in small and mid-cap – has been increased in US merger and acquisition activity. By mid-quarter, the value of US M&A deals announced was set to exceed the full amount for the first quarter of 2012. The increased corporate acquisitiveness reflects the greater confidence corporate chieftains now have about the economic environment in which they're operating. We expect this trend to continue – a positive for small and mid-cap US stocks – as slow but steady economic growth and postponed capital expenditure drives the need to produce earnings growth.³

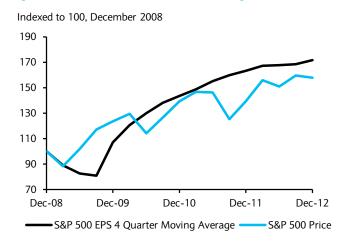
With the earnings season drawing to a close, financial headlines and investor attention will turn to the policy debates around sequestration of Federal expenditures that begins on March 1, and the potential shut-down on March 31 of the Federal government due to the expiration of the continuing budget resolution. At this juncture, it seems as if sequestration will occur as scheduled since there is little inclination on the part of Congress and the White House to reach a deal that would avert the automatic cuts. The effect on 2013 GDP of the \$85 billion in spending is roughly 0.50%. Given the rising private sector activity and the steady decline of government spending in recent years, the potential impact of sequestration represents more of a speed bump rather than a pothole to the nation's economic activity. Consider the following chart, which maps the decline in public sector expenditure to corporate earnings and stock prices.

Figure 3: US real public sector (government) spending



Source: BCA, Bloomberg; Quarterly values, as of December 2012. US Real Public Sector (Government) Spending is defined as government purchases from businesses plus compensation of government employees plus government purchases from the rest of the world.

Figure 4: S&P 500 index level and earnings



Source: BCA, Bloomberg; Quarterly values, as of December 2012

¹ Source: Bloomberg. Figures are total returns for February. Mid-cap index is the S&P 400 Mid Cap Index and Small Cap returns are represented by the S&P 600 Small Cap Index.

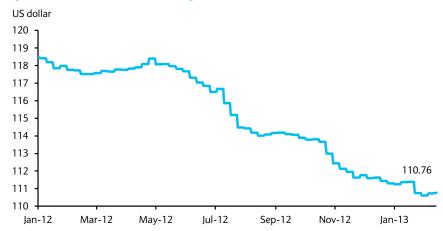
² Source: Bloomberg. S&P 500 Index companies earnings, as of February 28, 2012

³ US corporations spending on capital expenditures as a percent of profits is well below its long-term historic average: 55% vs. average of 89% since 1951. Source: Bloomberg, as of September 2012, latest available data. The need to reinvest in plant and equipment is not something that can be postponed ad infinitum.

We continue to recommend rotation away from Treasuries and investment grade bonds into equities or floating-rate public and private debt

Against the expectation of fiscal battles ahead, the consensus estimate for S&P 500 earnings this year appears to be settling in at the \$110 per share 4 level that we posited in December. 5 This is encouraging, as it makes our yearend S&P 500 target of 1,595 and the expected return of 12% to 14% more probable. (As you'll recall, our target was based on our 2013 S&P 500 earnings estimate of \$110 per share and an anticipated price-to-earnings multiple of 14.5.)

Figure 5: S&P 500 – 2013 Earnings Per Share Estimate



Source: Institutional Brokers Estimate System (IBES) as of February 27, 2013.

As expected, US investment grade and high yield fixed income returns have been challenged – flat to slightly negative – especially compared to equities. Talk of increased concern in certain quarters of the Federal Reserve about the impact of continued quantitative easing has investors wondering when the central bank's money printing program will begin moving into lower gear. As private sector activity accelerates this year, this question will feature ever more prominently in investor discourse. Beware: Investors who wait for the Fed's confirmation of an actual policy change will have waited too long. As we have frequently underscored in these pages and in our weekly publications, fixed income market valuations, at or near historic highs, are simply too expensive for any investor who seeks a margin of safety in a security's price relative to its intrinsic value.

Consequently, we continue to recommend investors rotate exposures away from fixed income investments – particularly Treasuries and US investment grade debt – into US equities, or floating-rate public and private debt. The risk reward potential is clearly in favour of the latter and not the former.

Asia: a promising start to the year

Market movement in Asia has been dominated lately by developments in Japan. The continued weakening of the Japanese yen has brought a rare whiff of excitement to the otherwise dull Japanese equity markets, in part due to expectation that the weaker currency will help boost export competitiveness. But as we highlighted in last month's *Compass* article "Where will Japan's rally go next?", the stock market's recent returns look a lot less spectacular once the extent of the yen's depreciation is taken into account – something international investors should note. Year-to-date, the Nikkei 225 index has returned more than 11% in local currency terms but only 2% in US dollar terms. 6

⁴ Source: Bloomberg, as of February 27, 2013

⁵ See December 2012 / January 2013 Compass: "An American Reckoning, or Reconciliation"

⁶ Source: Bloomberg as of 22 February 2013.

Meanwhile, the latest Q4 2012 GDP data for Japan – which shows that the economy continued to contract at a rate of 0.1% quarter-on-quarter – reminds us of the magnitude of challenges that the country still faces in reviving growth.

While Japan may be the momentum trade for now, for the region overall we remain most constructive on China, with its longer-term growth potential. China's macro data trend has been largely moving in the right direction: Its economy continues to show further signs of growth stabilization (see Figure 6) – with our estimate for China's 2013 GDP growth at 7.9%, up from 7.8% in 2012. While the latest flash Markit Manufacturing PMI, which tracks sentiment in small-to-medium businesses, retreated to 50.4 in February from January's final reading of 52.3, it remains expansionary, indicating that more manufacturers are optimistic about the outlook than not.

The stabilization of China's economic outlook has also led to improved earnings expectations (see Figure 7) and higher valuations for Chinese stocks. The MSCI China Index's current price/earnings ratio is 10, up from about 9 in October. These factors, combined with the successful transition in political leadership, make it unsurprising that Chinese equities have outperformed Asian stock markets over the last several months. Despite the recent outperformance, Chinese equities are still trading below their 10-year historical average price-to-earnings multiple of 12. Although the market may take a breather due to profit taking activities, we would view any set-back as an opportunity for investors to build exposure to Chinese equities —especially in companies that could gain from infrastructure- and/or consumption-related growth in China.

A key event to watch is the National People' Congress (NPC), which starts in early March. While the government could introduce additional measures to support near-term growth, we do not expect any large-scale stimulus in view of the improving macro data. Rather, we will watch for further policy initiatives aimed at reshaping China into a more consumption-driven economy with quality growth. Such initiatives would include additional state-owned enterprise (SOE) reforms; plans to liberalize interest rates further and increase SOE dividend payouts to government shareholders are already starting to emerge. Some market observers have expressed concerns that the reforms may be negative to SOEs, which still account for a significant portion of the Chinese equity market. Eight out of the 10 largest weighted stocks in MSCI China are SOEs; and these eight SOEs alone account for about 45% of the index. Hence, it is likely the stock market would be negatively impacted if reforms were to cause a sudden deterioration in SOE profitability and shareholder returns. However, we believe that the process of further



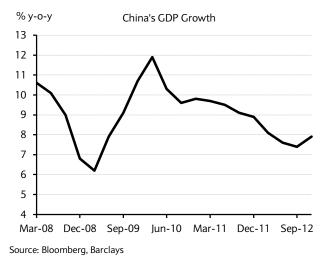
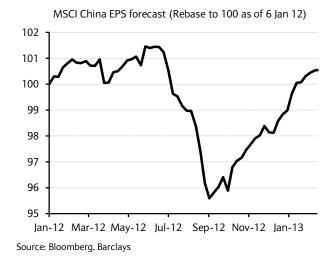


Figure 7: Improving China earnings expectations



reforms is likely be gradual, providing time for the SOEs to adapt and avoiding any sharp decline in SOE profitability. More significant, the reforms, if successfully implemented, could result in a more efficient SOE sector as well as better allocation of capital and resources in the country, supporting the sustainability of China's long-term growth.

Like China, Asia's key exporting economies are generally seeing signs of a turnaround as well. Take Korea. While the recent Japanese yen depreciation has brought some pressure to bear on Korean exporters, the general lift in global trade has provided some countervailing support. The country's January trade numbers, for example, show that exports grew by a much better-than-expected 11.8% year-on-year – compared to an outright y-o-y contraction of 5.5% in December. (The median forecast was for 8.9% growth, according to Bloomberg.) Similar strength can be seen in Taiwan, where exports grew by 21.8% year-on-year in January, compared to 9.0% the month before. These exporting countries – and their respective equity markets and currencies -- will only benefit from stronger global growth.

Barclays' key macroeconomic projections

Figure 8: Real GDP and Consumer Prices (% y-o-y)

		Re	al GDP			Consumer prices						
	2011	2012	2013	2014	2011	2012	2013	2014				
Global	3.8	3.1	3.3	4.1	3.9	2.9	3.0	3.1				
Advanced	1.4	1.2	1.1	2.1	2.5	1.8	1.8	2.0				
Emerging	6.5	5.0	5.5	6.0	6.3	4.7	5.0	5.0				
United States	1.8	2.2	1.6	2.5	3.2	2.1	2.1	↑ 2.2	\downarrow			
Euro area	1.5	-0.5	0.0	1.5	2.7	2.5	1.9	1.6				
Japan	-0.6	1.9	1.2	2.4	-0.3	-0.1	0.1	1.8				
United Kingdom	0.9	0.0	1.0	2.1	4.5	2.8	2.7	2.4				
China	9.3	7.8	7.9	8.1	5.4	2.6	3.2	3.5				
Brazil	2.7	0.9	3.0	3.6	6.6	5.4	6.0	5.7				
India	7.4	5.2	6.3	↓ 7.2	9.5	7.5	6.4	5.8				
Russia	4.3	3.4	3.3	3.5	8.6	5.1	6.4	5.5				

Source: Barclays Research, Global Economics Weekly, 22 Feb 2013

Note: Arrows appear next to numbers if current forecasts differ from that of the previous week by 0.5pp or more for quarterly annualized GDP, 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).

Figure 9: Central Bank Policy Rates (%)

Official rate	Forecasts as at end of								
% per annum (unless stated)	Current	Q1 13	Q2 13	Q3 13	Q4 13				
Fed funds rate	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25				
ECB main refinancing rate	0.75	0.75	0.75	0.75	0.75				
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	7.25	7.25	7.25	7.25	7.25				
India: Repo rate	7.75	7.50	7.00	7.00	7.00				
Russia: Overnight repo rate	5.50	5.50	5.50	5.50	5.50				

Source: Barclays Research, *Global Economics Weekly*, 22 Feb 2013 Note: Rates as of COB 21 Feb 2013.

TAA: risk assets still favoured

Euro politics, and continuing US fiscal indecision, have always been two very visible potential triggers for a rebound in stock market volatility after the relative calm, and solid gains, of recent months (geopolitical risk and escalating 'currency wars' would be two others, for example). We do not think that they yet warrant changes to our Tactical Asset Allocation. Instead we continue to focus on the euro likely remaining intact, backstopped by the ECB, and on the ongoing growth in the US and global economy. With equities still looking inexpensive, despite their rally since last summer, this leaves us firmly overweight developed stocks in particular (which is where we think the chances of beating (low) expectations are greatest). We are more wary of fixed income assets, which are still historically expensive. We are tactically underweight investment grade credit, and our recommended long-term allocation to government bonds was recently lowered in the annual review of our Strategic Asset Allocation (as reported in February's *Compass*).

Figure 1: Current strategic (SAA) and tactical (TAA) asset allocation by risk profile

	Low		Medium Low		Moderate		Medium High		High	
Asset class	SAA	TAA	SAA	TAA	SAA	TAA	SAA	TAA	SAA	TAA
Cash & Short Maturity Bonds	46.0%	45.0%	17.0%	15.0%	7.0%	4.0%	3.0%	1.0%	2.0%	1.0%
Developed Government Bonds	8.0%	8.0%	7.0%	7.0%	4.0%	4.0%	2.0%	2.0%	1.0%	1.0%
Investment Grade Bonds	6.0%	4.0%	9.0%	7.0%	7.0%	5.0%	4.0%	2.0%	2.0%	0.0%
High-Yield & Emerging Markets Bonds	6.0%	6.0%	10.0%	10.0%	11.0%	11.0%	10.0%	10.0%	8.0%	8.0%
Developed Markets Equities	16.0%	19.0%	28.0%	32.0%	38.0%	43.0%	45.0%	49.0%	50.0%	53.0%
Emerging Markets Equities	3.0%	3.0%	6.0%	6.0%	10.0%	10.0%	14.0%	14.0%	18.0%	18.0%
Commodities	2.0%	2.0%	4.0%	4.0%	5.0%	5.0%	6.0%	6.0%	5.0%	5.0%
Real Estate	2.0%	2.0%	3.0%	3.0%	4.0%	4.0%	6.0%	6.0%	7.0%	7.0%
Alternative Trading Strategies	11.0%	11.0%	16.0%	16.0%	14.0%	14.0%	10.0%	10.0%	7.0%	7.0%

As first published on 1 February 2013. The recommendations made for your actual portfolio will differ from any asset allocation or strategies outlined in this document. The model portfolios are not available to investors since they represent investment ideas, which are general in nature and do not include fees. Your asset allocation will be customized to your preferences and risk tolerance and you will be charged fees. You should ensure that your portfolio is updated or redefined when your investment objectives or personal circumstances change. Source: Barclays

0.1% Cash and Short-maturity Bonds 0.0% 4.5% **Developed Government Bonds** -0.1% 10.9% **Investment Grade Bonds** 0.0% 17.4% High Yield and Emerging Markets Bonds 0.5% 15.8% **Developed Markets Equities** 3.8% 18.2% **Emerging Markets Equities** -1.0% -1.1% | Commodities -1.4% 27.7% Real Estate 2.4% ■ 3.5% Alternative Trading Strategies 2.0% **2012** ■2013 (through 26 February 2013)

Figure 2: Total returns across key global asset classes

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 Global EM & Barclays EM Local Currency Governments; Developed Markets Equities by MSCI EM; Commodities by DI 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.

[†] Diversification does not guarantee against losses.

Dream and reality: emerging market currency returns

Petr Krpata, CFA +44 (0)203 555 8398 petr.krpata@barclays.com Contrary to received wisdom, emerging market currencies do not always outperform. EM FX recently needed a carry to keep up with developed market currencies. The same can be said of EM local currency debt, where carry – and not FX spot returns – was the key contributor to total returns of this asset class.

Demystifying DM and EM FX returns

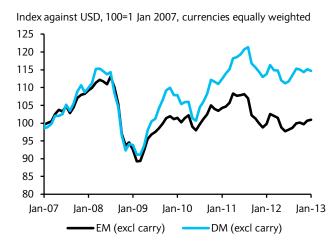
Although conventional wisdom suggests that emerging market (EM) currencies tend to outperform developed market (DM) currencies, in recent years, the opposite has been the case. As Figure 1 shows, a basket of DM currencies have outperformed a basket of EM currencies since 2007 (measured against USD). The same holds true if measured from March 2009, when risky assets troughed following the credit crunch.

However, we also find that when we account for carry (implied from the interest rates priced into 1-month FX forwards), the returns converge and are broadly the same (Figure 2). This suggests that, in general, EM FX returns have largely been derived from higher interest rates and the subsequent carry, which materially offset spot returns (Figure 3). In the case of DM FX, the opposite holds true: spot has been the main source of returns, while carry has been in the background (Figure 4).

Different EM region, different (sources of) returns

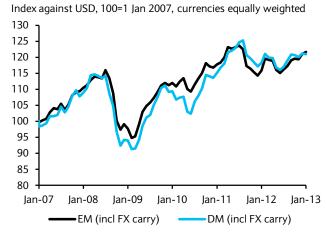
Not all EM currencies performed in this way. The three main regions (LatAm, EMEA and Asia) diverged in both spot and carry returns. As Figure 5 shows, EM Asia has been the best performer in terms of spot returns but, when we account for carry (Figure 6), returns for LatAm currencies increase materially and exceed those of EM Asia. In fact, EM Asia currencies' carry returns have been so much lower than other EM regions that even EMEA currencies (the worst performer in terms of spot) caught up, in terms of absolute return. Figures 7 and 8 show a decomposition of LatAm and Asian returns.

Figure 1: EM FX lagged DM FX in terms of spot returns



Source: Barclays, Ecowin

Figure 2: Accounting for carry, DM and EM returns converge



Source: Barclays, Ecowin

Figure 3: EM FX returns decomposition

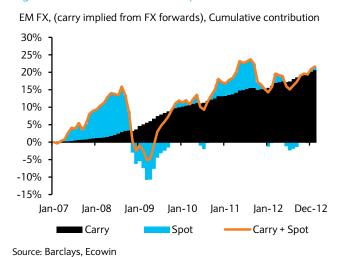
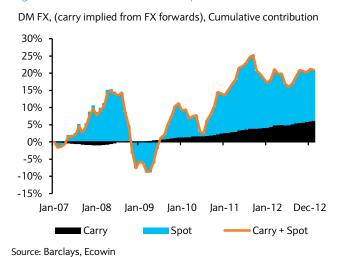


Figure 4: DM FX returns decomposition



The fact that EM Asia currencies outperformed in terms of spot returns supports our long-held view that EM Asia is the most attractive region structurally (i.e. the currencies appreciate in line with economic fundamentals). Indeed, EM Asia mostly experienced higher growth than the other two regions, while inflation was lower. Our economists expect the same trend to continue going forward. Indeed, a selected EM Asia currency basket has been one of our high-conviction investment ideas for some time.

Theory into practice

The divergences between spot performance of EM and DM currencies (and even intraregional EM FX divergences) suggest that an element of purchasing power parity (PPP) may be at work: high-inflation currencies (EM) underperformed low-inflation currencies (DM) in terms of spot returns. Within EM, Asian currencies (low inflation) outperformed EMEA currencies (high inflation).

The fact that DM and EM currencies total returns have been similar (Figure 2) suggests that, in this area at least, the FX market might be efficient. Although EM currencies offered a high carry, when compared to DM FX, the benefit of this carry was reduced by

Figure 5: Asian currencies delivered highest spot returns

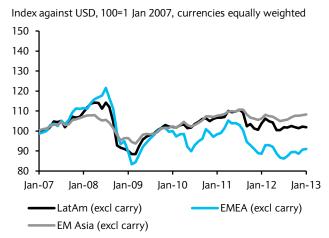
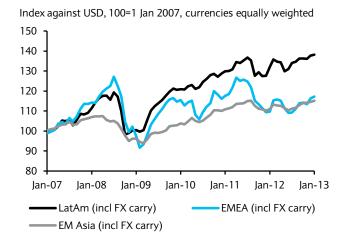


Figure 6: ... but lag LatAm FX once we account for carry



Source for both charts: Barclays, Ecowin. DM FX basket: EUR, GBP, JPY, CHF, SEK, NOK, AUD, NZD, CAD EM FX basket: Currencies from LatAm, EMEA & Asia baskets LatAm FX basket: BRL, PEN, CLP, MXN, COP, ARS EMEA FX basket: RON, RUB, ZAR, ILS, TRY, PLN, HUF, CZK Asia FX basket: CNY, THB, MYR, INR, TWD, PHP, KRW, IDR, HKD, SGD

Figure 7: LatAm FX returns heavily skewed to carry ...

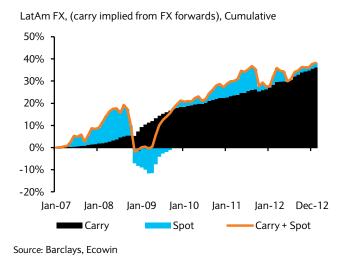
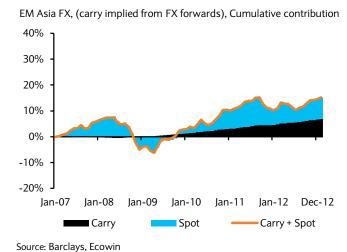


Figure 8: ... while EM Asia FX returns were more balanced



the underperformance of EM spot vs. DM spot – and total returns of both were broadly the same. In other words, "interest rate parity" appears to hold here.

However, this does not appear to be the case when assessed from the perspective of the US dollar (the most liquid and the main investment currency). Particularly for EM currencies, this can be seen in Figure 3. Against USD, the attractive carry the EM currencies offer was not wiped out by the respective currencies' depreciation (as EM currencies remained broadly flat against USD). In other words, from the prospective of the main investment currency (the US dollar), interest rate parity does not appear to hold – providing scope to extract positive returns from carry trades.

EM local currency bonds: more of carry, less of FX spot

The same trend can be seen in the EM local currency government bond space. Here, apart from carry interest and FX spot components, we are also considering the principal component (i.e. whether the underlying bond rises or falls in value). As Figure 9 shows, carry interest (denoted by the black-shaded area) has been the key source of returns for EM bonds, with gains from spot playing a minor role. Indeed, this is in line with our above finding that carry is the key source of returns from EM currencies.

While FX has not had a material impact on total EM bond returns over time, it does materially affect volatility. This is apparent in Figure 10, where we compare hedged and unhedged local EM bond indices. Clearly, the index with a currency exposure shows a higher degree of volatility from the pre-crisis period (2007) to date: 11.7% vs. 2.8%.

Moreover, as the same graph shows, hedging a high-yielding currency exposure is costly and materially affects returns (as indeed our earlier analysis would suggest). The impact of the cost of hedging, over time, is depicted by the difference between the blue and grey lines. While the blue line shows the return on EM bonds in local currencies, the grey line takes into account the cost of hedging. The impact on returns is clearly notable. Hedging costs are high, precisely because of those local interest rates (borrowing the currency to sell it forwards, thereby covering your exchange rate exposure, is expensive).

Although FX is a key source of volatility and may meaningfully weigh on returns, we note that, even during the years when it did restrain returns, the interest component provided a buffer and softened the impact of unfavourable FX movements. Local currency denomination allows us to get exposure to higher domestic interest rates

Figure 9: FX is not the key source of returns for EM bonds

JPM local currency EM bond index, 100 = 1 Jan 2007, cumulative returns (logged)

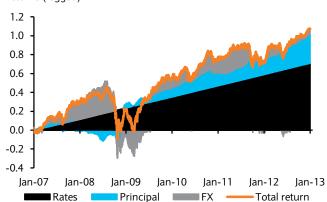
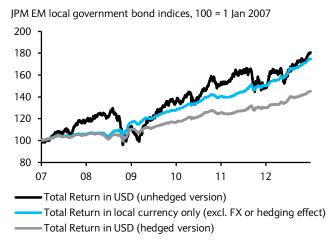


Figure 10: ... but it adds to volatility



Source for both charts: JP Morgan bond indices, Barclays. For this analysis we use the JPM GBI-EM diversified index, rather than our SAA benchmark (Barclays EM local currency government index) as the index has a longer history and is commonly used by various active EM bond managers.

(as, if hedged, the interest rate return decreases materially) but also acts as a potential source of volatility. EM local currency bonds are currently one of our favourite ways to implement our views on the high yield fixed income asset class.

EM currencies: constructive, but selective approach

Overall, the assumption that EM currencies outperform DM currencies is thus an oversimplification. However, this could change. Among other things, some DM currencies appear to have appreciated beyond levels justified by their long-term fundamentals (such as AUD or CHF, while JPY correction is now fully under way). This should limit the scope for them to appreciate further. In fact, they are likely to weaken against USD and EM currencies over the long term.

In terms of EM currencies, we retain a broadly constructive long-term outlook. Compared to their DM peers, they offer more attractive economic growth prospects, better fundamentals and attractive local investment opportunities. That said, we recognise that some currencies are likely to offer better prospects than others.

From a regional perspective, we continue to prefer EM Asia to Central and Eastern European currencies. This is due to our constructive outlook on the Chinese economy, the ongoing, but gradual, appreciation of the renminbi, and stronger fundamentals of regional economies (for example, current account surpluses, rather than deficits). On the other hand, and although prospects for central and eastern European currencies have improved – as euro area existential concerns have eased and the German economy (their largest export market) has shown signs of re-accelerating – their respective weakness in domestic demand, dovish central banks and our expectation of EUR/USD deprecation makes us less upbeat about these currencies, when measured against USD.

While we remain generally constructive on the long-term prospects of EM currencies (although more for some than for others), investors should not expect big spot returns. As many DM governments have introduced policies that either directly or indirectly weakened their respective currencies, EM governments are unlikely to allow their currencies to appreciate materially either.

That said, there may be some exceptions, such as RUB or MXN, where local authorities have a less activist approach to FX. This, coupled with their reasonable carry and attractive idiosyncratic factors (such as structural reforms in Mexico or bond-market liberalisation for RUB) makes us constructive on these currencies.

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Please see an expanded version of this article in our white paper, Overcoming the cost of being human (or, The pursuit of anxiety-adjusted returns).

Why behavioural finance matters

The classical principles of good investing are based on the assumption that we are all perfectly calm, unemotional beings, concerned only with long-term financial objectives. In truth, emotions are the biggest driver of our investment decisions and, therefore, our returns. At Barclays, our experience with behavioural finance gives us insight into two important aspects of investor behavior that can negatively affect returns.

Reluctance

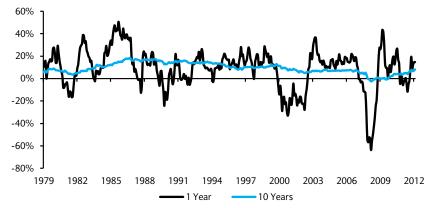
The first is *reluctance*: individuals often fail to see the potential long-term benefit of investing in a diversified portfolio compared to holding cash. This can cost the average investor 4–5% per year of foregone returns, over the long term.

Reluctance is the 'default' state of most investors. In normal circumstances we fear taking a risk and getting it wrong, more than missing out. This reluctance to get involved is compounded by another strong behavioural effect: *loss aversion*. Simply put, when we make decisions, "losses loom larger than gains" – we believe we will feel more emotional pain from losing a certain amount than the pleasure we experience from gaining the same amount. This may seem intuitive, but it has huge implications for investors. The proportion of loss we perceive *for the same portfolio* can be manipulated by how returns are presented to us.

Anxiety goggles

The chart below shows the annualised returns that an investor in the MSCI World Index would have experienced over time, depending on whether they focused on long- or short-term returns. The smoother (blue) line shows a rolling window of annualised 10-year returns. This line illustrates perception of returns along the journey that *should* inform our decisions. Ninety-six per cent of the time, the 10-year returns are positive; only turning negative in the catastrophically bad times at the depth of the credit crisis.

Figure 1: Annualised returns as seen through long-term and short-term frames



Source: FactSet. Past performance is no guarantee of future results.

⁷ From the famous 1979 Prospect Theory paper of psychologists Daniel Kahneman and Amos Tversky, which later won Kahneman the Nobel Prize for Economics (Tversky had passed away by the time the prize was awarded). Kahneman, D.; Tversky, A. (1979). "Prospect theory: An analysis of decisions under risk". *Econometrica* 47 (2): 263–291.

Contrast this with the more extreme line, which reflects rolling 1-year returns, which is much more akin to the actual perceptions of investors along the cycle (which tend to be even more extreme). In general, the same investment can feel completely different depending on the time frame over which we observe it. As evidenced in the diagram, investors experience vastly more volatile returns if they use a short-term horizon; unfortunately, as we all live in the present, short-term is our natural psychological default.

Failing to invest completely is the first way in which we naturally purchase short-term emotional comfort (because we tend to see things through our 'anxiety goggles') at a cost to long-run returns. It provides this comfort in a very simple way – you cannot lose if you don't get involved – but at a very high price. Figure 2 shows the effect of sitting in cash versus investing, over the last 10 years. Even during this turbulent time in the markets, being invested was a clear winner. Indeed, it's only in the depths of the most extreme crisis in living memory that a diversified portfolio dipped below cash, and as long as the investor didn't sell in panic, this situation was very short-lived.

Figure 2: The long-term value of diversified investing

Source: FactSet, Bloomberg, Merrill Lynch and Barclays. Past performance is no guarantee of future results. The Diversified Portfolio, representing nine asset classes, is constructed as the following mix of indices: 7% Barclays US Treasury Bills Index; 4% Barclays Global Treasury Index; Investment Grade Bonds 7% Merrill Lynch Global Broad Market Corporate Index; 11% Merrill Lynch Global High Yield and Emerging Markets Index; 38% MSCI World Index; 10% MSCI EM Index; 5% Dow Jones UBS Commodity Index; 4% – FTSE EPRA/NAREIT Developed Global REITs Index; 14% HFRX. The weightings are rebalanced monthly to maintain the same mix over time. An investment cannot be made directly in an index.

The returns depicted above do *not* represent *actual* portfolios, nor do they reflect trading or the impact of material economic and market factors including fees. Hypothetical illustrations and performance have certain inherent limitations. No representation is being made that any client will or is likely to achieve the hypothetical return represented in the illustration on this page.

Behaviour gap

The second issue that behavioural finance sheds light on is the *behaviour gap*. Multiple studies have confirmed that the average investor underperforms a simple buy-and-hold strategy over long periods of time. Most credible research on individual (as opposed to institutional) investors finds this underperformance to be between 1% and 2% per year, on average (although this can be substantially higher). And the *behaviour gap* is purely attributable to market-timing decisions, not costs or fees.

A recent study by Cass Business School – which used data from investors in actively managed UK equity funds over a 20-year period – concluded that, relative to a buy-and-hold strategy, the average investor conceded 1.2% annually by moving in and out of

funds.⁸ This percentage may not sound like much, but it amounts to a significant difference in final wealth when compounded over 20 years. If we take the 1.2% gap and apply it to \$1 mm invested in a hypothetical Diversified Portfolio. An investor who invested \$1 mm in a moderate-risk diversified portfolio would have \$4.44mm after 20 years.⁹ A *behaviour gap* of 1.2% per year would, over two decades, reduce this to \$3.50 mm - a\$ difference of \$940K or 21%.¹⁰

Although overcoming reluctance early is one of the keys to better investing, investors usually incur costs relative to the long-term optimum through being too active with the wealth they do invest. They do this by over-trading, constantly trying to adjust their portfolios and take advantage of perceived patterns in the market, and by increasing risk when they feel comfortable, but decreasing it when they feel uncomfortable.

One famous study grouped real investors into five groups according to the proportion of their portfolio they turned over every month. The bottom group barely traded at all, while the top group changed nearly 25% of their portfolio every month. Results were in opposite proportion to how much investors traded: The less they traded, the better they did.

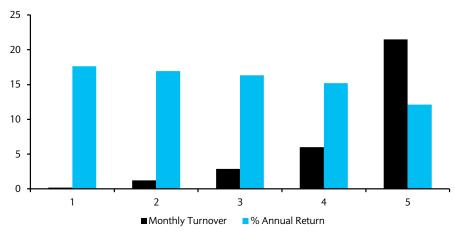


Figure 3: The behaviour gap and active trading

Source: Barber & Odean 2000.

Behavioural finance helps us to understand why investors deviate from good investing practice: Because good long-term investment decisions are invariably uncomfortable along the way. At Barclays, our behavioural finance approach is not to ignore this human need for comfort, but to acknowledge it and ensure that we can help each of our clients achieve it as efficiently as possible. Only by having a practical system that addresses investors needs for emotional comfort along the journey will investors be able to endure the ride, and get to the end with the sort of returns they should.

⁸ Study commissioned by Barclays at Cass Business School, Clare & Motson (2010). "Do UK retail investors buy at the top and sell at the bottom?" UK equity funds from 1992 to 2009 recorded by the Investment Management Association.

⁹.Source: DataStream and FactSet. Diversified Portfolio is represented as the following mix of indices, all in US dollars: 7% - Barclays US Treasury Bill; 4% - Barclays Global Treasury; 7% - Barclays US Corporate Investment Grade (1 Jan 1992–31 Dec 1996), then Merrill Lynch Global Broad Market (1 Jan 1997–31 Dec 2012; 11% Merrill Lynch USD High Yield & Emerging Market Sovereigns (1 Jan 1992–31 Dec 1998), then Merrill Lynch Global High Yield and Emerging Markets (1 Jan 1999–31 Dec 2012); 38% - MSCI World Index; 10% - MSCI EM Index; 5% - Dow Jones UBS Commodity TR; 4% - Real Estate by FTSE EPRA/NAREIT; 14% - HFRI fund of Funds Composite (1 Jan 1992–31 Dec 1997), then HFRX Global Hedge Fund (1 Jan 1998–31 Dec 2012). The weightings are rebalanced monthly to maintain the same mix over time. Past performance is no guarantee of future results. Changes in indices were made based on availability of historical index data.

¹⁰ The return calculated for the hypothetical Diversified Portfolio above does *not* represent *actual* portfolios, nor does it reflect trading or the impact of material economic and market factors including fees. Hypothetical illustrations and performance have certain inherent limitations. No representation is being made that any client will or is likely to achieve the hypothetical return represented in the illustration on this page.

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

Figure 1: Short-term interest rates (global)



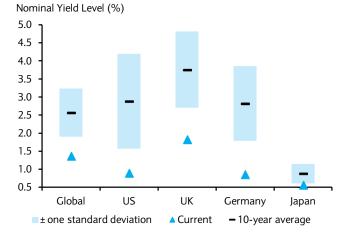
Source: FactSet, Barclays

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



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

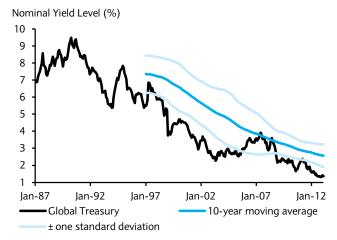
Figure 5: Government bond yields: selected markets



Source: FactSet, Barclays

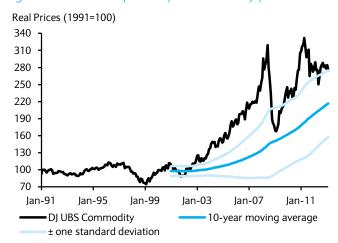
*As of COB 26 Feb 2013.

Figure 2: Government bond yields (global)



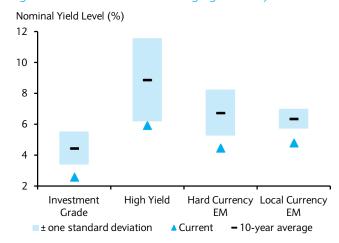
Source: FactSet, Barclays

Figure 4: Inflation-adjusted spot commodity prices



Source: Datastream, Barclays

Figure 6: Global credit and emerging market yields



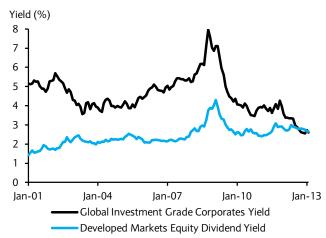
Source: FactSet, Barclays

Figure 7: Developed stock market, forward PE ratio



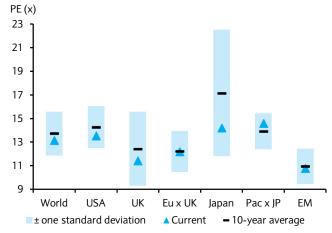
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 9: Developed world dividend and credit yields



Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 11: Global stock markets: forward PE ratios



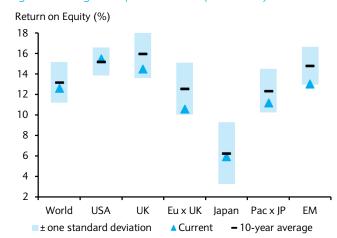
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 8: Emerging stock market, forward PE ratio



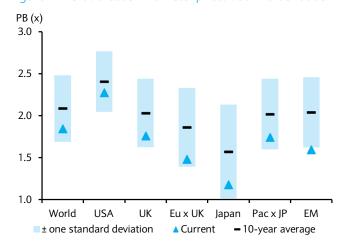
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 10: Regional quoted-sector profitability



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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