May 2013

Compass

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Market outlook: avoiding action

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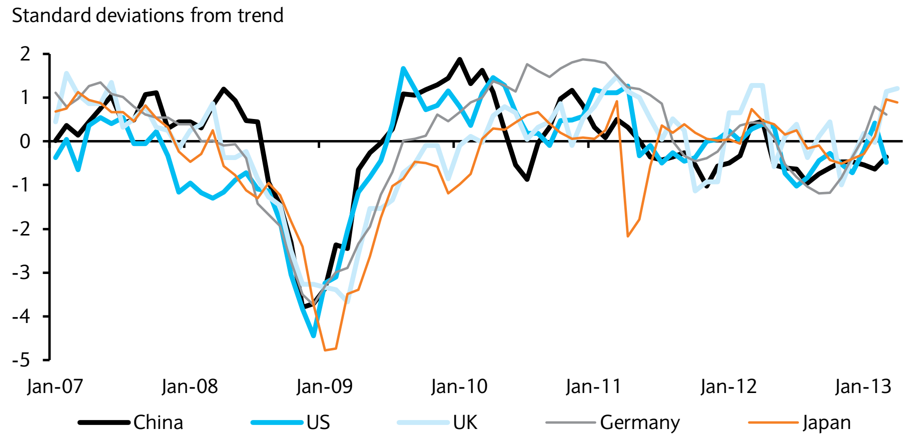
Proclamations of a "Great Rotation" from bonds to equities have been premature, and a setback in stock markets remains overdue. Nonetheless, on a medium and longer term view we still prefer corporate to government securities, and stocks to most bonds.

The cycle, an ECB safety net and valuations still favour stocks

In the last month several of the most widely-watched business surveys have slipped back a notch or two, but remain at historically respectable levels (Figure 1). Growth is modest, but seems likely to remain above stall speed, and economic recovery remains one of the central supports of our glass-half-full view of global capital markets. Indeed, we should arguably have stopped using the word "recovery" a year or two back, since in a little-noticed development, global GDP per capita likely pushed above its pre-crisis levels at some stage in 2010: the economic expansion is not just regaining lost ground, it has pushed firmly into new territory.

Manufacturers' order books have slipped back in the US and Germany, but the broad picture remains one of continuing expansion

Figure 1: Cyclical indicators are in neutral: selected manufacturing surveys

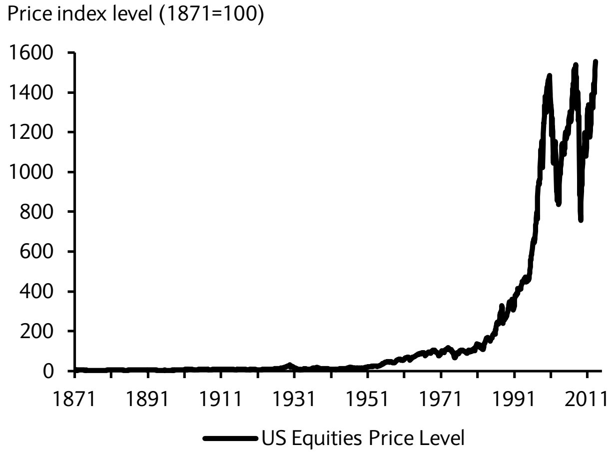


Source: Bloomberg, Datastream, Barclays

Economic growth does not guarantee stock market performance, but it can help. At the very least, it usually underpins corporate profits, and is currently helping keep valuations at unremarkable levels, even as the biggest market – the US – has hit new all-time highs in the last month (Figures 2 and 3). And with most bonds continuing to trade above their par values, and at levels that leave them very sensitive to changes in interest rate expectations, the *relative* valuation of the two largest liquid asset classes continues, in our view, strongly to favour stocks over bonds.

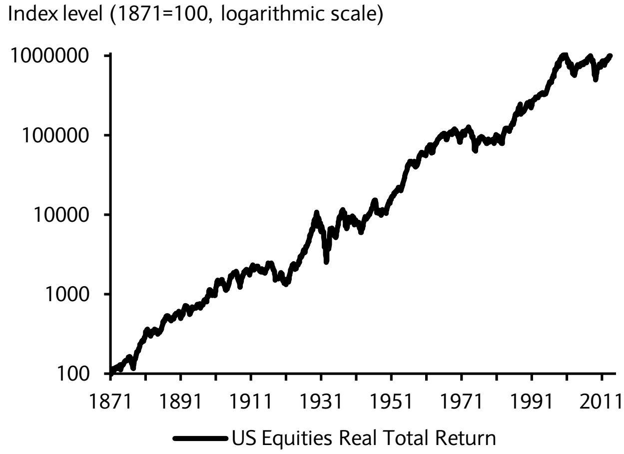
In the short-term, calling the precise turning point (upwards) in bond yields is a mug's game, and in the last few weeks the Bank of Japan has created a few more of those with its aggressive shift in monetary policy. Equally, a slowing in the pace of US and Chinese growth, geopolitical rumblings in the Korean peninsula, the continuing angst in the eurozone and even the calendar – sell in May and all that – all suggest possible triggers for an overdue setback in stocks. But on a medium-term view and beyond, we think a combination of the business cycle, the likely euro backstop provided by the ECB, and those relative valuations, all suggest that owning businesses will be a better risk-adjusted investment than lending to governments.

Figure 2: Not an attractive prospect: the S&P500 and its precursor, 1871 – to date



Source: Robert Shiller, FactSet, Barclays

Figure 3: A different view: the S&P 500, dividends included, log scale, adjusted for inflation



Source: Robert Shiller, FactSet, Barclays

The eurobloc continues to languish – but who thought otherwise?

Business surveys suggest that the eurozone economy is flatlining at best, but this ought not to be a major surprise. Very gradually, we expect expanding world trade, and stabilising domestic spending, to start pulling GDP up in the second half of the year. With a trend rate of growth in the 1-2% region in normal circumstances a more dramatic rebound in the bloc is not on the cards. This needn't prevent its stock markets from rallying and eventually outperforming again, as they did in 2012: if global risk appetite continues to revive, their volatility can make them attractive in a risk-on climate.

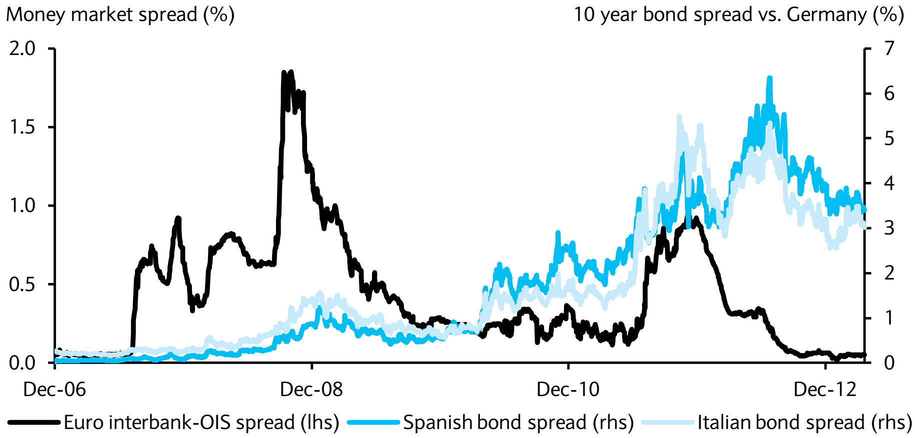
The euro itself remains central to that global risk on/off debate: an implosion or fragmentation of the single currency would be a seismic event globally, not just locally. As we have written here often, there can be no quick fix for the euro's existential crisis, and ongoing political uncertainty in Italy, missed budgetary targets in Spain, slippage in public expenditure plans in Portugal, banking worries in Slovenia, and the French government's political embarrassments, all point to possible renewed market volatility ahead.

That said, we think that in one respect at least the picture has cleared a little in the last month. The ambiguity surrounding the potential treatment of euro area bank depositors has been reduced by Mr Draghi's statements at the latest ECB press conference to the effect that the initial proposed treatment of depositors in Cyprus was indeed "not smart", and that the subsequent proposal should not be seen as a template for the resolution of banking difficulties elsewhere. As we noted last month, in future financial crises the situation may be different, but it is extremely unlikely currently that Spanish or Italian depositors would be asked to contribute towards any further bank restructuring needed in the current crisis.

In the meantime, we now think the ECB is likely to trim official interest rates in response to the flatlining economy. More importantly, it remains willing and able to offer some financial backstopping for a member government that requests support in stabilizing its borrowing costs (conditional, of course, on that government following an adjustment programme). In fact, Spanish and Italian bond yields have fallen markedly in the last few weeks without any official assistance, while interbank tensions have been marked by their absence.

Peripheral bond markets, and the interbank market, have as yet been largely unaffected by the crisis in Cyprus

Figure 4: Italian and Spanish bond yields have fallen, while interbank spreads remain stable



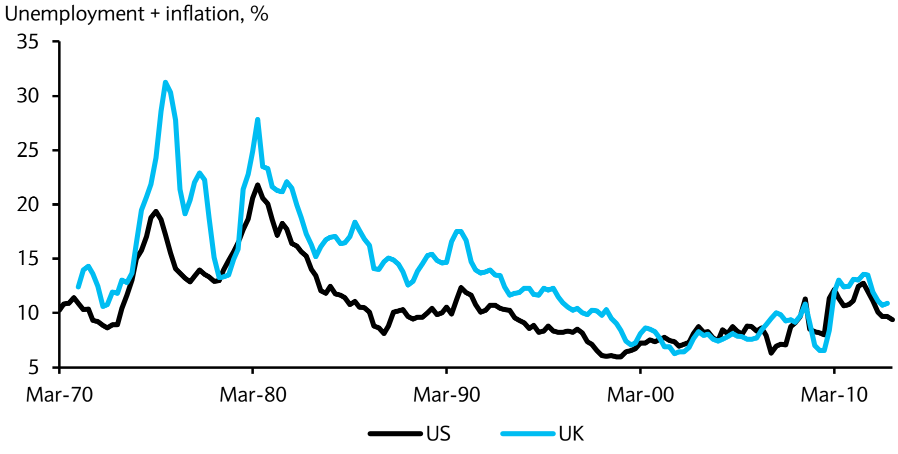
Source: Datastream, Barclays

The UK – don't look back in anger

There has been little to cheer in the UK economy either, but again investors shouldn't have been expecting there to be. The first quarter GDP data at least suggest that the economy is capable of growth in 2013, in contrast to the eurobloc, albeit at a glacial pace. And in one respect, the last month has provided a valuable source of perspective. The policies pursued by Mrs. Thatcher's administrations were divisive, but few of us would welcome a return to the economic landscape that she inherited: levels of inflation, unemployment, interest rates, nationalization and other controls and industrial unrest were routinely much higher then, and profitability lower, than currently. The same is true of course of many other developed economies, including the US (Figure 5).

Unemployment and inflation rates have been stubbornly-high of late, but are beginning to edge lower. They were a lot higher in the not-so-distant past

Figure 5: Misery indices for the UK and the US, %



Source: Datastream, Barclays

The relevance for today's investors is twofold. Generally, it reminds us that while times are tough, they have been tougher in the not-so-distant past, something to be borne in mind (for example) when considering equity valuations: the lower stock market PEs seen in the 1970s were there for a reason. More specifically, the famously hawkish 1981 budget demonstrated that a policy of fiscal retrenchment, even in a difficult economic climate, need not push the economy into reverse.

The US: time for another double dip debate?

The growth debate in the US seems set to heat up again as the economic indicators point to a likely slowdown in the second quarter. The growth profile continues to be dogged by a vigorous inventory cycle. Having been run down sharply in the fourth quarter of 2012, partly on account of the hurricane that disrupted East Coast production, inventories were rebuilt in the first quarter of 2013, and helped push growth above trend. Having been rebuilt, they will now lose some momentum and slow growth in the current quarter – just as the effects of public spending sequestration make themselves more fully felt.

This slowing, like similar events in the last three years, may cause some commentators to proclaim (again) an imminent double dip in the economy, that is, a renewed recession. We think these worries would again be premature, and our view remains that the US will continue to expand, with growth driven largely by the domestic private sector. We have noted many times that US consumer balance sheets are in better shape than many fear, and a reviving housing market and a gradually-improving labour market are underpinning confidence and incomes. Meanwhile, corporate spending on fixed investment (as opposed to inventories) is also capable of making a more pronounced contribution to growth, and with most corporate borrowing costs below the dividends paid out on US stocks, companies have a financial incentive to flex their balance sheets a little more also. (See essay below.)

Asia and the emerging bloc

A slowing in China's GDP data has unsettled the commodity markets, but we still doubt that a hard landing is imminent. A growth rate in the 7-8% region is broadly in line with the government's medium-term goal, and would (of course) be viewed as an outright boom in most developed economies. There are unresolved issues to be addressed in China's development – for example, its real estate market is frothy (see essay below), its capital investment looks inefficient, its money markets are underdeveloped, there are concerns about the scale of local authority borrowing and about the "shadow banking" sector – but for the time being we see China continuing to contribute significantly to global economic growth. The weakness in gold prices in particular we think tells us more about misplaced expectations there than about the scale of China's slowdown.

Japan's stock market may be flying, but its economy continues to languish. The extra monetary easing promised by the new regime is certainly keeping the yen under pressure – and we expect it to weaken further – but it may not have much of an effect on the economy's cyclical performance, let alone its structural malaise.

Outside China, several other emerging economy stories have disappointed of late, including Brazil and India, two other members of the high-profile BRIC quartet. We still think that the long-term case for structural economic growth is a compelling one, particularly in Asia, but there are more current account deficits in the bloc than there were supposed to be at this stage of the story, and the bloc is no longer the one-way bet that many have seen it as for the last decade or so. Its stock markets have now underperformed developed markets since early 2009.

Investment conclusion: avoid action

Growth may be anaemic, but it's not at stall speed, nor likely to be. The euro's existential angst is chronic, but containable. The latest results season is again showing US corporate profitability to be resilient, and reports of an imminent collapse in operating margins in particular look again to have been mistaken. But bonds are the assets which are trading expensively, and stocks – even after their rally – look much cheaper.

The Federal Reserve and now the Bank of Japan are of course supporting their respective bond markets with their direct purchases of bonds. The Bank of England may no longer be buying, but it could re-start its programme, and in the meantime is certainly not selling its current holdings. Even the ECB stands ready potentially to intervene in the secondary markets, and we wonder whether, if asked to do so, it would sterilise such intervention quite as fully and quickly as its statutes suggest it should. However, central bank buying in itself does not make a strong medium-term investment case for bonds (or foreign exchange – see essay below).

A setback for equities was overdue last month, and arguably still is. The issue as we see it is whether it will be deep or lengthy enough to warrant repositioning portfolios for: if as we suspect the primary trend in equity prices remains upwards, then selling out may leave us exposed to a sudden rebound of the sort seen often since early 2009. Again this month we think the potential opportunity costs of doing so are too high: we are avoiding action, leaving our tactical asset allocation intact (see section below) and in favour of developed equities (with cash and investment grade credit as the corresponding tactical underweights). Details, as usual, are shown on page 7.

Barclays' key macroeconomic projections

Figure 6: Real GDP and Consumer Prices (% y-o-y)

	Real GDP				Consumer prices			
	2011	2012	2013	2014	2011	2012	2013	2014
Global	3.8	3.1	3.2	4.0	3.8	2.9	2.8	3.1
Advanced	1.4	1.2	1.1	2.0	2.5	1.8	1.4 ↓	2.0
Emerging	6.5	5.0	5.3	6.0	6.3	4.7	5.0	4.9
United States	1.8	2.2	1.9	2.3	3.2	2.1	1.6 ↓	2.3
Euro area	1.5	-0.5	-0.3	1.4	2.7	2.5	1.5 ↓	1.4
Japan	-0.6	2.0	1.1	2.6	-0.3	-0.1	0.0	2.3
United Kingdom	1.0	0.3	0.6	1.8	4.5	2.8	2.8	2.6
China	9.3	7.8	7.9	8.1	5.4	2.6	3.2	3.5
Brazil	2.7	0.9	3.0	3.5	6.6	5.4	6.4	5.7
India	7.2	5.1	5.6	7.0	9.5	7.5	6.2 ↓	5.6
Russia	4.3	3.4	3.0	3.5	8.6	5.1	6.6	5.6

Source: Barclays Research, *Global Economics Weekly*, 19 Apr 2013
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).

Figure 7: 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	0.75	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	7.50	7.75	8.25	8.25	8.25
India: Repo rate	7.50	7.00	7.00	7.00	7.00
Russia: Overnight repo rate	5.50	5.50	5.25	5.25	5.00

Source: Barclays Research, *Global Economics Weekly*, 19 Apr 2013; *ECB Watching*; 24 Apr 2013
Note: Rates as of COB 18 Apr 2013.

TAA: avoiding action

As we noted last month, a setback in stock markets feels overdue, but we continue to feel that the opportunity cost of attempting to position for it – the possibility of missing an ongoing rally or a quick rebound – could be significant. The S&P500 may have hit a new all-time high, but stock valuations are far from theirs, and we see no reason why stock prices should fall and stay down. In contrast, bond valuations *are* close to all-time highs, and are very sensitive to changes in interest rates. We advise a *strategically* underweight position in government bonds (and a tactical underweight in investment grade credit). We stay tactically neutral in the diversifying asset classes of commodities, real estate and ATS. We are not inclined to use the weakness in commodity prices in particular – especially gold (see essay below) – as an opportunity to add to our tactical weightings: a growing global economy is no guarantee of higher commodity prices, and the monetary claims made for gold have always looked overdone.

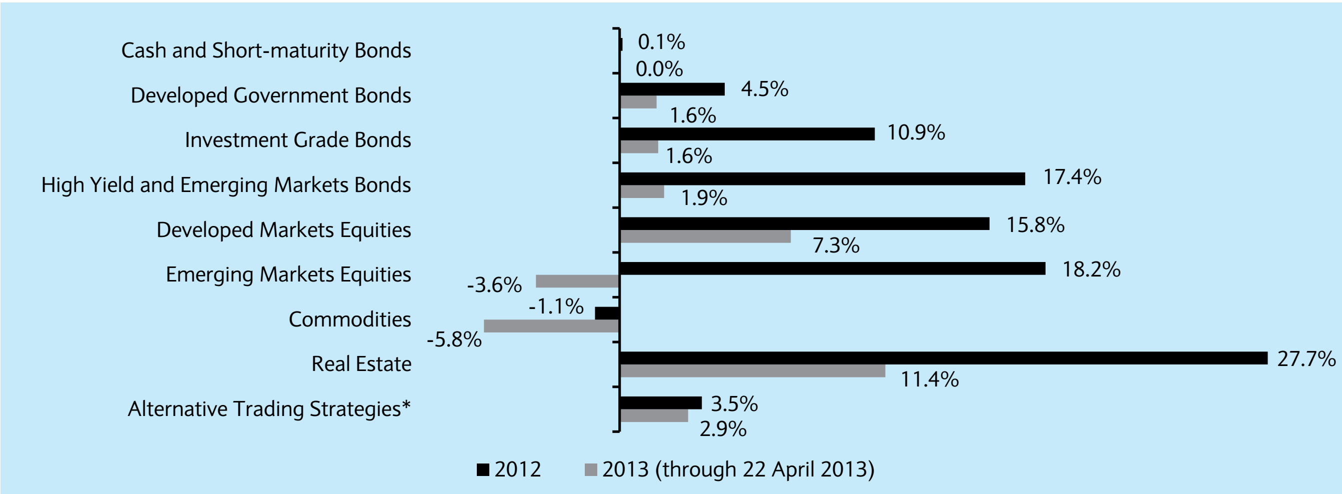
Figure 1: Current strategic (SAA) and tactical (TAA) asset allocation by risk profile

	Low		Medium Low		Moderate		Medium High		High	
Asset class	**SAA**	**TAA**	**SAA**	**TAA**	**SAA**	**TAA**	**SAA**	**TAA**	**SAA**	**TAA**
Cash and 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 and 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

Our **Strategic Asset Allocation (SAA)** models offer a baseline mix of assets that, if held on average over a five-year period, will in our view provide the most desirable combination of risk and return for an investor's degree of Risk Tolerance. They are updated annually to reflect new information and our changing views. Our **Tactical Asset Allocation (TAA)** tilts these five-year SAA views, incorporating small tactical shifts from one asset class to another, to account for the prevailing economic and political environment and our shorter-term outlook. For more on our SAA and TAA, please see our *Asset Allocation at Barclays* white paper and the February 2013 edition of *Compass*.

Figure 2: Total returns across key global asset classes



* As of 19 April 2013

† 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.

2013: The end of the gold run?

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Gold prices have enjoyed a steady upward trend for the past ten years. However, weakening investor sentiment has caused many market participants to question the sustainability of the bull-run. Here we look at how dynamics of the gold market have changed and discuss the short-term outlook for prices.

The rise of the physically backed ETF

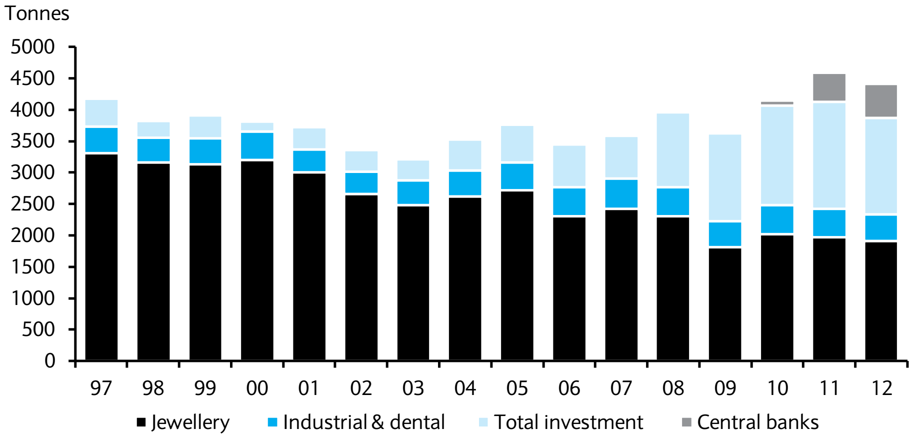
Over the past decade, investment demand has become an increasingly important part of the gold market. Demand for perceived safe-haven assets (which tended to have low or negative correlations with traditional investments, such as stocks and bonds) and assets which were likely to benefit from higher inflation, have been the main reasons why investors have built up substantial positions in gold.

As investment demand for gold started to pick up in the early 2000s, so too did the number of investment vehicles. Although traditional ways of getting exposure to gold – via derivatives for institutions and gold coin and bars for smaller investors – remain in place, the launch of the physically-backed exchange traded fund (ETF) in 2003 made it easier for gold to become a significant portion of investors' portfolios.

How have demand dynamics changed?

As gold became more accessible to the wider market, traditional demand dynamics changed. Jewellery has historically been the predominant source of demand, but as prices rose, demand from the sector declined. As a proportion of total demand, jewellery (which accounted for about 80% a decade ago), lost significant market share and, as of last year, accounted for just over 40% of demand.

Figure 1: Investment demand has been a significant driver of gold prices



Source: World Gold Council

On the other hand, investor demand has steadily risen over the same time period. Since the launch of physically backed ETFs, total investment demand (bar, coin and ETFs) has risen from about 10% to around 35% of total demand (Figure 1).

Demand for physically backed ETFs has been so robust that flows have been positive every year since they launched. As of 2012, gold holdings in physically backed ETFs totalled over 2,600 tonnes.

As a result of these changes in demand dynamics, gold prices rose over 5-fold in ten years and eventually peaked at $1920/oz in September 2011. However, since then, prices struggled to regain momentum, leaving prices relatively range-bound between $1800/oz and $1550/oz.

Investor sentiment turns in 2013

Although this range-bound trading has remained in place over the past few quarters, the overall price trend appeared to weaken this year. Financial market uncertainty began to subside, while the probability of a rise in inflationary pressures looked less likely in the short term. Additionally, with growth prospects – particularly in the US – picking up, demand for assets with attractive valuations – and more closely tied to the economic cycle – increased. This, in turn, weighed on the appeal of holding assets that do not provide cash flows or yields. As a result, investors reduced net long speculative positions and began to redeem their ETF holdings.

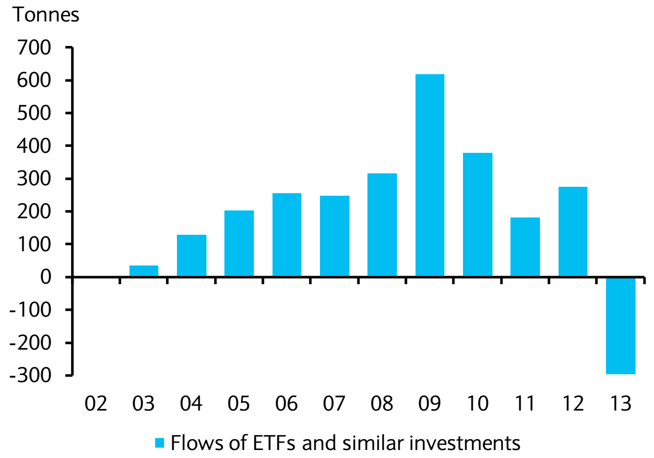
In mid-April, gold prices then fell through $1525/oz (a key technical resistance level), instigating a rapid sell-off (Figure 2). On Monday 15 April, prices dropped nearly 9% (their largest daily loss in absolute terms), hitting $1350/oz (their lowest level since February 2011). Although prices have regained some ground since, many market participants have started to doubt the sustainability of the gold bull-run.

Figure 2: Gold prices have breached key technical levels

Source: Datastream

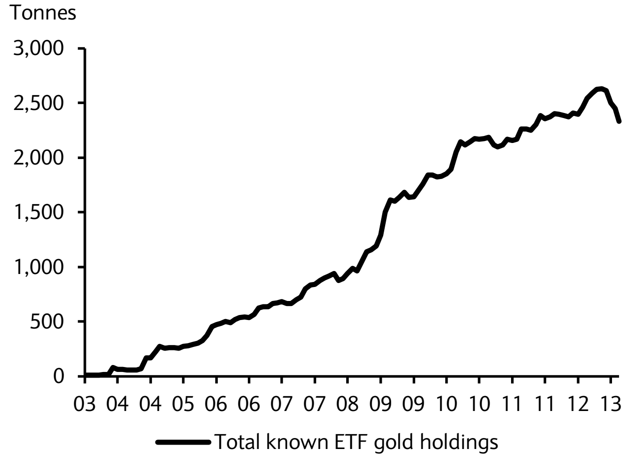
We think there have been several reasons for the latest rout. First, slightly more hawkish remarks from the Federal Reserve's latest minutes suggested that the third round of quantitative easing might end sooner than expected. Second, weaker-than-expected Chinese data appeared to trigger a broader commodity market sell-off. Third, reports stating that Cyprus might sell gold reserves to generate revenue (to contribute to its bailout package) added to the bearish momentum. While Cyprus does not have large gold reserves – in total it holds nearly 14 tonnes, while reports stated around 10 tonnes might be sold – this raised concerns that other eurozone countries might follow suit by selling some of their gold reserves to boost finances.

Figure 3: ETF redemptions have accelerated this year …



Source: World Gold Council, Bloomberg

Figure 4: … but total ETF holdings remain elevated



Source: Bloomberg

The combination of these factors led to an acceleration of ETF redemptions. Given the influence of ETFs in the gold market, this represented a significant change in sentiment. Year-to-date about 300 tonnes of gold have been redeemed, which just surpasses the total ETF inflows seen last year (Figure 3).

Prices likely to be range-bound in the short term

Going forward, fabrication demand (i.e. jewellery, industrial and dental demand) – particularly from India and China – will likely pick up now that prices are about 15% lower than at the beginning of the year. This, alongside some bargain buying, should be broadly supportive for prices. Furthermore, we do not envisage any change in central-bank buying activity (which accounts for approximately 10% of total demand). While there could be some sales, we are of the view that central banks will likely remain net buyers, overall, this year.

But with much uncertainty in the gold market at present, prices will likely be range-bound as investors grapple with the recent fragility of the market. Although ETF holdings have declined by more than 10% since their high reached in 2012, the total amount of gold held in physically backed ETFs is still elevated compared to historical levels (in fact, it represents the sixth-largest holding in the world, just behind France's official holdings). If further redemptions occur, prices could weaken. This is the biggest risk to prices, in our view, and the short-term trajectory of prices is likely to be determined by this investment demand for gold, rather than other sources. On the downside, fundamental cost support is estimated to be around $1300/oz, meaning that if prices were to fall below these levels, a considerable amount of output would be at risk, which could provide a (loose) floor for prices.

Gold in a portfolio context

Gold remains a highly emotional (and volatile) investment and, because of this, we would recommend that clients have an appropriate exposure to gold in line with their risk profile. In our Tactical Asset Allocation, we remain neutral on commodities, meaning that investors with moderate risk tolerance should have a 5% allocation to all commodities within their portfolio, and of that, only a small portion should be allocated to gold.

US CapEx: the sleeping giant

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Lacklustre capital spending by US businesses has marked the recovery to date. Investment helps drive growth and productivity. So when is it going to pick up? We think soon.

The sleeping giant: CapEx

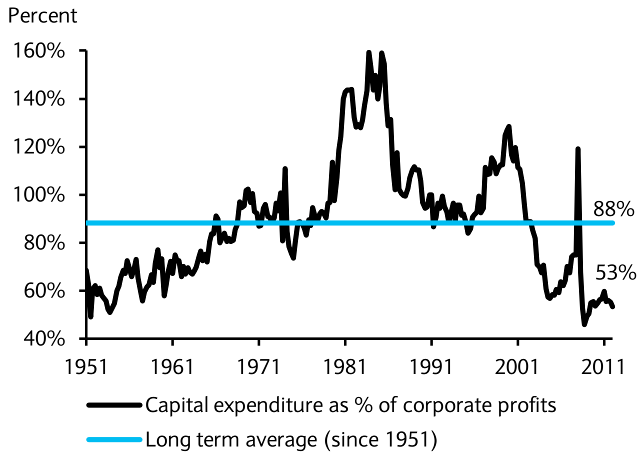
The capital stock – the machinery, equipment and buildings used to create the goods and services available in an economy – is one of the key drivers of a country's GDP and productivity. Business spending on such investment helps generate a positive economic feedback loop, leading to more durable growth.

Three years on, one of the surprising features of this recovery has been the relatively sleepy level of US business investment, despite companies having plenty of cash to spend. At 53% of corporate profits, capital expenditure is well below its long- *and* short-term averages of 88% and 67%, respectively (Figure 1 and 2). The absence of this key driver notwithstanding, US stocks have managed to achieve new highs – thanks largely to rising corporate earnings. But the recovery will be more soundly based when the capital spending "accelerator" kicks in.

The post-crisis improvement in business investment has not been broad-based. For instance, since the second half of 2009 information technology spending has grown by 8.8% per quarter on average. By contrast, spending on structures, which includes power plants and railroad tracks, has grown at a meagre 0.8% per quarter. Some of this divergence can be explained by how quickly IT products need replacing compared to other capital stock (the depreciation rate for software is 33%-55%, for structures, it's under 3%). But different depreciation rates don't tell the whole story.

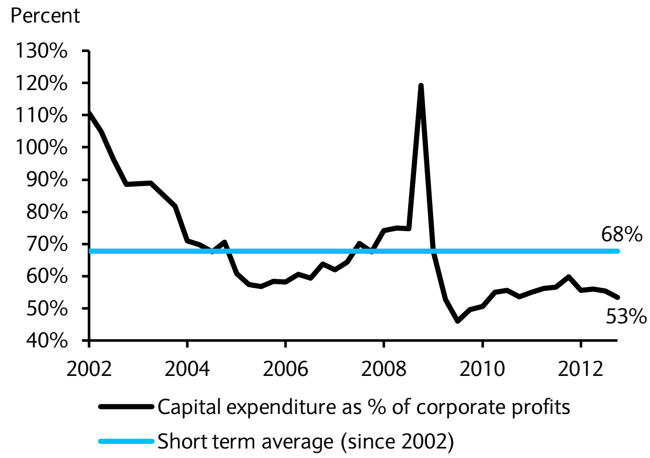
Take, for example, the North American heavy truck fleet, used to transport goods and packages across the continent. Over the past 25 years, the median age of a heavy truck has been 5.8 years – which makes sense since once a truck passes the five-year mark, it

Figure 1: US capital expenditures as % of corporate profits (1951-2012)



Source: Bloomberg, Federal Reserve, as of December 2012
Note: Corporate profits are calculated without inventory valuation and capital consumption adjustments.

Figure 2: US capital expenditures as % of corporate profits (2002-2012)



Source: Bloomberg, Federal Reserve, as of December 2012
Note: Corporate profits are calculated without inventory valuation and capital consumption adjustments. The spike in the fourth quarter of 2008 was due to the sharp drop in corporate profits in the period, rather than any increase in CapEx. For purposes of the 2002-2012 average, we discounted this data point.

becomes much more expensive to operate because maintenance and repair costs rise. Yet, by 2011, the North American heavy truck fleet's median age hit a *record* 6.7 years as companies deferred capital expenditures.

So why has capital spending not recovered more quickly? Part of the reason appears to be structural, but the other part seems to be cyclical, which we believe will be resolved.

Inducements to sleep: structural and cyclical

The first impediment to greater private investment growth in the US since 2009 is structural. With increased globalization, US investment overseas has increased significantly, and in many cases has displaced domestic investment.

The second impediment to greater capital spending is cyclical: namely, economic uncertainty. As Figure 3 illustrates, capital spending tends to decrease when economic policy uncertainty rises. Companies become reluctant to make capital outlays, which are typically long term in nature from a business perspective, when policy uncertainty makes it difficult to anticipate what the "rules of the game" will be. US tax regime changes, the automatic government spending cuts, and the need to raise the debt ceiling have all conspired to create a great deal of uncertainty of late.

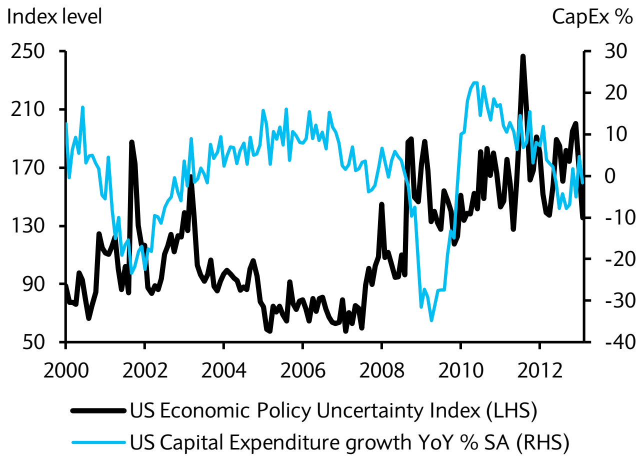
Wake up call

We believe that this sleeping giant will awaken more fully, for several reasons.

Reason #1: decreased uncertainty

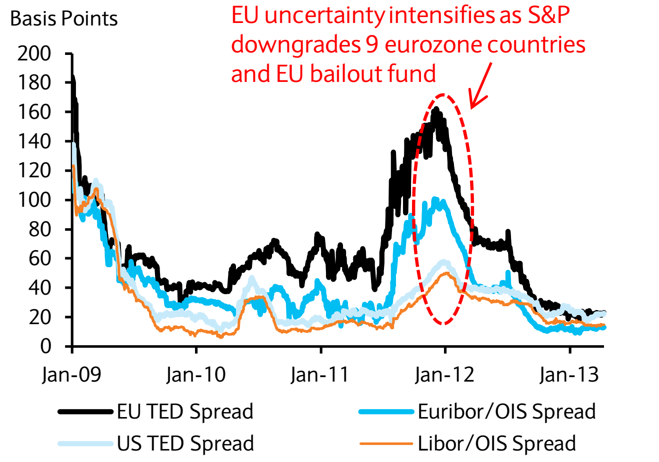
Policy uncertainty in the US has decreased significantly since beginning of 2013 as the "fiscal cliff" has been largely resolved (Figure 3). More important still, "tail risk" – the possibility of an extreme outcome – has probably decreased this year, as evidenced in lower money market spreads in Europe and the US (Figure 4), suggesting that investors believe that systemic banking risk has subsided (as do we).

Figure 3: US economic policy uncertainty and capital expenditure



Source: Bloomberg, Baker, Bloom, Davis as of February 2013
Note: Nondefense Capital Goods orders excluding Aircraft & Parts YoY % SA is used as a monthly proxy for Capital Expenditure Growth. The Economic Policy Uncertainty Index is driven by newspaper coverage, the number of federal tax code provisions set to expire in future years, and dispersion in economic forecasts.

Figure 4: US and Eurozone money market spreads

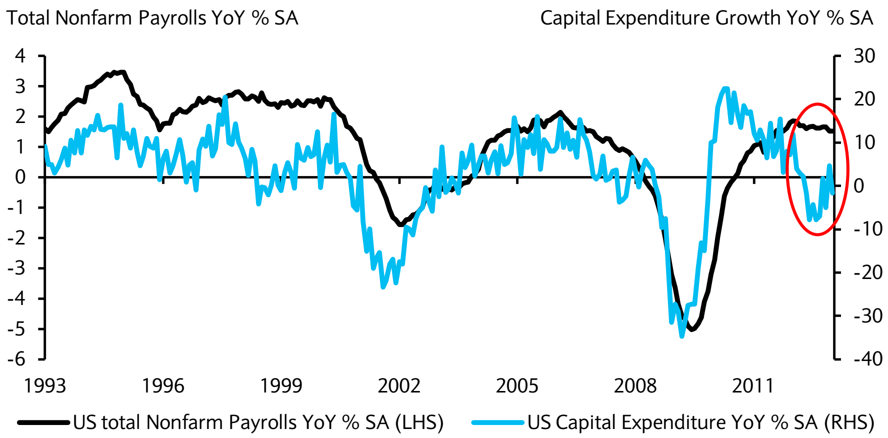


Source: Bloomberg as of April 2013
Note: **EU TED Spread** shows spread differential between Frankfurt 3 month Interbank Offered Rate and rate on Germany government bills maturing in 3 months. **Euribor/OIS Spread** shows spread differential between Euro Interbank Offered Rate and respective Euro overnight index swap rate. **US TED Spread** shows spread differential between British Bankers Association's 3 month rate and 3 month US Treasury bill rate. **Libor/OIS Spread** shows spread differential between British Bankers Association's 3 month rate respective US overnight index swap rate.

Reason #2: pent-up demand

Historically, employment and capital expenditure tend to move together, as Figure 5 illustrates; but since the beginning of 2012, US jobs and capex growth have diverged. The gap remains today, suggesting pent-up demand for business investment.

Figure 5: US capital expenditure vs. job growth



Source: Bloomberg as of February 2013
Note: Nondefense Capital Goods orders excluding Aircraft & Parts YoY % SA is used as a proxy for Capital Expenditure Growth

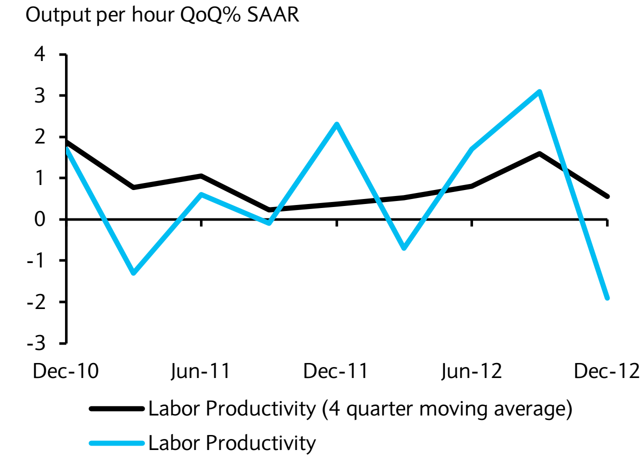
Reason #3: declining productivity

The divergence – greater investment in new hires than in capital stock to make those hires productive – appears to be having the obvious effect. Corporate efficiency is coming under pressure due to underinvestment. Labour productivity, or output per hour, and its four-quarter moving average have been trending down (Figure 6). In fact, in the fourth quarter of 2012, labour productivity fell by the most it has in four years.

Reason #4: ample means to invest

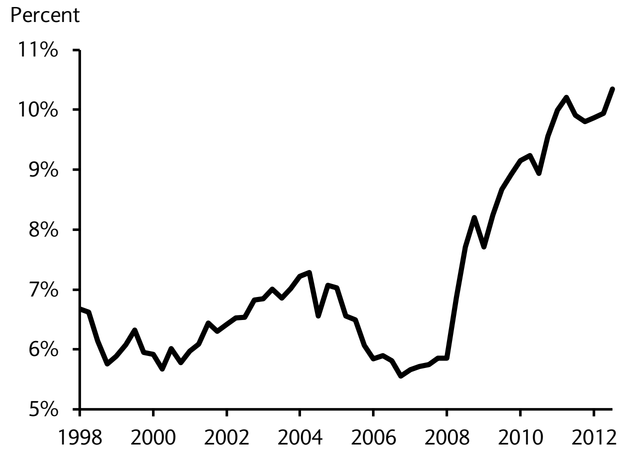
US companies not only have incentives to make substantial upgrades to their capital stock, they also have the means to do so. They're flush with cash. For companies in the S&P 500 Index, cash and short-term investments as percent of total assets is at a record

Figure 6: US labour productivity



Source: Bloomberg as of December 2012

Figure 7: Cash and short term investments as % of total assets S&P 500



Source: Bloomberg as of December 2012

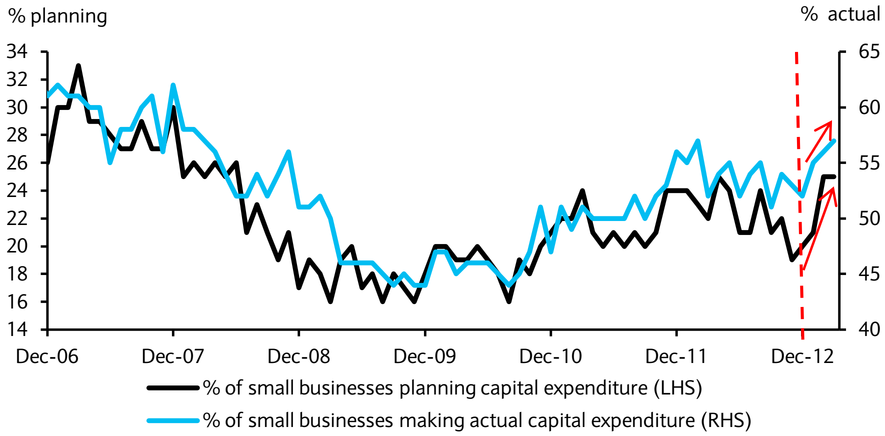
high (Figure 7). With interest rates so low, this money earns virtually nothing. In our view, companies will increasingly be enticed to use this "dry powder" to increase their future profitability and margins, especially now that uncertainty has declined.

Reason #5: signs of awakening

Encouragingly, there has been a recent improvement in the number of small businesses that are making, or are planning to make, capital expenditures, according to the National Federation of Independent Businesses surveys. Figure 8 shows a marked upward trend since the beginning of this year. The uptick in March was particularly noteworthy, given the weakness in that month's retail sales and consumer confidence. In short, it suggests the investment can no longer be deferred.

Pending by smaller businesses is showing signs of accelerating

Figure 8: US National Federation of Independent Business survey



Source: Bloomberg as of March 2013

Investment implications

So despite an atypical post-recession pattern of recovery, we believe the outlook for corporate capital spending is now brightening. Pent-up demand resulting from greater investment in staff, decreasing labour productivity and several years of underinvestment suggest businesses will continue to increase capital expenditures. This, in turn, should positively affect US GDP growth in the coming months, helping to offset negative effects from sequestration (the automatic government spending cuts) and higher taxes, and providing support for corporate earnings and thus US equities. Generally, this helps underpin our positive views on US and developed market equities more widely. More specifically, companies in the machinery sector are likely to benefit. Selective stock screening in this sector could create a good opportunity for outperformance.

FX and central banks: QE or not QE is *not* always the question

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Investors assume a strong link between central bank balance sheets and currencies. This may oversimplify things. While balance sheets matter in some cases (USD/JPY), elsewhere the link seems spurious (EUR/USD) or non-existent (GBP/USD). The differences don't always depend on whether Quantitative Easing is in place.

As interest rates approached zero in all major economies, their influence as a monetary tool became muted. Ever-inventive central banks then turned to new tools and started intervening in markets via channels of different sorts – most obviously via purchases of government bonds ("Quantitative Easing" in Japan, the US and UK) or large-scale lending to commercial banks ("Long Term Refinancing Operations" in the euro area). These unconventional measures were seen as the "next level" of monetary easing.

As with all monetary easing, the effects on respective currencies should be negative. Indeed, the received wisdom dictates that the larger the country's (or monetary union's) balance sheet, the larger the downside risk to the currency. However, we believe that this view largely oversimplifies the realities of the monetary world.

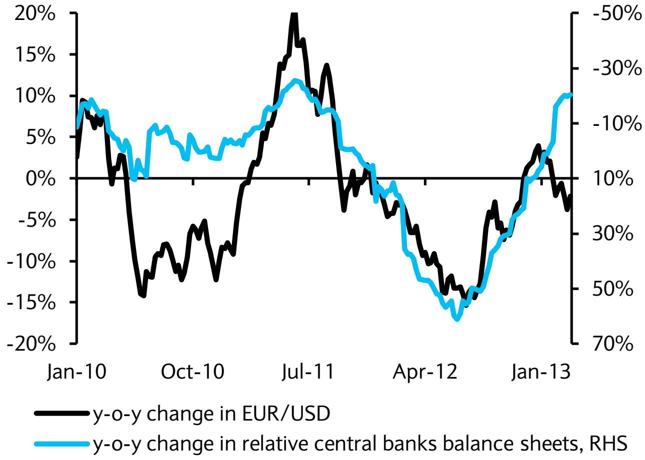
First, not every balance sheet expansion is the same. Comparing the loans and sterilised bond purchases made by the ECB with the unsterilised purchases of the Fed is equivalent to comparing apples and pears. They are simply not the same. In the first case, the aggregate money supply is unaffected. In the second, the central bank is effectively "printing money". But even if the types of balance sheet expansions are similar (such as QEs in the US and UK), they still may not be the key drivers of exchange rates. Below we explore the relationship between growth in central banks' balance sheets and three main FX crosses: EUR/USD, GBP/USD and USD/JPY.

EUR/USD, ECB and Fed – comparing the incomparable

On first sight (Figure 1), there appears to be a relationship between the relative balance sheet expansions and EUR/USD. However, closer inspection reveals that this relationship has been very unstable over time (see for example the rolling 26-week beta, or sensitivity, in Figure 2). In our view, this instability stems from two factors. First, the different nature of balance sheet expansions between the ECB and the Fed. While the Fed expanded its balance sheet largely by buying bonds, mostly from banks, thereby contributing to growth in the money supply (printing money via QE1, QE2 and now QE3), the ECB has not. When the ECB has bought bonds its actions have mostly been offset ("sterilised") by sales elsewhere, and much of its balance sheet expansion has been the straightforward making of loans. Of course, balance sheet expansion that is not associated with money printing is unlikely to be as negative for a currency.

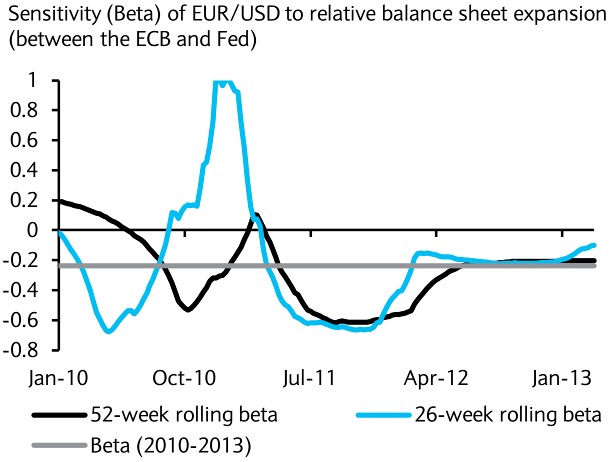
The second difference between the two is one of timing and context. While the Fed's balance sheet expansion (or market expectation of that) weakened the dollar in the past (as it stabilised financial markets at a time when the USD was a safe haven, prompting USD-funded trades), the ECB's indications that it may expand its balance sheet (for example, via LTROs or OMTs) had in fact a positive effect on the euro because the ECB's potential actions were seen as a backstop for the euro's existential worries, reducing the risk of a collapse.

Figure 1: EUR/USD and central banks balance sheets



Source: Barclays, EcoWin

Figure 2: Beta of EUR/USD seems unstable

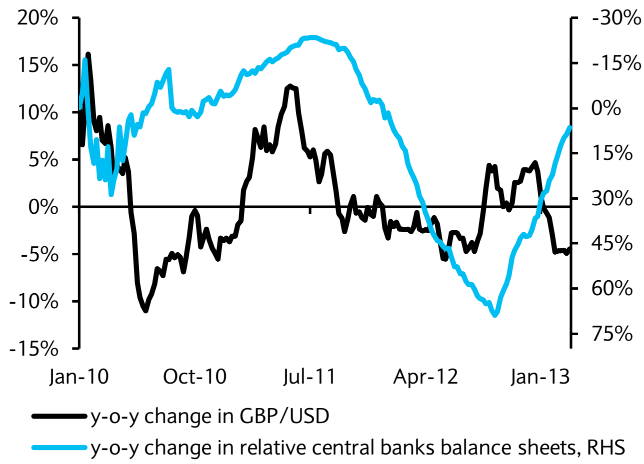


Source: Barclays, EcoWin

The second half of 2011 provides a case in point. The EUR/USD collapsed first as a result of market's grave concerns about the viability of the region's banking system. The fall in the euro area financial indicators (EUR/USD including) was followed by the ECB announcement of the LTRO program (cheap funding to euro area banks). As a result, the euro stabilised and rebounded from the 1.27 level it reached by mid-January 2012 to above 1.30 and stayed there until May 2012. Here, the EUR rebounded despite the fact that the ECB announced a material balance sheet expansion (the size of the two rounds of LTROs exceeded EUR 1 trillion). The same could be said about the Greek crisis in May/June last year, which was followed by the announcement of OMT program (whereby the ECB may buy short-term government debt of countries in need). This promise of further balance sheet expansion (via OMT) actually led to a rebound in EUR/USD from 1.23 to 1.37 in early February 2013 (rather than a collapse).

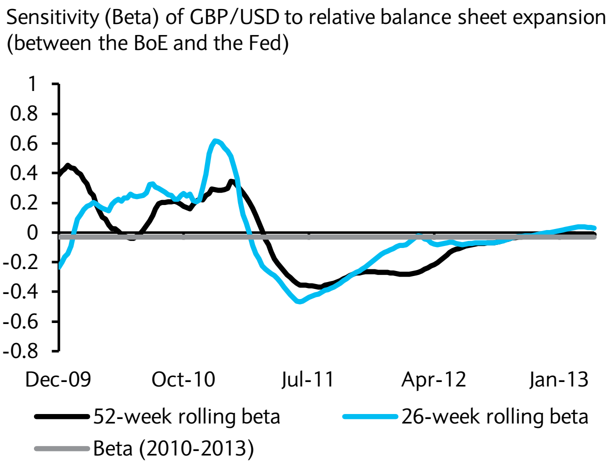
Hence, we remain cautious of using relative balance sheet movements on their own to try to predict EUR/USD moves. Not only have the ECB and the Fed so far engaged in very different types of balance sheet expansions, but the ECB's balance sheet expansion has been lately employed as a response to deteriorating euro area financial conditions. It acted as a systemic support for EUR, rather than a cyclical damper.

Figure 3: GBP/USD and central banks balance sheets



Source: Barclays, EcoWin

Figure 4: Beta of GBP/USD is almost non-existent



Source: Barclays, EcoWin

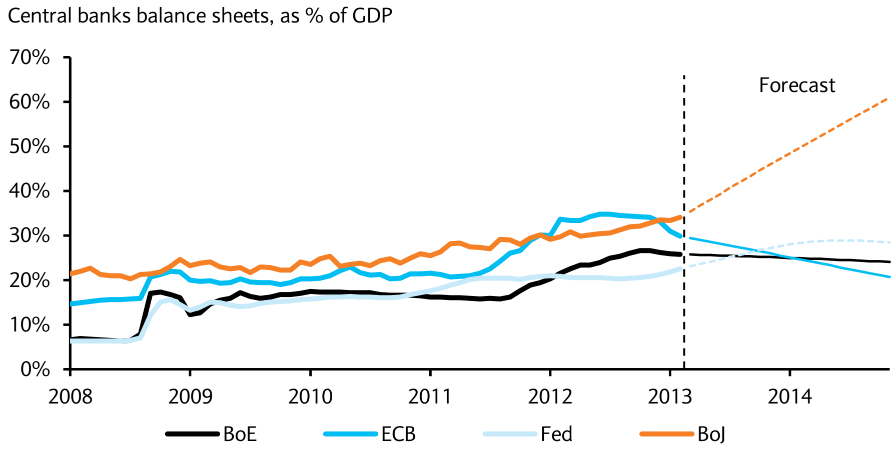
GBP/USD and balance sheets – other things matter more

While there has been some loose and unstable relationship between EUR/USD and the relative sizes of the balance sheets of the ECB and the Fed, there seems to be no relationship at all for the pound and the BoE's balance sheet (Figure 3). The sensitivity (beta) of FX to central banks' balance sheets is small, unstable over time and statistically insignificant (Figure 4).

In our view, this weak relationship is simply because other things appear to matter more for GBP. These have driven the currency's behaviour independently of the forces stemming from relative balance sheet expansions. In particular, the euro area crisis in late 2011 and mid-2012 kept GBP supported via safe-haven flows into the currency (due to: sterling's high liquidity; the attraction of gilts, then rated at AAA; the absence of an alternative given the ceiling placed on the Swiss franc; and regional proximity).

Given the euro area backdrop, GBP "survived" the material, unsterilised BoE balance sheet expansion (via QE) from late 2011 to Q3 2012. Bizarrely, but in line with the above reasoning, the collapse of GBP in the first quarter of this year was in fact accompanied by a materially favourable move of relative balance sheets between BoE and the Fed in favour of sterling (Figure 3). Other factors than the size of central banks' balance sheets were very visibly at work (namely, a rethink of sterling's safe haven status).

Figure 5: BoJ balance sheet to expand materially



Source: Barclays, EcoWin

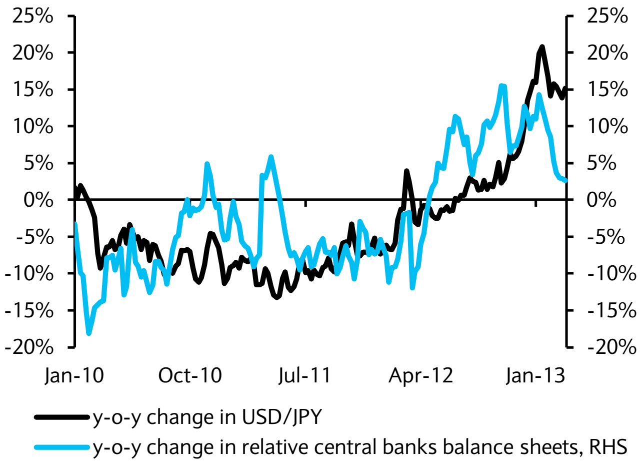
USD/JPY – where balance sheet expansion does matter

The yen and the BoJ have dominated headlines in recent weeks as the BoJ announced large-scale monetary easing, aiming to double the Japanese monetary base over the next two years (in its quest to reach its 2% inflation target).

As our projections in Figure 5 show, such large-scale balance sheet expansion will put JPY on a different level to USD, EUR and GBP. The BoJ will increase its balance sheet from currently 34% of GDP to more than 60% in two years. Given the ambiguities noted above, the question is whether such large scale money-creating relative balance sheet growth matters for USD/JPY.

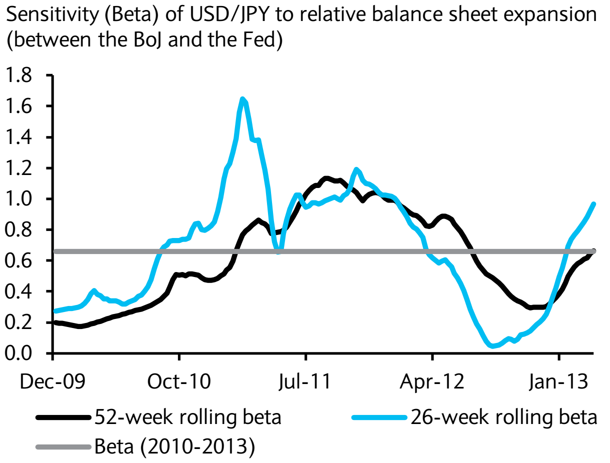
In this case we think it does. Figure 6 shows that the relative balance sheet expansion between the BoJ and the Fed does have a relationship with USD/JPY. Moreover, we show in Figure 7 that the sensitivity (the "beta") of USD/JPY to movements in relative balance sheets has been high over time (a correlation of 0.66 from 2010 until today). Moreover,

Figure 6: USD/JPY and central banks balance sheets



Source: Barclays, EcoWin

Figure 7: Beta of USD/JPY is significant



Source: Barclays, EcoWin

this sensitivity has remained in positive territory (and did not change signs, unlike EUR/USD). Taken at face value, this suggests that for every 1% year-on-year increase in the BoJ's balance sheet relative to the Fed's, USD/JPY should appreciate by 0.66%.

Based on a conservative assumption that the Fed will taper all asset purchases in 2014 by an equal amount every month and the already announced pace of BoJ balance sheet expansion, the BoJ balance sheet should increase by around 30% relative to the Fed by the end of 2014. This would suggest a further 20% appreciation in USD/JPY (assuming that beta of 0.66). This may be excessive. Markets are forward looking and, since Q4 2012, expectations of an aggressive monetary response have been building. Following the BoJ announcement on 4th April, the aggressive monetary policy is now the market's base case. But if a further 20% JPY weakness from current levels appear to be a bit aggressive, such a large scale balance sheet expansion is not supportive for JPY and should at least keep the currency soft. We thus expect JPY to continue struggling and expect USD/JPY to break above 100 over the months ahead.

Investment implications

We expect JPY to weaken further against USD as the ultra-dovish policy at the BoJ (and material QE) should continue weighing on JPY. But with some significant JPY weakening already behind us, investors should be selling JPY against USD during periods of JPY rebounds (such as the one seen on 15th April, when JPY temporarily rebounded from USD/JPY 98 to 96). For clients with existing long USD/JPY positions, we see further room for yen weakening. Our current forecast pencils-in USD/JPY at 103 in six months.

In terms of EUR/USD, we expect it to weaken to 1.25 and 1.23 over the 6- to 12-month time horizon. But we do not expect relative balance sheet expansion to be the main driver of the cross. Rather, the market expectations of the Fed tapering its asset purchases and normalising its monetary stance should support USD against EUR, where the probability of the ECB's next step is skewed towards further easing. This, coupled with our view of USD turning pro-cyclical, should lead EUR/USD lower.

For GBP/USD, relative changes in central banks balance sheets did not have significant explanatory power in the past. However, with the euro area situation stabilising (and hence taking the safe-haven support away from GBP), it may become a more important driver of GBP/USD. Nonetheless, we expect the diverging fundamentals (both economic and monetary) to weigh on GBP against USD over the quarters ahead.

China real estate: a balancing act

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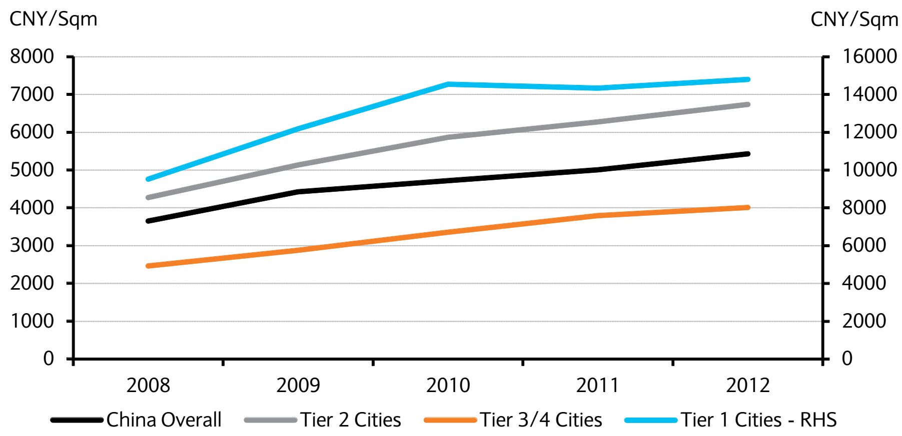
The Chinese real estate market is a perennial concern to investors. Amid still-rising prices, policy measures have grown increasingly restrictive and are likely to remain so for the near term. Overall, the government continues to fine-tune its policy measures to ensure a sustainable evolution of the sector. Ongoing urbanization and strong household balance sheets will also continue to support the sector.

Chinese property prices are once again under the spotlight. As expected, the government has announced another round of measures aimed at curbing the seemingly inexorable rise in prices. Concerns of oversupply have been resurrected by reports of ghost towns, such as the Inner Mongolian mining village of Erdos. Is the combination of rising prices and extreme oversupply symptomatic of a property bubble? Will the Chinese government change its stance on the sector in view of policy-implementation challenges?

Alarm bells are sounding across China (again)

The beginning of 2013 saw Chinese property prices start to climb again, after a brief pause in 2H 2012. In the first quarter of this year, the total value of new homes sold in China surged 69% on a year-on-year (yoy) basis, accompanied by both rising volume (+41%) and prices (+20%). Since 2008, average property prices have risen by more than 50%. This is justifiable given the rapid rate of income growth across the country, favourable demographic changes and steady urbanization (see Figure 1). Arguably, the limited investment options in China coupled with the cultural preference for real estate also contributed to the strong investment demand.

Figure 1: China property price trend



Note: Four Tier-1 cities are Beijing, Shanghai, Guangzhou and Shenzhen, Tier-2 cities include 36 cities, mainly provincial capital cities. Source: Barclays, National Bureau of Statistics

Notwithstanding the fundamental drivers, housing affordability has deteriorated significantly over recent years. Our economists estimate that average house prices have increased to around eight times disposable household income (this is markedly higher than the typical price/income ratio of 3 to 5 times in developed economies). The situation is even more severe in tier-1 Chinese cities where strong real- and-investment demand have driven prices higher. Tellingly, prices in Shanghai increased to more than 20 times that of household income in 2011.

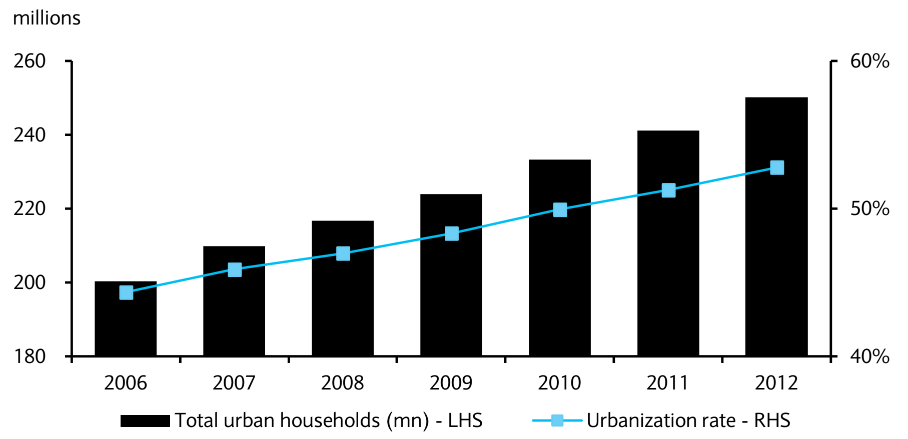
There are inevitable implications for the rest of the economy of a surging real estate sector. With a larger proportion of one's disposable income taken up by mortgage payments, there is less money available to spend elsewhere. As a result, general consumer spending, a key area that Chinese policymakers are looking to promote, may be adversely impacted. Higher property prices could also become an emerging source of social tension as average/low-income households get priced out of the market. Government efforts to maintain a "harmonious society" may, therefore, come under threat.

Over time, with the easing of fundamental drivers, the pace of Chinese growth will invariably moderate, which is all part and parcel of the government's measures to rebalance the economy. Moreover, as the proportion of the working-age population gradually declines, it would further ameliorate housing demand. Finally, further liberalization of the financial sector may present new investment alternatives. In spite of the above, Chinese policymakers still need to proactively manage the current situation as the risk of a property collapse has increased.

Urbanization continues to drive demand

Has the boom in China's property sector become a bubble, and is that bubble about to burst? We do not think so. Chinese households have strong balance sheets, which will help to avert potential foreclosures when property prices decline. Based on recent estimates, consumer loans constitute approximately 40% of aggregate household disposable income. This is still far from the US household debt-to-personal disposable income high of 133% seen in 2007. Besides, Chinese households typically use less debt to finance their property purchase due to regulatory and cultural reasons. Therefore, even if property prices were to fall by 30-40%, any negative impact on equity would likely be manageable.

Figure 2: Further urbanization driving new housing demand



Source: Barclays, National Bureau of Statistics

More significantly, despite the rise in urbanization (from 20% in the early 1980s to more than 50% in 2012 (see Figure 2)) – which saw 150 million people move from rural to urban areas – the rate is still low compared to Japan and the US. Thus, a rising urbanization trend is still in place to drive long-term Chinese housing demand. For China to achieve an urbanization rate of >70% - in line with the developed markets – it will require an additional 300 million people to move to the cities. A reform of the householdregistration system is in the pipeline, and this would provide a better social safety net for migrant workers and their families. It will also accelerate the urbanization process and thereby create more demand for housing.

Admittedly, while there has been some over-investment in the lower-tier cities over the past three years, we believe many of the perceived "ghost towns" today will turn into buzzing cities some years down the road. A classic case is that of the Pudong district in Shanghai – the city was also labelled as a "ghost town" of newly built buildings with low-occupancy rates in the late 1990s. By the mid 2000s, Pudong had become a vibrant city, boasting well-occupied office towers, hotels and sought-after residential homes. We believe the Chinese success formula of "buzzing-up" ghost towns is fairly well-documented and replicable – many more "Pudongs" will emerge in different parts of the country over time. Suffice to argue that the oft-cited case of Erdos in north-western China is not representative of national oversupply, it is more of an exception and, with <10% of China's population in that region, it is also a less-than-relevant example.

A balancing act

Given the delicacy of the real estate sector, we believe the Chinese government may need to adopt a fine balancing act as part of policy. For example, the policy stance turned from being supportive in December 2008 to restrictive by December 2009. By February 2012, the stance was obviously supportive again (see Figure 3). The frequent changes can be explained by the catch-22 situation that Chinese policy-makers are in: they have to be seen to rein in any excesses and, yet, can not afford a free fall of property prices. Real estate investment and construction account for about a quarter of China's fixed asset investments, and directly contribute more than 10% of the country's GDP. The gross impact is likely to be larger if we include the various related industries. Hence, the government's explicit policy objective is one of maintaining price stability in the sector.

With rising property prices over the past few months the Chinese government, unsurprisingly, announced a fresh round of measures to curb speculative demand in an effort to stabilize prices. In addition to the reinforcement of price controls, home purchase restrictions and further tightening on home mortgages, the regulator is also planning to levy a 20% capital gains tax on sales. The most restrictive measures will likely be applied to tier-1 cities, which have witnessed higher price increases in contrast to the lower-tier cities.

However, the implementation of the latest restrictive measures has been criticised by the public for being ineffective. For example, married couples have reportedly gone through rushed divorces to split property ownership in order to avoid the capital tax – only to remarry after the completion of their property sales. Local governments, especially those in smaller cities, have also been reluctant to enforce the tough measures for fear of crashing the market as land sales revenue is still an important source of financing. It remains to be seen if the government can enforce the measures, and we do not rule out a step-up in enforcement, where necessary.

Moving forward, the Chinese government has been toying with the idea of introducing a nation-wide property tax. Already, Shanghai and Chongqing are running a trial scheme, and we expect more cities to follow suit. While we are cognizant of the challenges of implementing a property tax – largely due to expected resistance from influential stakeholders – such a measure is, in our opinion, likely to be far more effective in curbing speculative demand. In addition, an introduction of property tax becomes more palatable if local governments can retain most of the property tax collected, which can serve as an alternative source of funding, in addition to land sale.

Meanwhile, the government will continue to pursue the social-housing programme to ensure sufficient supply of affordable housing for the growing urban population. With the eventual deceleration of private property investments and activities, the public housing programme could also be ramped up to mitigate marginal slowdowns. Longer term, we believe China's growth dependence on property investment will gradually decline, and be replaced by consumption in terms of share of GDP as the ongoing economic re-balancing process gathers pace.

Figure 3: China's property policy measures

Policy Nature	Date	Policy measures introduced
Supportive		**Aim to stimulate property demand, thus GDP growth and increase social properties supply**
	Dec 08	Encourage purchases with lower mortgage rate & higher loan-to-value
	May 09	Lower required equity to 20% for development of mass and economic housing; Business tax charged are waived for transactions over 2 years
Restrictive		**Aim to curb investment and speculation demand; and increase supply of mass and economic housing**
	Dec 09	Charge business tax on property sales within 5 years
	Jan 10	Raise down payment to 40% and tax rate for 2nd home; Set up a 3 year target to solve 15.4mn low income families' housing needs
	Mar 10	Require 78 non-developer SOE to exit the property sector
	Apr 10	70% new supply for mass and social housing
Restrictive		**Aim to stabilize price and supply social housing**
	Apr 10	Raise down payment ratio to 50%; Raise mortgage rate to 1.1x for 2nd home mortgage; Cease to approve 3rd and non-local home mortgage; Target to start 5.8mn units social housing
	Sep 10	Home purchase restrictions in 9 cities; 12th five year plan: 36mn social housing in 2011-15; 2011 social housing target 10mn units; Crack down on land hoarding via penalties
Restrictive		**Aim to solve the housing needs of urban families and curb investment and speculation demands**
	Jan 11	Set price control target - not exceeding GDP/income growth; Raise down payment ratio to 60% for 2nd home mortgage; 70% new land supply for mass and social housing; Property tax implemented in Chonqing and Shanghai; Home purchase restrictions expanded to 11 cities
	Jul 11	Home purchase restrictions expanded to 46 cities; Curb excessive rental rise
Restrictive		**Aim to correct price to reasonable level, promote property tax, increase mass and social housing supply**
	Dec 11	Central government stance unchanged; Social housing target 7mn starts, 4mn delivery for 2012
Supportive		**Aim to promote long-term stable and healthy development of housing market**
	Feb 12	People's Bank of China (PBOC) to support first time home buyers' mortgage needs and social housing construction; Shanghai/Beijing governments issued new standards for ordinary residences, which can enjoy preferential policies
	Jun 12	Benchmark interest rate cuts; Restart property trust financing

Source: Barclays, National Bureau of Statistics, China Index Academy

Conclusion

While there is cause for concern on China's surging property prices, we believe the sector is far from collapse. The government will manage the delicate real estate sector by, not only imposing measures to curb speculative demand in the near term, but also by ensuring a sustainable evolution of the sector. Fundamental factors such as increased urbanization and a strong household balance sheet will also continue to support to housing market demand and prices. As China becomes a more consumption-driven economy, the country will become less reliant on property investment growth. For now, the government must remain committed to this fine balancing act.

Where next in the hunt for high yield?

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The hunt for investment income continues, and the conventional High Yield bond market is looking quite fully priced. There are now no short cuts for investors seeking higher returns in fixed income markets: more substantial yields are only obtainable in exchange for giving up significant liquidity. For sophisticated investors willing and able to invest in illiquid assets, the small but growing European private loan market is a case in point.

High yield remains our strategically-favoured bond asset class, though prospective returns are likely to be lower than in previous years.

Update on the High Yield market

European high yield bonds have delivered a 3.8% return year-to-date – by far the best return of our fixed income asset classes. Last year, price appreciation contributed around 60% of global high yield returns. Due to the amount of callable bonds, price appreciation is likely to play less of a part this year (there is little incentive to buy a bond above the call price as the issuer has the right to redeem at various intervals). Over the first quarter, 88% of total return has come from the coupon, and we expect this to continue. Spreads have widened slightly this year – after approaching their 2011 post-crisis lows – and, in our view, are unlikely to tighten much further from here. If they do, it will most likely be because underlying interest rates rise – that is, it will not be a profitable tightening for investors holding the bonds.

Given the current yield of 5.4% on the European High Yield index, and allowing for likely credit losses, we forecast total returns in the region of 5-6% in 2013. This is still a better prospective return than we envisage from most other bonds, and High Yield and emerging market bonds together remain our favourite fixed income asset class strategically. We recommend that you continue to hold your positions for the time being.

However, the days of high yield delivering equity-like upside with credit downside are probably behind us. Yield-seeking investors unwilling to go down the much higher-risk equity road are increasingly looking for new credit investment opportunities. One possibility, which is not available or suitable for all investors, is to move away from rated credit towards the more illiquid, private loan markets, which can offer commensurately higher returns on a risk adjusted basis (Figures 1 and 2).

Traditional lenders have retrenched

Lending to non-investment grade companies has long been a key line of business for both European and American banks, but since the crisis there has been a massive retrenchment by traditional lenders as banks look to repair broken balance sheets.

US banks traditionally occupied roughly 40% of the US private lending market with the remainder comprised of well-established non-bank lenders that included specialty finance companies, collateralised loan obligations (CLOs), business development companies (BDCs), hedge funds, and private lending funds. In Europe there has been a larger historical ownership of the private lending market by banks in the region (between

60% and 80%). Following the retreat of lenders post the financial crisis, banks are only cautiously expanding their loan books as they wrestle with the weight of regulation (e.g. compliance with Basel III) and the repair of their balance sheets.

Making matters worse for European corporate borrowers is the absence of non-bank lenders in the region. Europe has neither BDCs, which exist exclusively in the US, nor sufficient CLO volume to pick up the slack. Furthermore, the local high yield market remains an unpredictable source of funding for small and mid-sized enterprises. As a consequence, there is a large prospective lending gap in the European market.

Private loans can offer an attractive risk/return profile but availability and liquidity are limited

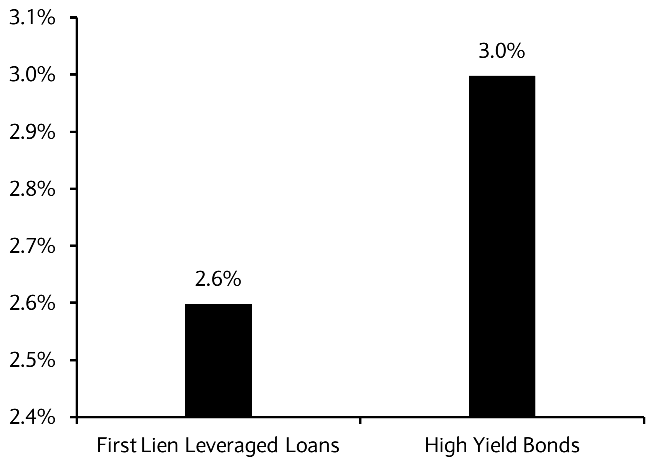
Near-term opportunity

Alternative credit providers offering flexible capital and willing to lend to European mid-market companies are currently able to negotiate bespoke lending packages across a company's capital structure. These transactions typically include first and second lien debt as well as mezzanine securities (listed here in the order of least to most risky) and can often comprise a Payable In Kind (PIK) coupon. For example, first lien lenders have the first claim on a company's assets, and may invoke covenants that force the stoppage of payments to more junior lenders, such as second lien and mezzanine, should the company go into financial distress.

Industry experts estimate that European direct lending returns comprise a cash coupon ranging from Libor/Euribor + 500-1000 basis points, a potential PIK coupon of roughly Libor/Euribor + 300-500 basis points and origination fees of 200-500 basis points. Interest rates charged to the borrower are usually floating, and lending packages can also often include a Libor/Euribor floor (100-200 basis points). The interest rate floor protects the lender from benchmark rates that dip below it by providing a minimum base yield in low interest rate environments.

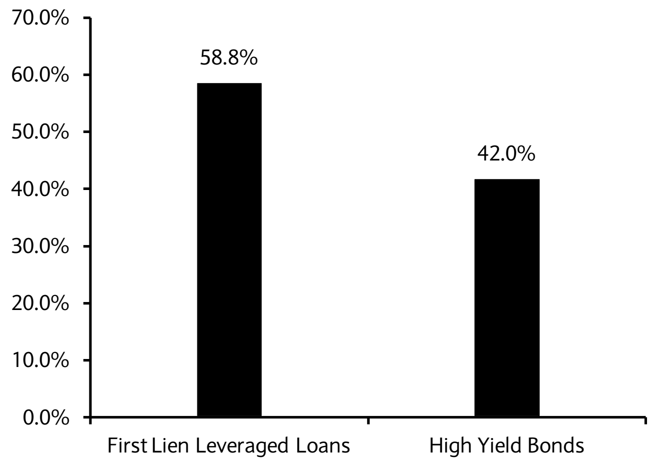
The floating nature of such loans can also, in part, help to mitigate the risk of rising interest rates. While fixed rate investment grade debt, and to a lesser extent high yield, carries significant duration risk due to the inverse relationship between rates and prices, private loans typically move in step with interest rates, thereby protecting investors from the return erosion that would likely occur to fixed rate securities should interest rates rise.

Figure 1: Average Annual Western European Default Rates: 2003-2012



Source: Credit Suisse. Past performance is not a guarantee of future results.

Figure 2: Average Annual Western European Recovery Rates: 2003-2012



Source: Credit Suisse. Past performance is not a guarantee of future results.

There is no doubt that healthy European middle market companies exist despite regional macro-economic woes (northern Europe is favoured because of its lower default rates and stronger legal systems). They have substantial cash on their balance sheets and belt-tightening-induced higher operating margins but face a difficult path to future growth without access to financing. The investment opportunity is evident; the challenge for investors is its implementation.

Whereas a long history of non-bank lending in the US engendered a strong field of private debt money managers, much of European debt origination and underwriting acumen continues to reside within the banks that for so long dominated the market. However we are seeing a number of established credit specialists, with experience in direct lending, beginning to take advantage of the bank funding gap. In addition, European governments recognise the importance of ensuring mid market companies are sufficiently financed as a means of fuelling economic recovery. In some cases they are doing this by actively investing alongside alternative direct lenders.

It is important to note that private loans can be difficult to access and are highly illiquid. They are not suitable for all investors. However, for those that believe this is a compelling opportunity, gaining access via private equity-style managers may be an interesting way to play this theme.

Cash and the Goldilocks principle

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Once upon a time, there was an investor named Goldilocks. She went for a walk in the forest and soon came upon an investment advisor's house. She knocked and when no one answered, she walked right in. Spread on the kitchen table there were three investment proposals. Goldilocks was hungry to invest. She started to examine the proposals…

Too risky, too safe, or just right?

Just like Goldilocks found that the bears' beds could be too hard, too soft, or just right, she would have an equivalent experience with the infinite ways to blend assets to create a portfolio. Some will be too risky – others too safe. She would hope to build the portfolio that is 'just right' to sleep as soundly as she did in the little bear's bed.

The goal of any well designed portfolio is to maximize expected return relative to the level of risk that an investor is willing to take, and for Barclays, subject to the level of anxiety you are willing to suffer. Our choices around the allocation to bonds, equities, alternatives and cash have a large bearing upon this. At Barclays, we publish our 'just right' asset allocation guidance across five risk levels, suitable for investors from low through high risk tolerance. Cash is an important asset class. We stated in our white paper *"Asset Allocation at Barclays"*, published in February 2013, that:

> *This asset class plays a unique and essential role in Strategic Asset Allocations, especially for the most risk-averse investors. It is the only investment that fulfils the objective: 'Make sure I retain my capital long term.'*

Figure 1: Cash in the Barclays Strategic Asset Allocations

Risk level	Cash allocation
Risk Profile 1 – Low Risk	46%
Risk Profile 2 – Medium-Low Risk	17%
Risk Profile 3 – Moderate Risk	7%
Risk Profile 4 – Medium-High Risk	3%
Risk Profile 5 – High Risk	2%

Source: Barclays

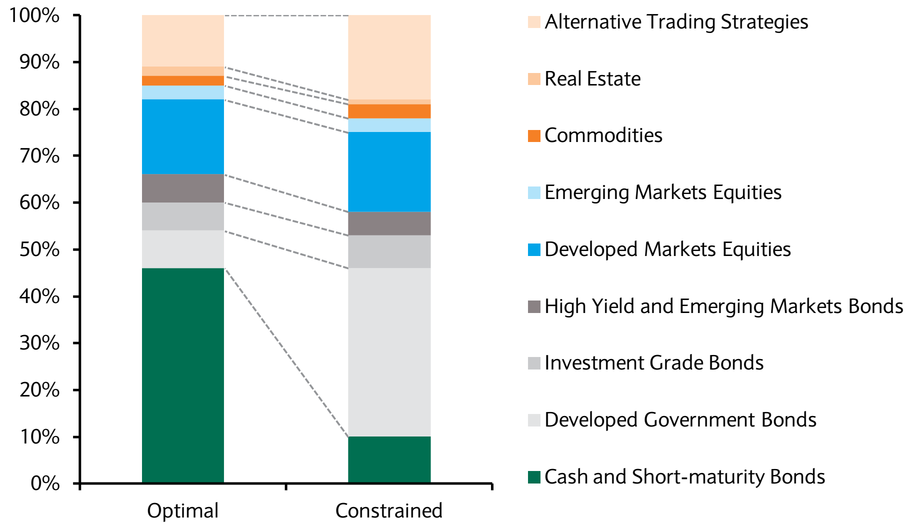
"That portfolio is too safe!" exclaimed Goldilocks

Many clients look at the cash allocation in our low risk strategic asset allocation and think it is very high. However, ask yourself this question: if you were one of the most risk averse investors in the population, then wouldn't you want about half your wealth in the safest asset class?[1]

However, there is a temptation to build a low risk portfolio without using so much cash – perhaps placing a restriction that you hold no more than 10% in cash. It is possible to apply this constraint to the portfolio construction process and learn where the cash allocation gets redistributed. This can be seen in Figure 2.

[1] From our calibration of risk tolerance on a global population we expect the 10% most risk averse individuals to be classified as low risk investors.

Figure 2: An optimal low risk portfolio versus a low risk portfolio constrained to a 10% cash allocation



Source: Barclays

Figure 2 shows that the effect of constraining cash is to increase the allocations to Developed Government Bonds (from 8% to 36%) and to Alternative Trading Strategies (from 11% to 18%). All other allocations are constant or change by only 1percent.

How does the cash constraint alter the characteristics of these portfolios? Figure 3 gives the details. Developed Government Bonds yield more and are riskier than our Cash and Short-maturity Bonds asset class. Because the cash constraint raises the proportion of assets in Developed Government Bonds, then the expected return of the portfolio is higher – albeit only marginally – and the expected volatility is also higher.

The crux of this comparison is whether the increase in risk is adequately compensated for by additional return. The crucial idea is this – for every level of risk, an investor needs a minimum level of return in order to be willing to invest. This balance between risk and return is dependent upon the level of risk tolerance. Lower risk tolerance investors need higher levels of return than a high risk tolerance investor for the same risk. We call returns above this minimum threshold our measure of *Desirability* – higher is better.[2] Our analysis of the two portfolios suggests that lowering the cash allocation reduces desirability, meaning the increased risk of the cash constrained portfolio is not fully compensated for by the additional return.

Figure 3: Portfolio comparison

	Strategic Asset Allocation	Cash constrained allocation
Expected excess return[3]	2.0%	2.1%
Volatility	4.6%	5.1%
Worst month (Oct 2008)	-6.8%	-7.4%

Source: Barclays

[2] More details on our desirability measure can be found in our white paper *Asset allocation at Barclays*, published Feb 2013.
[3] Excess return is the return over and above the risk free return that can be achieved.

The increase in risk can also be seen in a much simpler metric; the worst single month performance. For both portfolios, October 2008 suffered the worst performance. Our low risk strategic asset allocation lost 6.8% that month, whereas the cash constrained allocation lost 7.4%.

There is one other more tactical consideration. If interest rates revert to levels closer to their historical norms, then Developed Government Bonds are going to be affected much more than cash holdings. A cash constrained allocation might currently be running significantly higher concentration risk than history suggests. It is not that history suggests that the cash constraint is massively more risky, but concentration into a currently high priced asset increases the risk that history will not be a good guide. Our Goldilocks investor may think holding cash is too safe but she is perhaps shifting risk around in an extreme way.

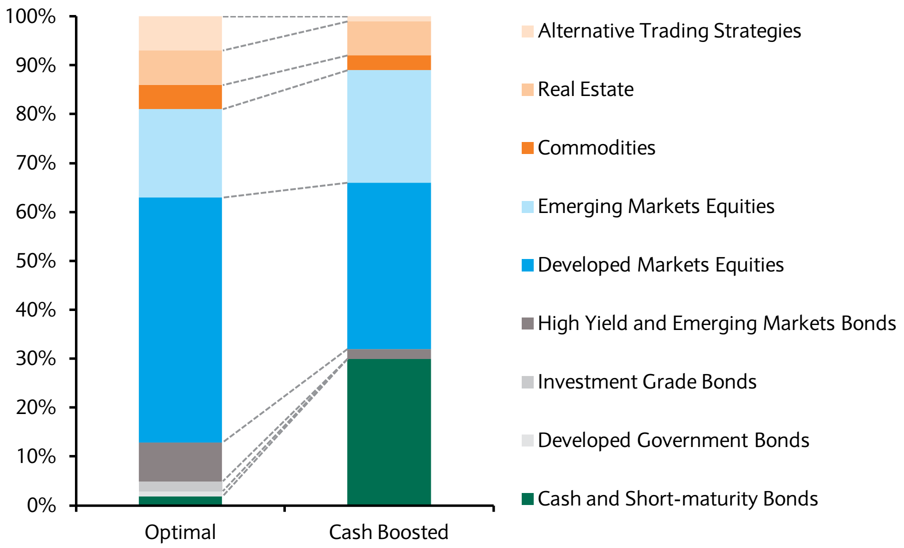
"That portfolio is too risky!" exclaimed Goldilocks

Goldilocks may, like many investors, suffer from a problem of reluctance. Holding cash instead of a diversified portfolio provides emotional comfort but does so at a large opportunity cost – forgoing the expected return of that diversified portfolio. We discussed this in the February issue of *Compass*.[4]

Alternatively, Goldilocks may find herself maintaining the overall risk level of the portfolio by running a 'barbell' type strategy – one where a large cash holding is used to offset the risk of a higher risk investment portfolio. Some investors find this comforting, knowing that the low risk cash holding 'secures' their lifestyle and provides a buffer against the worst-case event. This strategy also has some downsides. Principally it reduces the diversification benefit by concentrating the investment portfolio in the riskiest asset classes. This can be particularly uncomfortable for low composure investors.

Figure 4 shows what happens to our high risk strategic asset allocation if you maintain the risk but choose to hold 30% in cash rather than the 2% 'just right' recommendation.

Figure 4: Optimal and cash boosted high risk portfolios



Source: Barclays

[4] What is your wealth doing while you're waiting for the right moment?, *Compass*, Feb 2013

From Figure 4 it is clear to see that the riskiest emerging markets equity exposure has had to increase to keep risk and return high. Perhaps more important is the loss of the diversification benefit. Two of the bond asset classes do not feature in the cash boosted portfolio. The bond and alternatives asset classes collectively account for 30% of the strategic asset allocation but only 12% of the cash boosted allocation. This means that the performance of the portfolio is much more closely tied to equities with cash lowering the overall portfolio risk. More Figure 5 shows the effect this has on the portfolio metrics.

Figure 5: Portfolio comparison

	Strategic Asset Allocation	Cash boosted allocation
Expected excess return	5.9%	4.9%
Volatility	13.9%	11.8%
Worst month (Oct 2008)	-19.3%	-15.6%

Source: Barclays

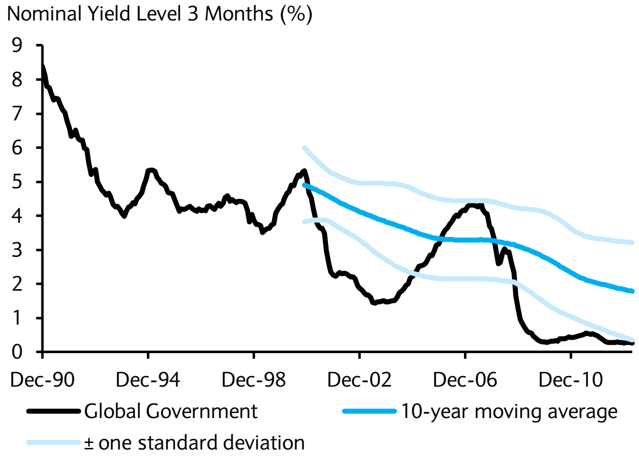
By holding too much cash, investors may be giving themselves greater emotional buffers at significant costs to their portfolio efficiency. This may be a trade-off that makes sense if it helps to stay invested in all market conditions – but it may be one that leads to greater extreme outcomes in bad markets because diversification is reduced.

"Hmmm…that portfolio is just right!" exclaimed Goldilocks

My colleagues in the Behavioural Finance team would have a lot of sympathy for Goldilocks. We see lots of portfolios that are too safe and too risky, while constantly striving for the 'just right' portfolio. The 'just-right' portfolio is one that maximizes return relative to the stress and discomfort the investor has to endure along the journey. Our strategic asset allocations are the starting point for that, but we should also consider strategies to further boost the anxiety buffer where needed. Cash is just one of the ways of providing an anxiety buffer, but as Goldilocks learnt, it is by no means a costless way of achieving it.

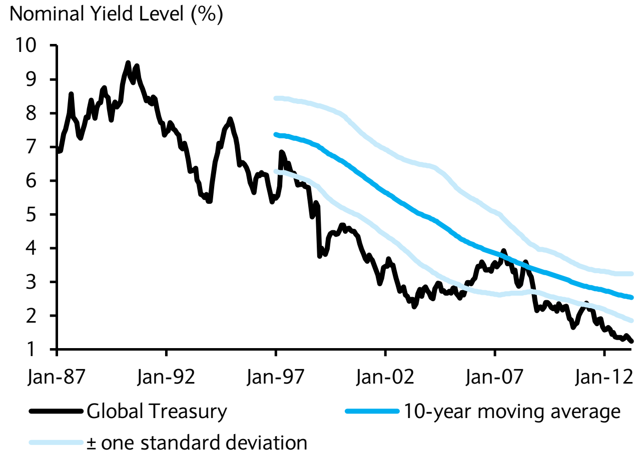
Interest rates, bond yields, and commodity and equity prices in context*

Figure 1: Short-term interest rates (global)



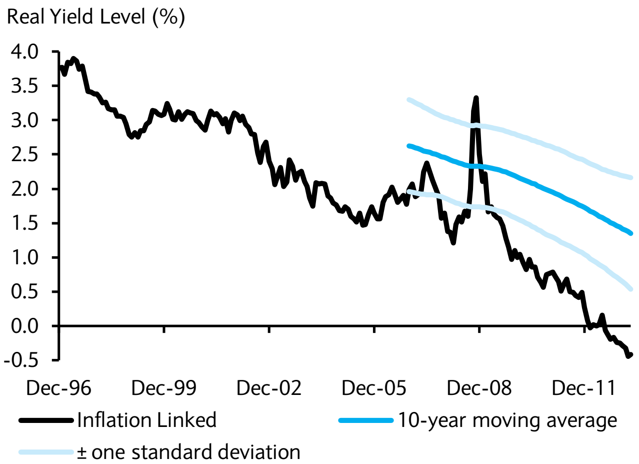
Source: FactSet, Barclays

Figure 2: Government bond yields (global)



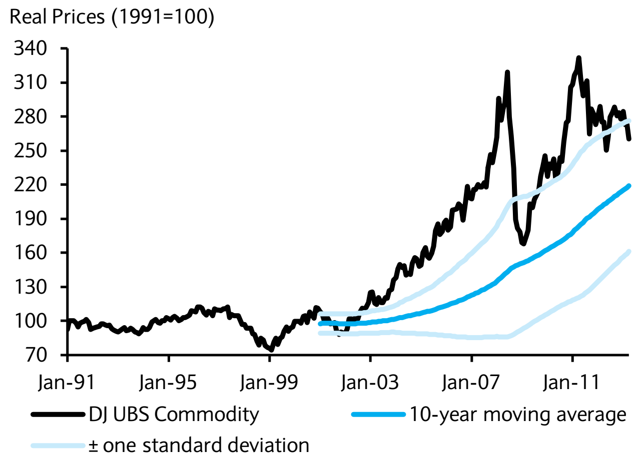
Source: FactSet, Barclays

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



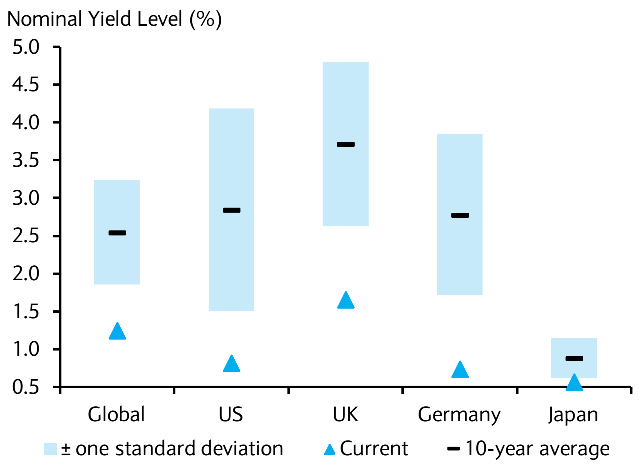
Source: Bank of America Merrill Lynch, Datastream, FactSet, Barclays

Figure 4: Inflation-adjusted spot commodity prices



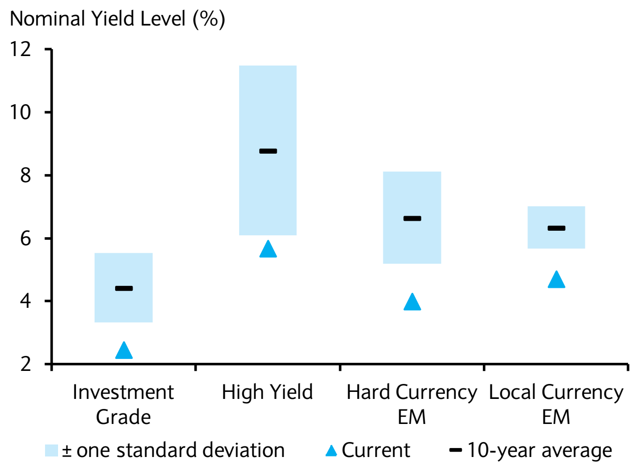
Source: Datastream, Barclays

Figure 5: Government bond yields: selected markets



Source: FactSet, Barclays

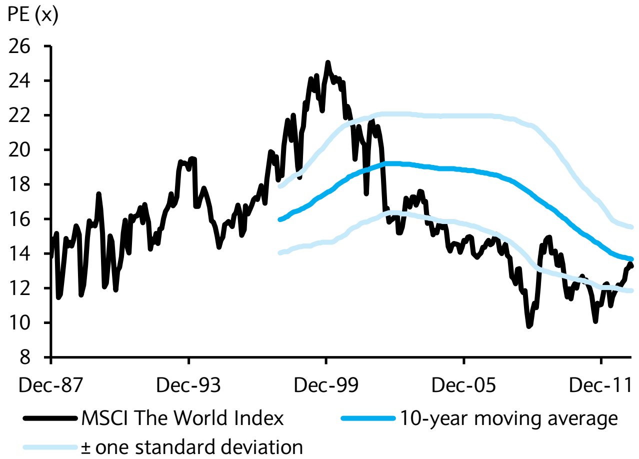
Figure 6: Global credit and emerging market yields



Source: FactSet, Barclays

*As of COB 22 Apr 2013. Past performance is not a guarantee of future results.

Figure 7: Developed stock market, forward PE ratio

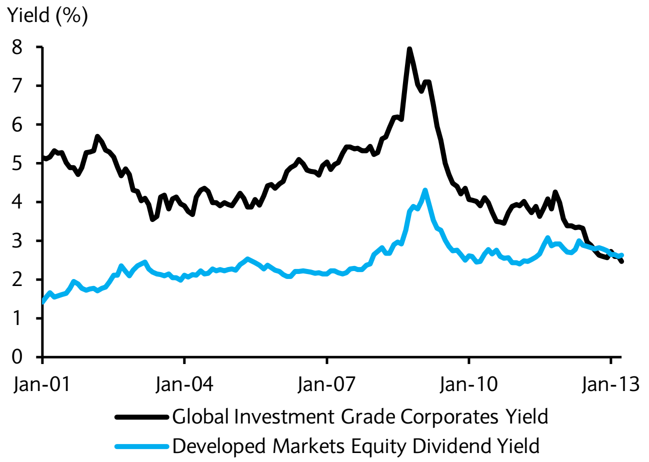


Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 8: Emerging stock market, forward PE ratio

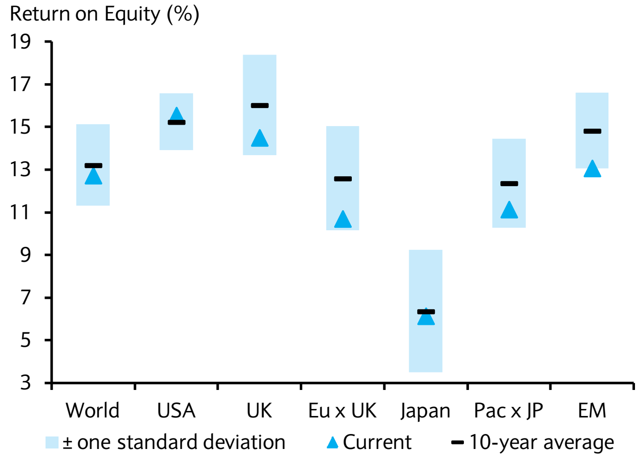
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 9: Developed world dividend and credit yields



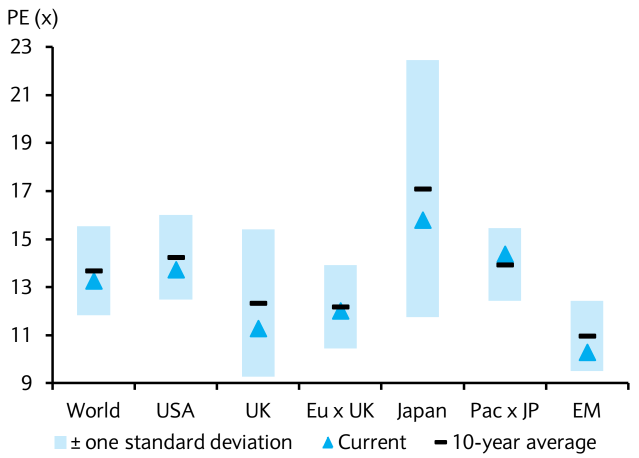
Source: MSCI, IBES, FactSet, Datastream, Barclays

Figure 10: Regional quoted-sector profitability



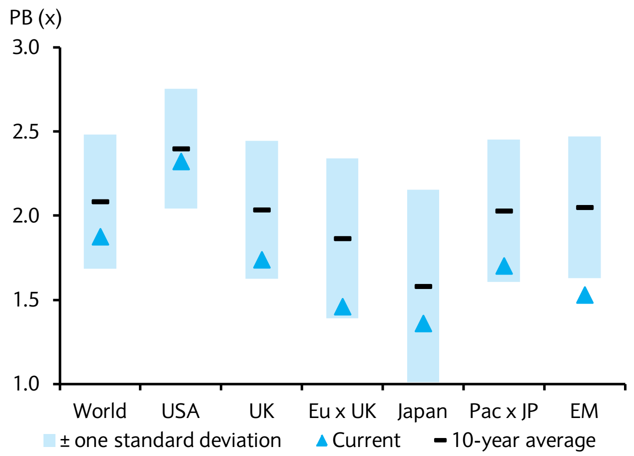
Source: MSCI, IBES, FactSet, Datastream, Barclays

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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