

Highlights

- Despite calls that the end is near, the business cycle will carry on
- Breadth of global growth is 'unprecedented', less debt-dependent
- Investor positioning far from stretched despite bullish outlook
- Equity valuations above average due to low rates, stage of cycle
- Yields, curve distorted by exceptionally easy monetary policy
- Rising yields won't kill the bull: 100bp rise would hit S&P by 5.5%
- US wins Q3 earnings season: we move 3% pf weight from EA to US
- We upgrade KRW to 0, cut South African bonds to 0

Key Macro Forecasts

US, EA and China strong – three locomotives boosting world trade – no near-term economic threat.

Trump tax reform could boost growth in 2018 – before 2019 overheating.

Substantial increase in rates along the curve likely over 24 months:

- Fed to hike once later this year, twice more in H1 2018; inflation up in 2018
- Bonds to follow/lead subject to ECB political/policy delays
- Key turning point: ECB less ultra-loose despite strengthening euro.

Risk asset prices, especially stocks, still bullish – though medium-term risky:

- US stocks at high p/e's but good growth, low inflation to boost earnings through 2017/2018
- European stocks less highly valued: more 'legs'
- German-centred Europe to show prolonged strength real estate and stocks recommended
- Gold and commodities not favoured, except in protectionist scenario.

Major protectionism would slash forecasts – though Treasuries still bearish.

Never-ending Japanese imbalances a potential risk – China to slow in 2018, with possible domestic financial ructions – Italian risks not major over next 12 months.

Emerging markets bounce complete: selectiveness as important as ever.

LSR Asset Allocation

November 2017

Asset Allocation	3
Macro Outlook	5
Cross Asset	9
Equities	15
Fixed Income	21
Currencies	25
Model Portfolio	29

This publication has been prepared by Andrea Cicione, Charles Dumas, Oliver Brennan and Eugenio Montersino. Copies of this briefing in pdf format are available to our clients from our website www.lombardstreetresearch.com. Where you will also find a fully searchable archive of all of our publications.

A full set of the sources used is available on request from Lombard Street Research.



www.lombardstreetresearch.com

Asset Allocation

3-to-6-month view. Previous ratings in brackets. Monetary policy outlook changes in bold. Rationale on next page.

	Equities	Govt Bonds	FX vs. USD	Monetary policy				
Developed Markets								
North America								
US	+1	-1		Four hikes in next 12 months				
Canada	0	-1	0	Tighter				
Developed Europe								
UK	0	-2	-1	Next hike in Q3 2018				
Switzerland	0		-2	Unchanged				
Euro Area			+1	As announced				
Germany	+1	-1						
France	+1	-1						
Italy	+1	-1						
Spain	+2	-1						
Asia Pacific								
Japan	+1	0	-1	Unchanged				
Australia	0	-1	0	Unchanged				
Emerging Markets								
Asia								
China	+1		0	Unchanged				
India	+1		+1	Unchanged, easing bias				
Korea	+1	-1	0 (-1)	Tighter				
Taiwan	+1		0	Unchanged				
Latin America								
Brazil	+1	+1	+1	Unchanged, easing bias				
Mexico	0	+1	+1	Unchanged				
Europe & Africa								
Russia	+1	+1	+1	Unchanged				
Turkey	0	0	0	Unchanged				
South Africa	0	0 (+1)	0	Unchanged				

Commodities	
Energy	0
Industrial Metals	0
Precious Metals	0

Corporate Bonds	IG	HY
US	0	+1
UK	-1	
Euro Area	0	+1

Key to recommendation	ns			
+2 = strongly positive	+1 = positive	0 = neutral	-1 = negative	-2 = strongly negative

Recommendations based on expectations of **normalised local-currency total returns**. FX returns include **carry**. **ValuQEST** country and sector scores on page 14 and 18. **Model portfolio** performance on page 29.



Summary of key recommendation changes

	From	То	Rationale
KRW vs USD	-1	0	Korean growth is improving in line with the synchronised global growth upswing. Geopolitical risks have diminished and, following the end of a year-long quarrel, Chinese tourism to Korea should also pick up.
South Africa debt	+1	0	Fiscal risks are increasing as the government's budget deficit is set to rise further, risking South Africa's last remaining investment grade rating. Tax raids to fill the fiscal gap could further weaken growth, thereby increasing domestic political risks.
US monetary policy	75bp by end-H1	Four hikes in next 12 months	Fed still likely to deliver three more hikes by H1 2018 (in December, March and June), and an additional one before the end of next year as the tax reform boosts growth.
UK monetary policy	75bp by end- 2018	Next hike in Q3 2018	Following the BoE's 25bp hike and guidance of three more over the next 3 years we moderate our expectations of further hikes next year.
Korea monetary policy	Unchanged	Tighter	Loosening fiscal policy makes rate hikes more likely.

Summary of model portfolio changes

	1-month chg	O/W (U/W)	Comments
DM equities	0%	6%	We add 3% to US and reduce France, Italy and Spain by 1% each.
IG corporate bonds	+1%	4%	We add 1% to US investment grade.
EM bonds	-1%	2%	We reduce South Africa by 2% following the downgrade to 0, and add 1% to Russia.

Full model portfolio composition and performance from page 29.

Macro Outlook

- US growth spurred by confidence among 25- to 34-year-olds
- Migration and domestic demand boost EA, trade surplus ebbing a little
- China slowed to on-trend growth in mid-year, to slow some more from Q4

Growth no longer heavily debt-dependent

Three major locomotives – less dependent on debt growth Not only is the breadth of global growth unprecedented this century, with three major locomotives all going strong, but also their growth is far less dependent on debt than was the pre-crisis global economy in 2004-07. To be sure, the US is still running budget deficits at a rate that marginally increases public debt relative to GDP, but continental Europe is going the other way. Only China has perceptible debt growth that will require action in the future; and there, as in the US, it falls mostly on the broad shoulders of the government, not the more vulnerable private sector.

US consumers still there as capex grows

Retail stays strong...

Q3 GDP data came through with a repeat of Q2's 3% annualised growth, taking the year-on-year rate up to 2.3%. Leading the way were household durables, notably cars (partly spurred by hurricane damage), business capex and inventories, together with a modest boost to exports. Much of this strength can be expected to persist well into 2018 at least. The 25-34 age group, whose position has much improved, is shifting its spending to household goods from clothing and footwear. And that spending is not slowing down, despite the absence of 2014-15's following wind of falling oil prices and the drag of rising rents (millennials are finally leaving the parental home, but mostly for rental accommodation so far). The underlying point is that the goods-only CPI is falling once energy is excluded, so that growth in nominal retail spending typically not far short of 4% since early 2016 has kept the economy on the move.

...and capex likewise

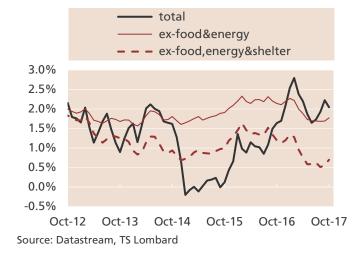
Capex is likely to accelerate in Q4, as the strength of shale fracking and developing bottlenecks arising from simple growth are reinforced by reconstruction after the

Retail sales ex-gasoline, 3-mth/3-mth %, saar



Source: Datastream, TS Lombard

US CPI, various measures, 12-month % change

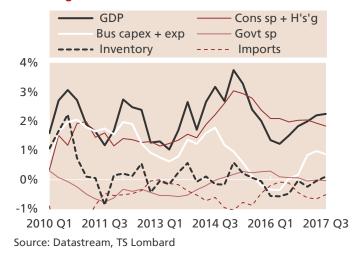




Durable goods orders & capex, 3-mth/3-mth %, saar



US GDP growth contributions, % YoY



devastating hurricanes: already September's durable goods orders were up sharply, and the relatively weak structures section of business capex should also start to revive, if only for a while.

Good prospective growth even before tax cuts

As a result of these factors, the combination of business capex, inventories and exports has been contributing about 1% to real GDP growth since early 2016. As these elements are only about a quarter of GDP, their growth has been at a 4% rate. And the modest dip in the contribution of consumer spending and housing shown in the chart above, largely owing to a mid-year housing slowdown, is likely to cease or even be reversed now that 25- to 34-year-olds are seriously into household formation. All this excludes any impact of a tax cut that is expected over the winter – though the concentration could easily be on corporation tax, where any changes are likely to have only a minor short-term effect on growth.

Fed remains easy, despite hikes

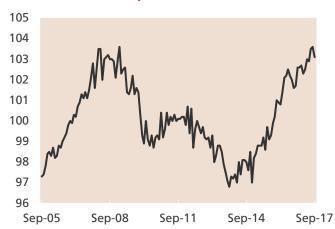
More crucial, however, is the Fed, and there are few grounds for fear in this quarter. The fed funds rate remains below inflation, compared with a long-run real average of 1.9%. Even the three hikes we expect by June may take the rate barely above core inflation, as inflation itself is turning up slightly, as are wage settlements. Beyond the rise we are forecasting in fed funds to 2%, further increases will depend on how strong growth is and what form tax cuts take. But with monetary effects anyhow subject to long and variable lags, a shift to minimally positive real short-term rates next spring is unlikely to check the economy's momentum before the end of 2018.

Europe – the new-boy locomotive

Migration boosting German-centred Europe Continental Europe is the new locomotive, with Britain as a tag-along economy with a low FX rate – reversing the unnatural pattern that persisted until the UK's mid-2016 Brexit vote. It is migration, a big factor in that vote, that is accounting for continental strength now, concentrated in German-centred, north-central Europe. With Benelux, Scandinavia, Switzerland and Austria having aggregate GDP equal to Germany's, this region is Germany times two and nearly three times France and four times Italy in size. Spain too is now growing fast again.

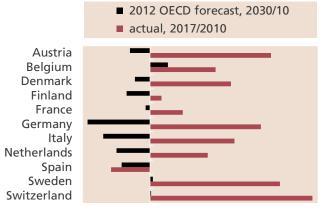


EA retail sales volume, 2010 = 100



Source: Datastream, TS Lombard

Eur. labour forces, % pa change, forecast v. actual



-0.6%-0.3% 0.0% 0.3% 0.6% 0.9% 1.2% 1.5%

Source: OECD, TS Lombard

Consumer demand has stayed strong

Mr Draghi had a stroke of luck with his QE-induced devaluation of the euro in late 2014 and early 2015, as it coincided with a slump in the oil price, so that the usual consumer squeeze from rising import prices did not happen. Meanwhile, the depreciation helped exports and business cash flow, even if for a region already in massive current account surplus it was globally anti-social. The chart above shows retail sales volume up more than 6% over the past four years – in an economy whose trend growth rate has been below 1% - and car sales up 30% over the same period.

Immigrants have left capex plans deficient

The right-hand chart above illustrates how seriously official forecasters have underestimated the influx of migrants, even though the bar on east-bloc migrants lapsed in 2011 and the euro crisis meant Mediterranean youth unemployment was soaring towards an average of 50%. The result of this underestimation has been insufficient capex in general, particularly of housing, working facilities, schools, roads, etc. As a result, the good growth of consumer spending is being joined by lively capex, so that for Germany in particular this is the only time since WW2 when domestic demand has been the primary growth driver, with the exception of reunification in the early 1990s.

Trade surplus shrinks

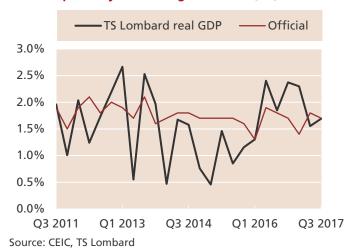
One consequence is that despite the 'inverse J-curve' effect of the euro's recent appreciation, the euro area's current account surplus is shrinking. But this reflects somewhat improved terms of trade cutting into substantial net import volume growth relative to exports.

Continued ultra-easy ECB stance threatens 'go-stop' in 2018-19

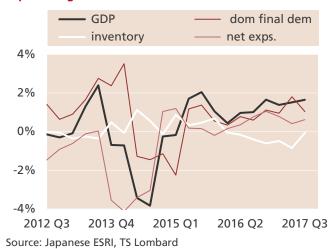
The ECB is fighting a rearguard action in defence of its cheap-euro policy. Mr Draghi is no doubt (rightly) fearful that substantial further appreciation will hurt Italy in the medium term, its economy being the major weak link in the EA. But continued ECB ease is unlikely to do more than moderate the euro's upswing. For one thing, its pursuit of ultra-stimulative policy in the face of already above-trend growth must add to demand pressures that can only attract capital into the euro – if only for real-asset investment purposes at first. Moreover, as and when the ECB achieves its target of just under 2% inflation, the overheating needed to get to that point will not suddenly cease: inflation will not stop increasing just because it reaches the target. The ECB is likely to be forced into stop-go mode – or rather go-stop – in 2019.



China's quarterly real GDP growth, % QoQ



Japanese growth & contributions, % YoY



China slows a little, Japan steady

China still slowing in Q4...

The TS Lombard recalculation of China's real growth was unusually close to the official estimate in Q2 and Q3 – ie, on trend at a rate of about 6½%. (The official estimate is always on trend.) Latest data confirm that China has started the slowdown we have been anticipating. Domestic demand is easing on the back of property and fiscal tightening. The softness has spread to manufacturing investment and retail sales. But high-tech manufacturing continues to grow at double-digit rates. With "new economy" sectors strengthening and solid global demand lending support, China can look forward to a new platform for growth once the current weak spell is over. The growth mix promises to be more balanced than it has been since the GFC.

...and policy stays tight

Despite the slowing economy, there are no signs of policy easing. Growth in total social financing (including local government bonds) slowed from an average of 14.9% in Q3 to 14.4% in October. M2 growth fell from 9.2% in September to 8.8% last month. A recent rise in bond yields has caused market concern, but the impact on the economy will be limited given that bank lending remains the chief financing channel: short-term interest rates are still within the PBoC's corridor.

Japan export-led as usual

Japan's Q3 GDP growth fell back to the 1½% range that has prevailed for the past year or so. The Q2 surge in domestic final demand was partly unwound, and the corresponding run-down of inventory was likewise reversed. The economy remains export-dependent, as has been true throughout the nearly five years of Abenomics. No longer is this solely a matter of yen competitiveness, as the BoJ has lost control of the rate since Japan's large CA surplus reversed its decline in mid-2015. The chief factor for now is the buoyancy of world trade, and particularly China. The leap in Q2 growth followed China's growth climax in Q1, so China's likely slowdown into the first half of next year will probably spill over to Japan – but not until end-2018.

BoJ to raise JGB yield? – not yet

Meanwhile, markets are speculating whether the BoJ will respond to rising bond yields elsewhere by raising its target for the 10-year JGB yield from zero. This could be several months away – and if and when it happens it could well signal the end of the current global growth patch, given the BoJ's past track record of 'little and late'.



Cross Asset

- The cycle is not about to end and evidence of irrational exuberance is scant
- Global macro fundamentals remain strong and so should corporate profits
- A DCF model of the S&P 500 shows rising rates aren't an immediate threat

No, the cycle is not about to end

Rational exuberance

The recent selloff in equities has, unsurprisingly, prompted quite a few investors and commentators to air their concerns about excessive risk taking in the market, too high valuations and too much complacency. The phrase 'irrational exuberance' has inevitably cropped up. We took the opposite view last month (see Asset Allocation, 'Rational Exuberance', 13-Oct-2017), and continue to believe that calls for the end of the cycle are premature.

What kills a cycle?

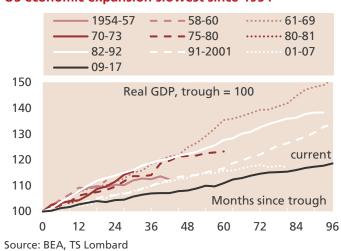
As the adage goes, cycles do not die of old age. To be sure, the current one is getting long in the tooth, with economic expansion in the US now in its ninth year. But while the present growth phase has lasted longer than average, it has been the slowest recovery since the 1950s (left-hand chart below). Add to this inflationary pressures that are conspicuous by their absence, and the conclusion is that there are no signs of overheating in the economy.

External shocks, monetary tightening, corporate margins, macro imbalances If not time, what is it then that kills a cycle? As we've argued in a recent Macro Picture ('Cycle ends', 7-Sep-2017) there is no economic theory that seems to provide a definite answer to this question. Nonetheless, our colleague Dario Perkins identifies several forces that typically bring an end to the expansion. These include external shocks, monetary tightening, corporate margin pressures and macroeconomic imbalances.

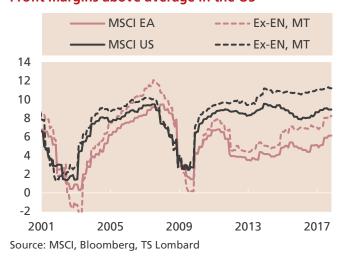
Monetary policy: no tightening in sight

On the basis of these four forces, a recession does not seem imminent. Inflation is still low and central banks, while removing accommodation at the margin, are not acting aggressively to try and keep it in check. That is unlikely to change anytime soon as wage growth remains low, suggesting CBs will be in no hurry to tighten.

US economic expansion slowest since 1954



Profit margins above average in the US





Margins: slow wage growth means little pressure on them Weak wage growth is also a boon for corporate profits because they cap pressure on margins. Early signs of a recovery in productivity suggest that margins should remain well protected in coming quarters, even though they are already above average (at least in the US, right-hand chart on the previous page). Falling margins normally spell trouble for the cycle: while companies may allow some erosion to happen at first, they eventually end up cutting costs (resulting in lower aggregate corporate sales), or reducing personnel (likely to lead to lower aggregate demand), or both. When this behaviour becomes widespread, typically a recession ensues.

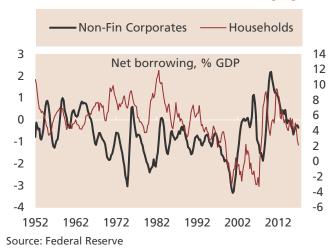
Imbalances: leverage has moved to safety of government balance sheets As far as macroeconomic imbalances go, they appear to be nowhere close to the extremes reached in the lead-up to the global financial crisis or before previous recessions. Banks have deleveraged aggressively, household balance sheets are in better condition than in 2008 and even corporates, while more indebted than in the past, are in reasonably sound shape given the level of interest rates and the long duration of their liabilities. Governments have taken up the debt slack and, while this is not ideal, a faster, forced deleveraging of the whole economy after the GFC would probably have caused another Great Depression. Besides, if there has to be high debt in the economy, the safest place for it to be is on the government's balance sheet.

Shocks: politics and geopolitics still a risk, but no more than that for now

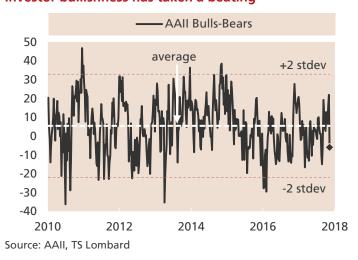
This leaves us with external shocks. For a while, political and geopolitical risks were all investors seemed to worry about, especially at the start of the year ahead of a series of elections in Europe. Those turned out to be non-events for the markets, as the extreme scenarios never materialised. Italy's general election next year is a major unknown but investors do not seem to have focused on it yet, judging by the downward trend in BTP spreads since April. Then the North Korea crisis flared up but, after an initial wobble, even that failed to derail the market rally. Investors soon realised that the only way to hedge against a nuclear conflict would be to go into full risk-off mode. Given the low probability of this happening, they were not prepared to do so.

In sum, there are no obvious indications that the current expansion is about to end. The three global locomotives – the US, north and central Europe, China – keep chugging along steadily, if not exactly at full steam. Even Japan, thanks to strong

NFCs and households have been 'deleveraging'

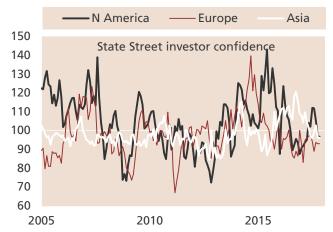


Investor bullishness has taken a beating



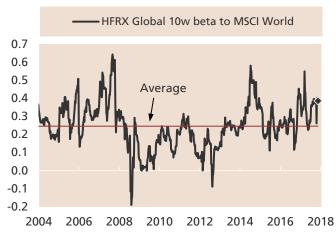
LSR Asset Allocation | Cross Asset

Actual investor positioning not particularly long



Source: State Street Global Markets, Bloomberg

Hedge funds beta to equities high but not extreme



Source: Hedge Fund Research, TS Lombard

exports supported by synchronised global growth, is expanding at above-trend rates (Daily Note, 'Towards a more flexible Bank of Japan', 15-Nov-2017). All of this suggests that the world economy will be not only stronger for longer but also more resilient to perturbations, be they endogenous or exogenous.

Symmetrical risks

Has complacency gone too far?

Even though a recession does not appear imminent, what about market-related threats? Are investors taking too much risk, and are they pricing it correctly? Looking at valuations – be it equity multiples, government bond yields, the level of the VIX or corporate spreads – one would be forgiven for thinking that complacency has perhaps gone a bit too far.

Individual investors were quite bullish

There is no denying that sentiment, and consequently positioning, has been on the bullish side recently. As the right-hand chart on the previous page shows, the difference between the percentage of bulls and bears in the AAII US sentiment survey of *individual investors* was more than one standard deviation above average before it took a beating this week. This indicator produces fairly reliable short-term market signals when it gets to extreme levels, whether to the upside or the downside. However, it doesn't have much predictive power in the medium term and, as the chart illustrates, responses can swing quickly from one extreme to the other.

Institutional investors a lot less

A better, longer-term gauge of investor confidence is the set of State Street indices for North America, Europe and Asia. Their <u>methodology</u> measures confidence directly and quantitatively by assessing the changes in *institutional investors'* holdings of risky assets, rather than asking them about their attitude towards risk. As the left-hand chart above shows, institutional investors are no more bullish on risk assets than they historically have been. Hedge funds are not abnormally long risk either. The right-hand chart above shows that the beta of the HFRI Global index to the MSCI World is above average, but not extreme. Here too there seems to be room for investors to increase their allocation to equities.

Buy the dip likely still in vogue

Despite the commentariat's claims, there is scant evidence that investors are exceptionally optimistic or overconfident in their bullish views or that they are holding excessively large positions in risk assets. As always, short-term corrections are to be expected, especially when technical indicators look stretched, as they did in late October/early November in a number of markets. But they are unlikely to be sustained. In fact, pull-backs may end up luring hitherto reluctant investors into stocks and other risky assets. Market risk remains symmetrical, in our view.

Discounting the impact of higher yields on stocks

Low rates help explain high equity multiples

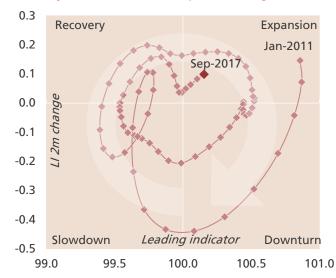
The plain reality is that fundamentals remain strong, both for the economy and for corporate profits. As long as these remain supportive, we think it very unlikely that a bear market for stocks can establish itself. Yes, equity valuations are well above their historical average. However, as we contended a couple of months ago (Asset Allocation, 'The valuation conundrum', 15-Sep-2017), this doesn't necessarily imply that they are expensive. Below-average interest rates explain a lot of the higher-thanusual p/e multiples.

P/e's above cyclical average during 'Expansion' phase

According to the OECD's 'business cycle clock' approach, the global economy entered the 'Expansion' phase in June, when its leading indicator rose above 100 (signalling above-trend growth). The LI rate of change had already turned positive in July 2016. This means that the world economy is now growing above potential and accelerating (left-hand chart below). Now, p/e multiples tend to be above average during the Expansion stage, as investors are more willing to pay a premium for growth assets like equities (right-hand chart below). This also helps explain the higher-than-average valuations currently observed in many equity markets.

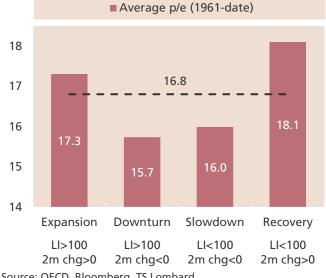
High valuations are poor indicators of market turning points, but they tend to be good predictors of expected returns for investors - all else equal, the higher the price paid for an asset, the lower its future returns tend to be. But even if one accepts that current multiples are not 'expensive', but rather that they are justified by the current

Global cycle has moved to Expansion stage



Source: OECD, TS Lombard

P/e's tend to be higher during the Expansion stage



Source: OECD, Bloomberg, TS Lombard



low level of interest rates, what would happen if rates went up? After all, the reason we hold negative recommendations on most DM bond markets is because we expect yields to rise. Shouldn't we be negative on equities then?

DCF analysis helps assess impact of higher rates on equity valuations If the equity risk premium is to remain constant, higher yields should result in lower valuations. We've made this point qualitatively in the past, noting that, despite falling multiples, equity returns have historically tended to be positive during monetary policy tightening cycles (which usually overlap with Expansion phases). This is because, historically, earnings have grown fast enough to compensate for rising discount rates and falling multiples. This month we try to quantify these dynamics in a more forward-looking fashion by using a stylised discounted cash flow (DCF) model of the S&P 500. (See US Watch, 'US Trump's taxes – tailwind, not a hurricane', 12-Nov-2017 for a DCF-based analysis of the impact of Trump's tax plan on US equities.)

Model calibrated to match current prices

As everyone who's fiddled with them knows all too well, DCF models require both art and science in equal measures. For this reason we tried to (1) keep ours as simple as possible, and (2) work with consensus forecasts wherever available. We then calibrated the model to the current S&P 500 price and, from there, undertook our differential analysis to assess the impact of rising rates. We made explicit forecasts of free cash flows (FCF) for the next five years and used a growing perpetuity formula for the rest. FCF consensus forecasts are available for the first three years, and we assumed a 7.5% CAGR for the subsequent two (roughly half of that of the first three years); for the terminal value (TV) we assumed 3% growth. We then discounted the cash flows with a weighted average cost of capital (WACC) of 7.7% (the average for the S&P) to match the current S&P 500 level of about 2,590.

A 100bp increase in cost of debt cuts S&P 500 valuation by 5.5%

So, what would happen to the S&P 500 if the cost of debt rose by, say, 100bp? Given that equity represents nearly three-quarters of the index's enterprise value, not very much at all: the WACC would rise by 0.20 percentage points, to about 7.9%. Ceteris paribus, this would lower the S&P 500's present value (PV) by about 5.5% (about 130-140 points). P/e multiples would fall by about 1.0x, to 18.4x forward and 20.6x trailing. While a 5.5% impact is not negligible, it is hardly a reason to be bearish on stocks simply because one expects rates to rise. The risk is that the cost of debt increases much more than 100bp, perhaps through a combination of higher US Treasury yields and credit spreads. For instance, twice the increase in the cost of debt (200bp) would nearly double the impact on the S&P's PV, cutting it by about 10%.

Larger increases in credit yields unlikely

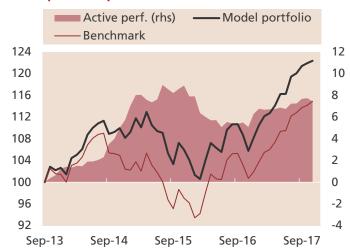
Earnings grew 7% y/y in Q3, so it would take more than a year of EPS growth at those rates to make up such a loss. That would be, at best, a significant drag on returns, and a reason for investors to be much more cautions on stocks. But how likely is this to happen? The last time IG yields were 200bp higher than today was in mid-2009, when 10y Treasuries were at 3.5% and credit spreads were still abnormally high as a result of the GFC. This is an unlikely scenario, certainly over our three-to-six-month forecasting horizon. This means that, for the time being, equity investors should not worry too much about the prospect of rising interest rates – unless they expect another credit crunch.



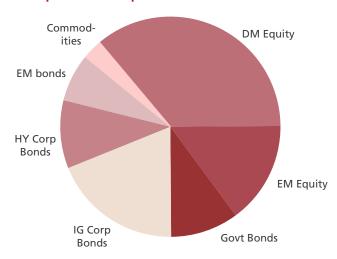
Model portfolio changes



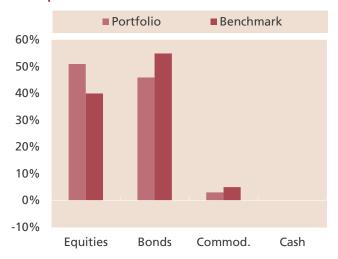
Model portfolio performance



Model portfolio composition



Model portfolio vs benchmark



Cross asset dashboard

	Tota	l Return I	_C	V	olatility		Sha	rpe Ratio	. [1Y (Correlatio	on	3Y Beta		
	1y	3у	5у	1y	Зу	5у	1y	3у	5у	ш	Infl.	Rates	ш	Infl.	Rates
DM Equities	20.0	9.0	14.1	6.0	11.2	10.4	3.0	0.7	1.3	29.5	4.7	36.2	16.2	0.7	8.6
EM Equities	31.6	10.0	9.2	7.3	11.3	10.6	4.1	0.8	0.8	36.2	-3.8	-3.8	21.7	-0.6	-1.0
DM Govt Bonds	4.7	1.8	0.9	4.7	5.0	4.7	0.6	0.1	0.0	-18.3	-26.1	-63.1	-4.6	-1.8	-6.8
DM Corp Bonds	5.6	4.2	3.4	4.1	5.1	4.9	0.9	0.6	0.5	-1.5	8.9	-56.1	-0.4	0.6	-6.2
EM Bonds	11.1	0.0	-0.1	5.7	7.3	6.9	1.6	-0.2	-0.2	16.3	-20.1	-42.4	7.9	-2.6	-8.9
Energy	16.0	-21.3	-16.4	24.2	34.9	28.7	0.6	-0.6	-0.6	26.1	-17.3	13.4	45.0	-8.1	10.0
Industrial Metals	19.5	-0.3	-2.0	16.1	17.1	16.4	1.1	-0.1	-0.2	39.1	-12.0	-3.6	36.8	-3.1	-1.5
Precious Metals	3.1	1.8	-7.1	11.4	15.1	16.8	0.1	0.0	-0.5	-4.6	9.0	-62.7	-3.9	2.0	-22.8
DM Currencies	5.8	-5.5	-15.1	6.4	7.5	6.8	0.6	-0.9	-2.4	-6.6	-4.1	-13.8	-2.7	-3.5	-19.0
EM Currencies	4.2	-5.6	-5.8	3.3	3.8	3.4	0.7	-1.8	-2.0	12.8	-10.6	-26.6	3.2	-0.7	-2.8

All figures % except 1y Beta.



Equities

- US equities were the clear winners of the Q3 reporting season
- We rotate 3% from EA stocks to US (1% each from France, Italy, Spain)
- . We stay selective on EMs, but in the bounce the laggards will likely do well

Q3 earnings: US equities the clear winners

Dollar strength still hurting EMs

ValuQEST's Global Directional Indicator was broadly unchanged this month, edging up from 11% to 12% and remaining close to the lowest levels since December 2015. The tactical component of the index, comprising sentiment and macro indicators, as well as valuations, remains a drag. The gap between the DM and EM leading indicator averages narrowed a little. The dollar strengthened some more, especially against EM currencies, causing emerging equities to underperform their developed counterparts in the past month – something we had broadly anticipated by reducing our EM exposure in our model portfolio in favour of DMs.

Earnings revisions main performance driver this month

Within developed markets, Japan was at the top of the league table over the last 30 days, despite a sharp 3% correction since November 8th. Australia, Canada and the US were not far behind, with Europe posting negative returns of between 1% and 2% (with the exception of Germany, which was largely flat). A lot of this relative performance has to do with the Q3 reporting season. We argued last month that earnings revisions were more likely to have an impact on performance than 'beats' and 'misses', and that seems to have been the case.

Stronger guidance in US and Japan, not so in Europe

To be sure, the beat in Europe was smaller than in the US (about 2.2% vs 4.5%, with about 95% of companies having announced their results), as was year-on-year growth in both sales and earnings. But, more importantly, US companies have provided stronger forward guidance than their European peers. As a result, earnings revisions, which had dropped sharply for most DM markets going into the earnings season, have bounced back in the US (and Japan), though not in the EA and the UK (left-hand chart on page 17).

Global Directional largely unchanged



DM-EM leading indicator gap narrowing a little

——G7 leading indicators average



1982 1986 1990 1994 1998 2002 2006 2010 2014 Source:



ValuQEST Country Scores and LSR directional view

		ValuQES	T scores		1m	LSR
	Macro	Valuation	Timing	Total	Change	View
United States	-0.2	-0.8	1.4	-0.9	0.4	+1
Canada	-0.7	1.2	2.2	-0.1	-0.5	0
Japan	-0.1	1.0	1.6	0.1	0.5	+1
Australia	0.1	0.9	1.7	0.4	-0.8	0
UK	-1.1	0.6	2.3	-0.8	-0.3	0
Switzerland	0.7	-0.2	1.4	0.2	-0.2	0
Germany	0.4	-0.7	1.7	-0.2	0.6	+1
France	-1.0	-0.5	1.1	-1.7	-0.4	+1
Italy	0.7	0.3	1.9	0.7	0.1	+1
Spain	-0.3	0.7	1.9	-0.1	-0.3	+2
Euro area	-0.4	-0.3	1.8	-0.7	0.0	-
China	0.2	-1.2	1.1	-0.9	-0.4	+1
India	0.5	-0.8	1.5	-0.3	-0.2	+1
Korea	0.3	0.2	1.4	0.1	-0.2	+1
Taiwan	-1.0	-0.5	1.8	-1.5	-0.2	+1
Brazil	0.3	-0.8	2.1	-0.2	0.0	+1
Mexico	1.7	1.8	0.6	2.0	0.5	0
Russia	0.4	-0.3	0.3	-0.6	0.1	+1
Turkey	2.2	1.3	1.2	2.4	0.0	0
South Africa	1.5	-0.4	1.7	1.0	0.4	0

ValuQEST scores standardized relative to 7.5y history and across DM/EM. Values above 1.5 and below -1.5 highlighted. LSR view is discretionary. Numbers in (brackets) represent previous month's recommendation.

With Q3 reporting virtually behind us, does this mean that US equities will stop outperforming? Chances are that they won't. While we continue to believe that earnings should grow faster in the EA than in the US, consensus expectations remain very high. That said, 12-month forward EPS growth for EA equities has come down from about 50% a couple of quarters ago to 30% now.

ValuQEST Total Sector Scores

(Full breakdown available at goo.gl/eWSMxz)

	Sn	Canada	Japan	Australia	UK	Switzerland	Germany	France	Italy	Spain	Euro Area	Brazil	China	Faiwan	India	Mexico	Russia	South Africa	Korea
Market	-0.9	-0.1	0.1	0.4	-0.8	0.2	-0.2	-1.7	0.7	-0.1	-0.7	-0.2	-0.9	-1.5	-0.3	2.0	-0.6	1.0	0.1
Industrials	-0.3	0.5	-0.1	0.3	-0.5	0.8	0.0	-1.2	1.3	0.3	-0.2	0.4	-0.3	-1.3	0.1	1.6		1.4	0.4
Energy	-1.5	-0.3	0.4	-0.2	-1.1			-1.9	0.4	0.1	-0.9	-1.0	-1.2	-1.0	0.1		-0.9	1.2	0.4
C. Discr.	-0.6	0.2	0.6	1.2	-0.3	-0.3	-0.1	-1.5	1.7	0.6	-0.6	0.5	-1.9	-1.7	0.0	1.5		1.0	-0.5
Healthcare	-1.1	0.5	-0.3	-0.1	-1.3	0.1	0.3	-1.1		-0.1	-0.2	0.2	-0.6	-1.9	-0.4		_	0.9	-0.6
Financials	-1.0	-1.0	-1.1	-0.1	-1.4	0.1	-0.5	-2.5	0.8	-0.4	-1.0	-0.2	-1.7	-1.8	-0.6	1.9	-0.2	0.4	-0.1
Real Estate	-0.6	-0.4	-0.2	-0.1	-1.1	0.3	0.2	-1.6			0.1	-0.7	-1.1	-1.8		2.2		0.4	
Utilities	-1.2	-0.5	0.2	-0.1	-0.2		-0.7	-2.1	-0.2	-0.4	-1.5	-0.9	-1.1		-0.6		-1.1		-0.1
Tech	-0.8	0.4	0.5	1.3	-0.2		0.3	-0.7		0.9	-0.4	0.7	-0.4	-1.3	0.7				0.9
Telecoms	-0.5	-0.8	0.3	-0.1	-1.1	0.3	-0.5	-2.8	0.9	-0.2	-1.3	-0.8	-1.3	-2.5	-1.6	1.0	-0.5	0.1	0.6
Materials	-1.4	-0.3	0.1	0.2	-0.5	-0.2	-0.3	-1.1			-0.1	0.0	-1.1	-1.2	-0.3	2.2	-0.1	8.0	0.1
C. Staples	0.0	-0.2	0.3	0.6	-0.7	0.2	0.4	-1.5		0.1	-1.0	-0.3	-0.9	-2.0	0.7	3.1	-0.2	1.0	0.4

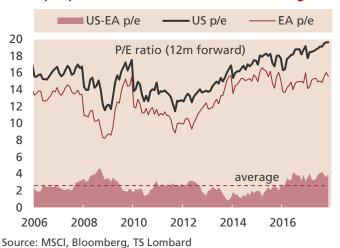
Values above 1.5 and below -1.5 are highlighted



Revisions diversion

-US – EA UK Japan 60% Earnings revision ratios 50% 40% 30% 20% 10% 0% -10% -20% -30% -40% -50% Oct-16 Jan-17 Apr-17 Jul-17

US-EA p/e premium remains close to all-time highs



Valuations still favour EA over US...

Source: IBES, Datastream, TS Lombard

This is still high and unlikely to be met. However, the 20% growth in 12m forward EPS that consensus expects in the US is also probably too optimistic. In other words, the gap in expectations has narrowed to a more sensible level over the past six months or so (about 10% vs 30% previously). Valuations remain more favourable for Europe than the US. On a 12m forward basis, US equities trade at 19.4 times earnings, vs 15.7x for the EA. Is this premium justified? Perhaps not. As the top-right chart shows, the premium at which US stocks trade relative to the EA is well above average, and close to the all-time highs of 2009.

...in part because of relative size of Tech sector

However, there are reasons for this – the main one being the state of grace the Tech sector is in. As the charts below illustrate, Information Technology has posted extremely strong earnings growth in both the US and Europe. In fact, Tech has become a major global driver of corporate profits. Japan IT's earnings rose 32% y/y in Q3, while Chinese giants such as Alibaba and Tencent have recorded annualised EPS growth of 50-60% over the past two years. This fast growth explains the higher multiples that Tech stocks trade at. Given how large the sector is in the US, where it accounts for one-quarter of the S&P 500's market cap (vs only 8% for the MSCI EA), it is unsurprising that market-wide multiples are higher there.

Tech a major driver of global equity performance...



...Though not for the euro area



EA equities to do well, but unlikely to outperform US On balance, while we think that EA equities will continue to post positive returns, we were disappointed by the slowdown in earnings growth in Q3. The EA economy continues to expand strongly and corporate profits should therefore follow, especially as consumer and business confidence is high and rising. We are, however, less sure that this will be enough to cause EA stocks to materially outperform the US.

EA political risks in the near term (Catalonia, Italy) We continue to think that Catalonia won't secede and that Spanish equities will have some catch-up to do assuming the situation settles after the region's elections in December. We therefore maintain out +2 this month, but we acknowledge that there could be volatility in the near term. Looking ahead to 2018, Italy too will go to the polls – most likely in mid-March. Investors don't seem to be paying too much attention yet, but this may change around the turn of the year. In sum, while we make no changes to any of our equity ratings this month, we rotate 3% of our portfolio weight from EA equities (1% each from France, Italy and Spain) to the US. As a result, we now have roughly the same overweight in US as in EA equities (about 6% each).

Cautious EM call was right, country selection less so

We have been more selective on EMs...

Last month we contended that the recent rebound in the greenback was not enough for investors to completely give up on EM equities, but that the dollar's strength would cause long-standing vulnerabilities to resurface; selectiveness was therefore even more important than before. As a result we downgraded **Turkey** to **0** from **+1** and cut its portfolio weight by 2%. Also, we rotated from **Mexico** (cut to **0**) to **Brazil** (raised to **+1**), adding 2% to the latter while removing 1% from the former.

...but last month's changes had little impact

Neither of these changes was particularly consequential for our performance. Turkish equities were flat, while Mexico and Brazil fell by similar amounts. We keep our recommendations and weights unchanged this month. As we explain in the *Cross Asset* section, we think that the recent risk-off phase is temporary. In the rebound that should ensue, the laggards will probably enjoy a correspondingly bigger bounce.

DM price-to-book vs RoE



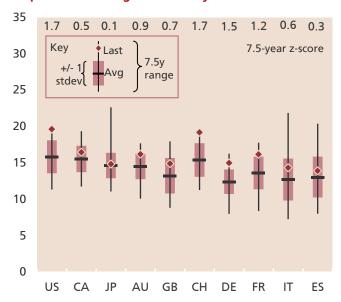
EM price-to-book vs RoE



Source: Bloomberg

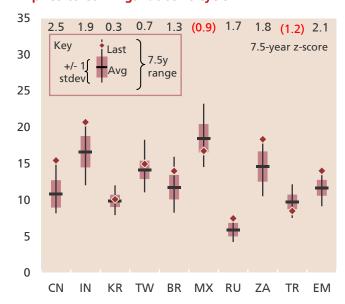


DM price-to-earnings ratios vs cycle



Source: Bloomberg, TS Lombard

EM price-to-earnings ratios vs cycle



Source: Bloomberg, TS Lombard

Equities dashboard

		MktCap	Tota	l return	LC		P/E (x)			P/B (x)			RoE		EPS gro	owth	Dividend yield		
N	/lemb.	(US\$)	1m	ytd	2016	Trail.	Fwd	StDev	Trail.	Fwd	StDev	Trail.	Fwd	StDev	Fwd	3m	Trail.	Fwd	StDev
World (AC)	2489	54,419	0.4	20.4	8.5	20.0	17.3	1.5	2.3	2.2	1.9	11.5	10.0	-0.4	15.6	1.1	2.4	2.4	-1.5
United States	632	24,273	1.3	17.7	11.6	22.2	19.6	1.7	3.2	3.1	1.9	13.5	16.2	1.5	12.9	1.9	1.9	1.9	-1.3
Canada	93	1,602	1.3	7.0	21.2	18.4	16.5	0.5	1.9	1.8	0.4	12.0	11.5	-0.3	11.8	5.2	2.7	2.8	-0.1
Japan	321	4,649	2.7	16.8	-0.4	15.6	14.9	0.1	1.4	1.4	1.4	9.1	7.8	-0.2	5.0	2.6	1.9	2.0	-0.6
Australia	70	1,072	2.5	10.6	13.9	16.9	16.2	0.9	2.0	1.9	0.7	11.6	12.1	-0.8	4.5	1.9	4.4	4.5	-0.7
UK	109	2,662	-1.8	7.0	19.2	21.4	14.9	0.7	1.9	1.9	1.1	9.3	9.0	-0.2	43.5	0.9	4.3	4.3	1.3
Switzerland	36	1,295	-1.2	15.2	-3.5	23.5	19.2	1.7	2.5	2.5	1.1	10.7	12.4	-0.9	22.1	-1.6	3.1	3.2	-0.8
Germany	59	1,782	0.4	13.5	6.6	18.9	15.0	1.5	1.9	1.8	1.4	10.5	12.0	1.0	26.0	-3.1	2.5	2.7	-1.2
France	75	2,171	-0.5	14.1	9.2	18.4	16.2	1.2	1.7	1.6	1.6	10.0	9.3	-0.3	13.8	0.1	3.0	3.1	-1.3
Italy	24	499	-1.3	14.9	-6.9	N.A.	14.3	0.6	1.2	1.2	1.5	4.4	9.1	2.8	N.A.	0.4	3.3	3.8	-0.5
Spain	24	683	0.0	14.0	4.6	15.4	13.9	0.3	1.4	1.3	0.7	9.4	8.1	-0.4	10.8	-0.2	4.3	3.8	-1.2
Euro Area	241	6,514	-0.6	13.9	5.5	20.2	15.6	1.1	1.7	1.7	1.5	9.6	9.3	1.0	29.1	-0.7	3.0	3.1	-1.1
DM	1652	44,473	0.5	18.9	8.2	20.8	17.9	1.4	2.4	2.3	1.7	11.4	11.1	0.6	16.4	1.1	2.4	2.4	-1.4
China	149	2,922	1.6	54.8	1.2	17.2	15.5	2.5	2.1	2.0	1.6	13.1	12.8	-1.5	11.0	3.6	1.9	2.0	-1.9
India	77	1,198	-0.1	25.4	1.1	22.8	20.8	1.9	3.0	2.8	1.1	13.9	12.4	-2.2	10.0	-3.6	1.4	1.5	-0.3
Korea	110	1,283	2.5	33.5	12.2	11.3	10.2	0.3	1.1	1.2	0.5	10.8	12.9	N.A.	11.7	1.9	1.3	1.5	0.3
Taiwan	89	805	-1.4	20.5	17.3	15.3	15.0	0.7	2.0	1.9	1.6	13.1	15.0	0.4	1.7	0.0	3.7	3.8	0.2
Brazil	57	683	-5.5	20.4	37.2	17.1	14.0	1.3	1.7	1.6	1.1	9.8	11.5	-0.1	21.6	-3.5	2.5	2.9	-1.4
Mexico	26	273	-3.9	6.6	8.6	17.9	16.8	-0.9	2.3	2.3	-1.2	14.5	21.0	-0.5	6.7	-6.3	2.5	2.4	1.9
Russia	22	438	1.8	0.5	35.1	8.2	7.5	1.7	0.9	0.8	0.4	10.3	7.3	0.0	8.4	0.9	4.7	5.3	1.1
South Africa	53	422	3.3	22.4	4.6	23.7	18.4	1.8	2.5	2.2	0.1	12.0	12.7	-2.1	28.8	2.2	2.6	2.8	-1.5
Turkey	25	135	0.9	40.1	10.7	8.7	8.6	-1.2	1.3	1.3	-0.5	16.7	15.7	0.4	1.2	4.7	2.8	4.0	2.2
EM	838	9,946	-0.5	33.4	11.6	15.7	14.1	2.1	1.8	1.7	1.3	12.0	9.7	-0.4	11.4	1.0	2.3	2.4	-1.8

The StDev columns show the number of standard deviations from the 7.5-year average (numbers below -1 and above 1 are highlighted). All figures % unless stated otherwise. P/e, p/b, RoE and DY StDev from 7.5y average calculated on 12m forward meaures. EPS forward growth is forward / trailing. EPS 3m growth is on forward earnings.



MSCI Sector weights

	S	Canada	Japan	Australia	UK	Switzerland	Germany	France	Italy	Spain	Euro Area	Brazil	China	Taiwan	India	Mexico	Russia	South Africa	Korea	Turkey	DM	EM
%				<u> </u>						_				•	<u>=</u>		Œ					
Industrials	9.9	7.4	21.5	6.5	8.1	9.5	14.6	21.1	10.0	13.2	15.6	5.2	3.5	1.8	7.1	10.9		1.2	7.7	17.2	11.7	5.2
Energy	5.9	20.2	1.0	5.2	15.3			8.8	17.5	5.6	5.4	11.3	3.6	0.7	11.9		53.9	0.8	2.2	6.9	6.1	7.0
C. Discr.	12.3	5.0	19.3	2.5	7.9	5.4	19.3	17.5	12.0	7.8	13.5	5.4	9.7	3.0	13.1	8.7		40.6	9.7	6.1	11.9	9.9
Healthcare	13.9	0.3	7.1	7.0	9.5	34.7	12.9	8.8		1.8	7.9	2.1	1.8	0.2	5.8			3.6	3.6		12.0	2.3
Financials	14.1	40.8	11.8	40.9	22.3	19.2	15.3	15.5	38.5	40.4	20.9	34.1	19.4	15.3	24.2	16.8	20.6	23.9	12.5	36.9	17.7	22.6
Real Estate	3.1		3.9	7.8	1.2						1.9	1.4	3.9	0.4				5.9			3.2	2.6
Utilities	3.2	2.5	1.8	2.2	3.3		3.2	3.5	16.7	14.1	5.0	5.5	1.9		2.0	1.9	2.1		1.4		3.2	2.6
Tech	24.7	3.3	13.1	0.8	1.6		10.6	4.3		6.3	8.1	2.1	50.1	61.4	11.7				48.0		17.1	30.6
Telecoms	1.9	5.9	6.1	3.2	4.4	1.1	4.5	2.5	3.9	10.2	3.9	2.4	3.8	4.7	2.6	7.1	5.9	6.8	2.0	8.6	3.0	4.4
Materials	3.1	9.6	6.8	16.5	8.4	5.5	13.2	5.2			7.9	17.1	1.0	8.8	11.3	18.8	12.2	10.5	6.8	8.5	5.0	7.2
C. Staples	7.9	3.9	7.6	7.2	18.0	24.0	3.7	9.3		0.6	9.8	13.4	1.5	2.7	10.2	32.3	5.2	6.7	6.1	13.5	9.0	5.9

Largest three sectors for each market highlighted

Sector price-to-earnings ratio (12-month trailing)

	US	Canada	Japan	Australia	UK	Switzerland	Germany	France	Italy	Spain	Euro Area	Brazil	China	Taiwan	India	Mexico	Russia	South Africa	Korea
Market	21.4	17.6	15.6	15.9	20.0	21.9	16.5	17.8	14.4	15.4	17.1	15.4	17.1	15.0	22.8	17.6	8.3	21.0	10.9
Industrials	21.7	20.5	15.3	37.2	20.2	25.3	16.7	22.4	17.5	20.2	19.7	17.6	10.5	17.6	30.0	20.3		16.0	13.4
Energy	32.1	25.9	9.3	21.6	26.0			16.7	31.7	12.6	18.3	26.9	14.5	12.7	15.0		7.9	8.1	9.3
C. Discr.	21.9	16.1	14.5	15.3	14.3	24.4	10.5	18.6	11.9	28.2	14.1	21.4	30.4	16.4	23.0	38.7		47.2	11.6
Healthcare	20.5		27.1	33.6	23.7	25.3	23.5	23.1		25.9	23.8	22.2	24.5		30.2			20.5	53.4
Financials	16.0	14.0	10.4	14.2	21.1	14.2	17.4	11.7	9.6	12.8	12.5	12.4	8.2	12.2	24.0	13.2	7.1	12.4	8.3
Real Estate	46.2	16.7	20.0	8.7	14.8	19.0	6.4	8.1			7.3		11.3	9.8		5.9		15.4	
Utilities	19.5	19.1	11.1	33.2	14.0		63.6	117.1	20.5	14.2	18.9	14.5	16.2		18.7		10.3		8.4
Tech	24.2	29.8	22.4	34.6	38.6		30.1	25.6		28.1	29.8	15.2	46.6	15.5	16.3				10.6
Telecoms	13.8	19.2	14.3	10.8	15.8	15.6		88.4	9.7	18.4	22.4	20.9	14.6	20.6	68.2	33.3	11.5	22.0	7.6
Materials	22.0	19.8	15.8	17.4	15.3	24.5	20.0	14.6			17.4	10.0	14.8	13.2	27.5	15.5	11.7	13.9	10.6
C. Staples	21.1	21.3	23.1	21.0	22.4	23.9	23.0	23.6		14.4	25.3	30.4	28.9	24.2	45.0	17.4	15.7	21.0	20.0

Sector 12-month total returns (local currency)

%	US	Canada	Japan	Australia	nK	Switzerland	Germany	France	Italy	Spain	Euro Area	Brazil	China	Taiwan	India	Mexico	Russia	South Africa	Korea
Market	20.6	10.7	24.6	17.7	12.7	18.7	21.9	22.6	34.0	23.5	22.6	25.6	51.9	23.9	28.2	15.2	20.0	23.6	42.6
Industrials	16.4	17.7	25.1	18.0	15.5	22.3	20.7	32.2	28.4	27.6	26.7	34.4	13.5	27.6	37.5	3.6		13.5	5.0
Energy	-1.9	-3.9	36.4	20.3	20.8			11.0	11.1	32.0	15.4	9.9	14.3	12.1	52.2		11.8	63.9	37.3
C. Discr.	17.1	27.6	24.0	28.3	8.5	29.5	19.8	31.0	63.1	-3.5	23.2	36.8	57.1	-1.0	26.2	-14.6		49.2	19.8
Healthcare	17.6	-24.8	15.5	29.2	-2.7	14.9	12.8	3.5		38.7	9.5	58.0	44.2	-12.8	-16.2			-5.1	89.5
Financials	20.4	17.9	10.5	15.8	16.7	13.8	28.4	21.7	42.2	30.5	27.6	32.4	34.9	16.2	32.5	24.3	53.2	9.4	24.5
Real Estate	18.7	6.2	7.5	14.8	5.8	5.8	34.0	12.4			20.8	34.0	88.2	2.9		5.7		20.1	
Utilities	24.0	15.1	9.7	31.3	-2.2		60.2	30.3	46.7	20.7	29.5	8.6	26.2		26.5		19.9		-13.9
Tech	40.3	13.0	49.6	44.7	26.8		33.5	45.9		49.3	34.6	-0.4	88.8	30.9	18.2				75.9
Telecoms	-3.6	25.8	27.4	-23.9	-1.1	22.0	8.5	9.8	-0.8	7.6	9.1	28.6	2.6	2.4	43.9	50.8	26.9	11.7	19.5
Materials	23.3	4.1	37.5	20.0	22.7	21.6	19.0	23.3			20.9	37.7	46.4	8.7	43.6	8.4	21.7	4.7	31.6
C. Staples	11.7	3.2	23.9	15.1	14.4	24.0	10.1	17.2		-7.8	15.0	15.3	29.1	17.9	32.2	12.2	-32.6	8.9	13.5



Fixed Income

- Global yields remain distorted by exceptionally easy monetary policy
- Yield curve equally distorted; it is not a cyclical signal
- South Africa fiscal risks: we downgrade from +1 to 0

Ever-decreasing easing

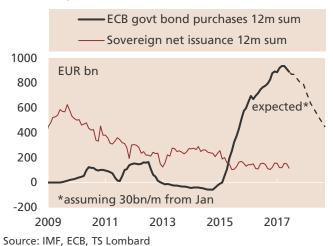
Extremely easy monetary policy set to wind down slowly

The ECB is set to cut its asset purchases by half in January. The Federal Reserve is slowly reducing the size of its balance sheet. Even the BoJ may tweak the parameters of its yield curve control policy as inflation and growth continue to improve (LSR Daily Note 'Towards a more flexible Bank of Japan', 15-Nov-17). Although it is too soon for any major central bank to declare victory in the battle to generate inflation, they have mostly succeeded in avoiding deflation and no longer need to set monetary policy for an emergency. At the peak of QE, the ECB was purchasing more than six times sovereign net issuance. By September next year the purchase rate will still be between four and five times net issuance: monetary policy is less easy than it was, but it remains exceptionally easy and is distorting global yields.

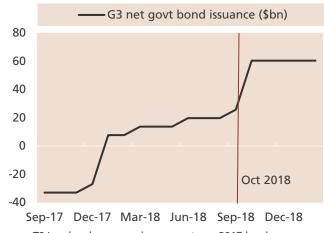
Low-yield cycle will only be broken by rising inflation or the end of QE In this week's Macro Picture ('Inversion therapy', 16-Nov-17), Dario Perkins highlights how ECB policy has become part of a low-yield cycle: QE has created a safe asset shortage and has reduced term premia. In turn this is interpreted by central banks as a signal of a "worried" market, so QE continues. This feedback loop will not be broken until either inflation rises more sharply than expected or possibly in late 2018, when the net supply of G3 bonds rises materially. The pace of the Fed's balance sheet reduction will reach its maximum of \$50bn/m in Q4 2018 (of which \$30bn will be US Treasuries), and the ECB may finally finish QE next October.

Markets should efficiently discount expectations of future events, but the shortage of safe assets is limiting the extent to which bond markets can discount the end of easing. We retain our negative bias on DM government bonds as the balance of risks remains tilted to higher yields globally when these distortive effects begin to fade.

ECB asset purchases remain distortive



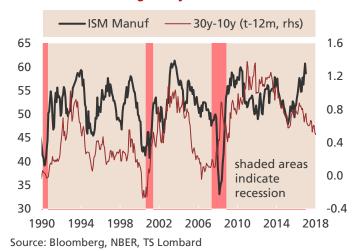
Supply of safe assets to rise next year



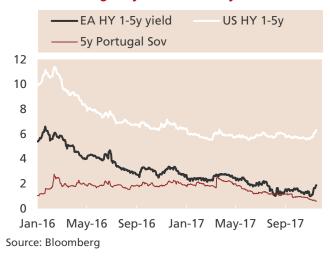
Source: TS Lombard, assumes issuance at avg 2017 level



Yield curve is no longer a cycle indicator



EA HY risk is higher yield, eventually



Somebody tell the economy?

The safe asset shortage is creating spurious signals that investors may interpret as an economic warning. Traditionally, the US yield curve has bear-flattened during tightening cycles and inverted ahead of a recession (the yield curve is lagged by 12m in the chart above). But in the past G3 central banks used interest rates, not asset purchases or the yield curve, as a policy tool.

US yield curve has decoupled from the cycle

The flattening of the US yield curve in 2013-2014 was a correct indicator of an economic slowdown. But the curve did not invert and ISM subsequently rebounded. But since 2015 the ECB has significantly distorted markets: the yield curve did not rebound as sharply as the subsequent US recovery would have implied and, when the ECB increased its asset purchases to €80bn/m from €60bn/m, the US curve started to flatten. The flattening since 2016 is therefore not a recession indicator and, when the ECB finally halts asset purchases, curves will likely bear-steepen – with yields set to rise across the curve – before embarking on a cycle-driven bear-flattening trend. Economic fundamentals tell us to remain bearish government bonds.

High yield tide has not turned

The recent sell-off in US and euro area high yield (HY) debt points to some underlying fragility in the market: investors are aware that fundamental valuations do not support the elevated pricing. But, once again, ECB asset purchases are distorting the picture. Valuations can continue to be "wrong" as long as the ECB remains in the market.

HY to provide carry and rolldown for a few months more In our Macro Strategy portfolio we are positioned for euro area HY debt to weaken (LSR Macro Strategy 'High yield for the ECB taper', 13-Sep-17) as we reckoned there was a risk of a sharp correction in HY if the ECB's taper announcement was hawkish. It wasn't, and the ECB's policy remains exceptionally easy. There is then no economic reason why the recent correction should be the start of a new trend higher in yields. And with the backstop of continued asset purchases there is no reason why HY debt will not recoup its losses in the next few months. We stick to our positive stance on



HY credit overall, but as EA HY yields are around 450bp below US HY yields (for 1-5y debt), we retain our relative value position in the Macro Strategy portfolio for EA spreads to widen more than US spreads.

South Africa weakness ahead

South African interest rates are some of the highest in emerging markets. For good reason, as political risks continue to lurk under the surface. When Finance Minister Pravin Gordhan was fired in March, 10y yields spiked by 70bp and South Africa's sovereign rating was downgraded to junk by S&P and Fitch.

Fiscal credibility deteriorating

Where Gordhan was prudent, current Finance Minister Malusi Gigaba was at least realistic in his medium-term budget policy statement (MTBPS) last month. He reported fiscal slippage of 0.5pp in the last fiscal year and budgeted for a deficit of around 4% of GDP in the next three (1pp larger than Gordhan had projected). In that time the debt/GDP ratio is expected to rise to 60%. Interest costs are soon likely to account for 15% of revenue.

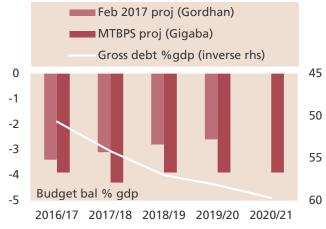
Risk of downgrade to junk

The government's projections are likely understating the fiscal risks, as it expects to take measures to constrain deficit and debt expansion - a necessary step to persuade Moody's (the only agency that still rates South Africa investment grade) not to cut its rating to junk. But the government is assuming that GDP growth rises to 1.5% in 2019 and 1.9% in 2020 (the current rate of growth is 1.1%), whereas the risk is that growth will disappoint, especially if there are further tax raids to balance the budget.

Move to neutral on SAGBs

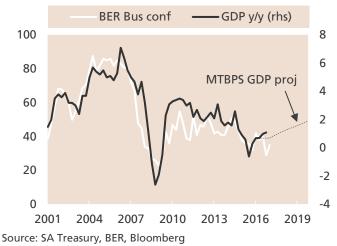
We downgrade our stance on **SAGBs** to **0** from **+1**. Risks to the fiscal outlook are to the downside given South Africa's weak growth outlook, and political risk remains elevated heading in to the ANC Congress, which will elect the party's next leader on 20th December. In this month's <u>EM Strategy Monthly</u>, South African assets have been downgraded to underweight relative to the rest of EM. We are similarly underweight, but owing to our overall positive outlook on markets we do not yet assign a negative bias to South African assets.

South Africa budget bal and deficit to deteriorate

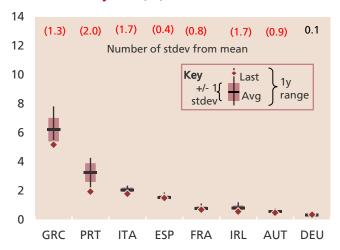


Source: SA Treasury, TS Lombard

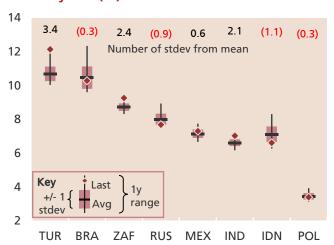
GDP growth risk likely below MTBPS projection



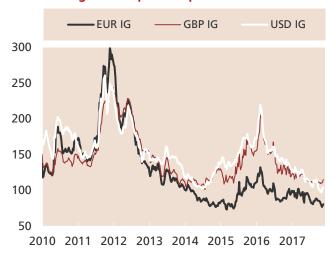
Euro area bond yields (%)



EM bond yields (%)



Investment grade corporate spreads



High-yield corporate spreads



Government bonds dashboard

	Policy	Infla	tion	2y	yield	10y	yield	7-10	y total r	eturn	5y Cl	DS (bp)	Money	growth	Budget	Debt	GDP
	rate	Rate	Target	Last	StDev	Last	StDev	1m	ytd	2016	Last	StDev	Narrow	Broad	%GDP	%GDP	у-у
United States	1.25	1.3	2.0	1.72	2.1	2.36	0.1	0.5	2.5	1.2	N.A.	N.A.	22.9	5.0	-3.4	77	2.3
Canada	1.00	1.6	1.0-3.0	1.48	0.9	1.97	-0.2	0.2	-0.1	-1.0	N.A.	N.A.	8.5	4.1	-1.3	99	4.5
Japan	0.10	0.7	2.0	-0.20	-1.4	0.04	-1.3	0.2	0.4	1.5	33	-1.3	14.5	4.1	-5.0	222	1.7
Australia	1.50	1.8	2.0-3.0	1.78	-0.9	2.57	-0.9	1.4	3.3	4.2	19	-1.5	7.0	6.8	-0.9	47	1.8
UK	0.50	3.0	2.0	0.50	-0.1	1.32	-1.0	0.4	1.9	6.6	29	-0.7	N.A.	4.8	-2.9	89	1.5
Germany	0.00	1.4	<2.0	-0.71	-1.2	0.38	-1.0	0.1	0.6	3.5	10	-1.0	9.7	5.1	0.8	68	2.8
France	0.00	1.4	<2.0	-0.59	-1.1	0.72	-1.1	0.6	3.1	2.7	19	-1.0	9.7	5.1	-3.4	96	2.2
Italy	0.00	1.4	<2.0	-0.32	-1.1	1.82	-1.0	0.8	3.7	0.0	123	-0.7	9.7	5.1	-2.5	133	1.8
Spain	0.00	1.4	<2.0	-0.35	-1.2	1.54	-1.1	0.3	3.0	4.1	70	-0.9	9.7	5.1	-4.5	99	3.1
Brazil	7.50	2.7	2.5-6.5	8.29	-1.4	10.30	-1.0	-1.2	15.0	36.8	180	-0.2	2.7	9.4	-8.8	70	0.3
Mexico	7.00	6.4	2.0-4.0	7.13	2.4	7.33	1.6	0.1	8.3	-1.4	112	-0.4	10.6	7.4	-4.4	50	1.6
Poland	1.50	2.1	1.5-3.5	1.60	-1.1	3.41	-0.6	0.4	4.7	0.2	78	-0.6	9.0	5.4	-2.5	48	4.7
Turkey	8.00	11.9	5.0	13.73	2.8	12.66	2.7	-1.5	3.6	9.4	208	0.0	N.A.	N.A.	1.5	29	3.1
South Africa	6.75	5.1	3.0-6.0	7.70	1.0	9.29	1.5	-0.9	3.1	16.5	192	0.0	5.8	6.7	0.2	50	1.1

The StDev columns show the number of standard deviations from the 7.5-year average (numbers below -1 and above 1 are highlighted). All figures % unless stated otherwise.



Currencies

- ECB dovish taper will not arrest the EUR rally
- · Positive USD outlook moderating as upside risks diminish
- Korea upgraded from -1 to 0, CNY to strengthen vs basket (but not USD)

As you were

EUR has recovered its ECB-induced losses

The ECB's Governing Council delivered a 'dovish taper' last month by extending asset purchases at a pace of €30bn/m until next September, suggesting there may be another step down before QE finishes and pushing market expectations of the first rate hike beyond the end of 2018. The single currency fell by around 1.5% after the meeting, but now it has erased its losses against the dollar and is making a new high against a trade-weighted basket. In the context of this year, the fall was a mere blip in the euro's rally.

ECB implicitly approves further EUR strength

Analysis of the ECB's press conferences shows that, while the currency was becoming a drag in July and was a key concern for policymakers in September, it was no longer regarded as a risk at last month's meeting. The ECB is not concerned about the *level* of the currency, and its volatility (read: pace of gain) has fallen since the summer. The ECB will not fight a steady advance in EUR, so long as it continues to be accompanied by improving euro area growth and rising inflation. We retain our +1 stance on EUR against USD, although we expect it to perform well against most currencies: in the Macro Strategy portfolio we are long EUR against an equally weighted basket of USD, CHF, GBP and AUD (LSR Daily Note 'Why the euro area cycle has a long way to go', 18-Oct-17).

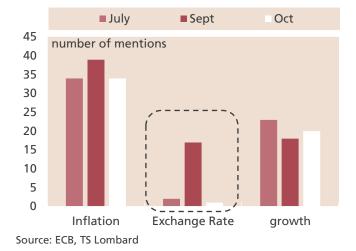
Positive USD factors diminishing

For USD, we reckon the recent bounce is mostly complete. Our original rationale for expecting a bounce (Daily Note 'Six reasons for a dollar rally into year-end', 29-Aug-17) included seasonals, positioning, data flow, rate expectations and valuations. There is still some time to go before year-end and seasonality remains bullish, but the other factors are no longer consistently positive for USD.

Post-ECB, EUR/TWI is making new highs



Euro was a sideshow at the ECB news conference





USD short positioning has fallen



And positive data surprises are likely to peter out



Source: Bloomberg, TS Lombard

USD short positioning reduced, data have improved, rate hike pricing is high

Short USD positioning is still in place but has been much reduced, cutting the risk of a sharp rally. There has also been a strong run of positive data surprises so, although data could still beat expectations, it is more likely that outcomes will be mixed and fail to provide further impetus for dollar strength. Investors now discount almost three 25bp Fed rate hikes over the next two years, up from less than one when we originally turned bullish. By contrast, our US economist, Steve Blitz, expects three 25bp rate rises by June 2018 (US Watch 'Yellen can start reacting to normal', 29-Oct-17). So there remain upside risks to USD as the market discounts further Fed hawkishness, but the repricing of rate expectations is mostly over.

As to valuations, we were concerned that the swing from EUR cheapness to richness in the summer would be a barrier to further gains. But, as noted above, and explained by ECB board member Benoit Coeure, the EUR is stronger because growth is stronger. As such, the rise in the exchange rate will not be a drag on the euro area economy.

We are still positioned for some further USD strength, but as much because of a weak term currency as a strong base currency. The bias of -2 on CHF and -1 on JPY reflects the fall in demand for safe havens in the present environment and the extremely low yields on offer to investors in both currencies. The -1 bias on GBP reflects sterling's necessary rebalancing because of economic and political headwinds, although the chances of progress in Brexit negotiations over the rest of the year have improved (LSR Macro Strategy 'Mind the gaps', 15-Nov-17).

Korea upgrade

Korean geopolitical risks have diminished, growth improving

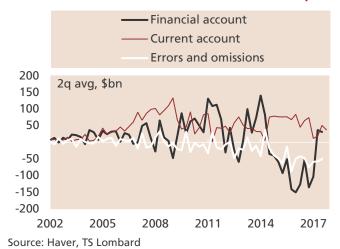
The reason for our downgrade of Korea in September's Asset Allocation was geopolitical risks. Since US President Donald Trump's visit this month passed with barely a murmur, these risks appear to have diminished. Meanwhile, Korean domestic macro momentum continues to improve in line with the synchronised global growth upswing. (October's export data only showed a sharp fall in y/y growth because of a week's holiday at the start of the month.)



Korean domestic momentum improving

-Korea Exports y/y World export volumes 3mma y/y (rhs) 40 6 30 5 20 10 3 0 2 -10 October 1 -20 holiday effect -30 2012 2013 2014 2015 2016 2017 Source: Bloomberg, CPB, TS Lombard

Amid the noise, China's financial a/c now in surplus



Thawing geopolitical risks should also provide another boost to the Korean economy as an end to a year-long quarrel between Beijing and Seoul over the latter's deployment of the THAAD anti-ballistic missile system leads to a rebound in tourism. In Q2 2016, almost 2m Chinese tourists visited Korea; only 500,000 visited in Q2 2017. The outlook for Korean growth remains bright, and we hold a positive bias on equities and a negative bias on government bonds (in addition to improving growth, fiscal policy is set to loosen, making rate hikes more likely in the near future). We upgrade our stance on KRW from -1 to 0; but the currency is approaching recent highs and, while it may have sufficient momentum to continue, we opt against an outright positive stance for the time being.

Bullish CNY against its basket

CNY to strengthen against its basket

We retain our neutral stance on CNY vs USD this month, but we now think that CNY is likely to appreciate against its basket over the next year. Capital outflows have moderated and FX reserves are rising again. Foreign debt has been the catalyst of capital outflows in recent years, because whenever CNY weakened debt-servicing costs mounted. But Chinese corporates have now mostly paid down their foreign debt, so there is no longer a negative feedback loop when the CNY weakens a little.

Improving financial account reducing downward pressure on CNY

China's balance of payments data include large errors and omissions, so one can never quite pinpoint underlying BoP dynamics. E&O totalled \$50bn in Q2 2017 – equal to the size of the total current account surplus – and there are other grey areas too: the travel deficit (money spent by Chinese tourists overseas) is approaching the same size as the goods trade surplus (during the 2015 capital outflow phase, overseas travel was one method used to take money out of China). But the recent pick-up in portfolio investment has returned the financial account balance to surplus, lessening overall pressure on CNY and supporting a period of appreciation. For more on our CNY view see our Daily Note from 13-Nov-17, 'Change of RMB view: appreciation to continue'.

Currencies dashboard

	FX	12m	Spot	t chg	F	REER chg		Policy	Infla	ation	CA 9	%GDP	Terms o	f trade	Money o	growth	Budget	Debt	GDP
	spot	fwd	ytd	у-у	ytd	y-y S	tDev	Rate	Rate	Target	Last	StDev	Last	StDev	Narrow	Broad	%GDP	%GDP	у-у
USD	93.72	-	-8.31	-7.11	-5.9	-4.6	1.2	1.25	2.0	2.0	-2.4	0.2	-14.2	1.0	22.9	5.0	-3.4	77	2.3
EUR	1.179	1.208	12.13	10.98	5.1	4.6	-0.3	0.00	1.4	<2.0	3.0	0.9	-5.7	1.0	9.7	5.1	-1.5	89	2.5
JPY	112.6	110.2	-3.70	2.28	-3.0	-9.3	-0.9	0.10	0.7	2.0	3.8	1.1	-20.3	0.8	14.5	4.1	-5.0	222	1.7
GBP	1.320	1.336	6.9	6.3	0.6	0.9	-0.9	0.50	3.0	2.0	-5.1	-0.4	8.1	0.9	_	4.8	-2.9	89	1.5
CAD	1.275	1.270	-5.17	-5.73	1.8	2.2	-1.1	1.00	1.6	1.0-3.0	-2.9	0.8	4.9	-0.4	8.5	4.1	-1.3	99	4.5
AUD	0.755	0.753	4.68	1.88	0.7	-1.7	-0.7	1.50	1.8	2.0-3.0	-2.1	1.0	17.0	-0.3	7.0	6.8	-0.9	47	1.8
CHF	0.992	0.965	-2.61	-1.46	-5.8	-6.5	-0.9	-0.75	0.7	<2.0	10.3	-0.1	-7.0	1.0	6.4	4.4	0.4	33	0.3
SEK	8.422	8.218	-7.5	-8.89	0.0	2.3	-1.2	-0.50	1.7	2.0	4.4	-1.2	-6.2	1.3	-11.0	10.3	1.1	42	3.1
NOK	8.212	8.118	-4.96	-3.85	-2.8	-4.3	-1.1	0.50	1.2	2.5	4.4	-1.7	46.2	-0.6	-1.5	5.8	5.5	36	5.6
SGD	1.356	1.349	-6.26	-4.54	-0.2	-0.9	-0.4	N.A.	0.4	_	19.6	-0.1	-4.5	0.9	9.2	5.3	8.6	113	4.6
CNY	6.633	6.793	-4.49	-3.56	-1.4	0.2	0.7	4.35	1.9	3.5	1.0	-1.7	-13.7	0.8	6.3	8.8	-3.4	16	6.8
BRL	3.282	3.425	0.98	-4.05	-6.3	-0.3	-0.7	7.50	2.7	2.5-6.5	-0.7	2.2	-5.2	-1.1	2.7	9.4	-8.8	70	0.3
INR	65.02	67.57	-4.28	-4.14	1.1	1.2	1.7	6.00	3.6	2.0-6.0	-1.2	0.8	-32.6	0.5	2.7	6.5	-3.7	50	4.7
RUB	59.43	62.59	-3.00	-8.33	-5.5	1.5	-0.5	8.25	2.7	4.0	2.4	-0.8	47.7	-0.8	9.0	9.5	-2.5	10	1.8
ZAR	14.03	14.86	2.14	-2.70	-6.7	-1.2	-0.9	6.75	5.1	3.0-6.0	-2.5	0.9	17.1	-0.5	5.8	6.7	0.2	50	1.1
MXN	19.06	20.24	-8.0	-6.7	7.0	6.8	-1.6	7.00	6.4	3.5	-1.6	0.1	11.3	-0.9	10.6	7.4	-4.4	50	1.6
KRW	1097	1095	-9.14	-6.68	5.4	4.3	1.3	1.25	1.8	2.0	5.7	0.3	-21.8	0.8	8.8	5.9	1.7	46	3.6
TWD	30.10	29.48	-6.69	-5.58	1.9	0.4	1.9	1.38	-0.3	_	12.8	0.8	N.A.	N.A.	3.2	3.8	-0.1	31	3.1
PLN	3.595	3.588	-14.14	-13.86	6.8	8.0	-0.4	1.50	2.1	1.5-3.5	-0.9	0.6	-5.3	1.0	9.0	5.4	-2.5	48	4.7
CZK	21.68	21.25	-15.63	-14.79	8.3	8.3	0.5	0.50	2.9	1.0-3.0	0.9	1.0	-7.5	0.9	12.3	9.4	0.7	41	5.0
HUF	264.3	259.0	-10.22	-9.37	0.9	1.4	-0.7	0.90	2.2	3.0	5.8	1.2	-4.3	0.7	22.0	13.1	-1.9	74	3.6
TRY	3.897	4.368	10.6	15.6	-11.3	-13.4	-2.1	8.00	11.9	5.0	-4.1	0.8	-15.6	0.5	N.A.	N.A.	1.5	29	3.1
IDR	13528	14104	0.41	1.16	-4.9	-3.2	-0.4	N/A N/A	3.6	3.5-5.5	-1.5	0.1	-5.3	0.5	15.9	10.9	-1.8	32	5.1
THB	32.86	32.69	-8.22	-7.30	3.3	4.3	0.9	1.50	0.9	0.5-3.0	10.6	1.4	-18.7	0.5	8.4	4.9	0.3	41	3.7
MYR	4.161	4.214	-7.25	-5.31	3.9	2.3	-1.4	3.00	4.3	_	2.6	-0.9	-6.9	-0.7	11.1	5.0	-4.4	53	6.2
CLP	629.3	634.8	-6.17	-6.78	0.3	1.5	-0.4	2.50	1.9	2.0-4.0	-2.2	-0.1	27.6	0.6	10.7	6.0	-0.3	21	0.9
СОР	3016	3099	0.51	-3.72	-4.7	0.1	-1.4	5.00	4.1	2.0-4.0	-4.1	0.0	36.6	-0.5	N.A.	N.A.	-5.4	52	2.0

The StDev columns show the number of standard deviations from the 7.5-year average (numbers below -1 and above 1 are highlighted). All figures % unless stated otherwise.

Model Portfolio

- The model portfolio underperformed its benchmark by 44bp this month
- We reduce our Euro exposure, switching out of EA Equity in favour of US
- We trim our EM bond o/w from 3% to 2%

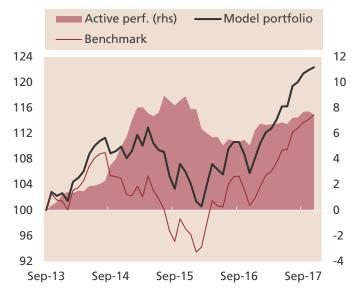
Reducing EA equity overweight

- Since the last update (6-Oct-2017), the portfolio has underperformed its benchmark by 0.44%, returning +0.56% vs +1.0%.
- Negative active performance contributions came mainly from our EM bonds o/w (-31bp), with South Africa and Brazil o/w in particular accounting for -15bp and -11bp respectively. Our Govt bonds u/w cost the portfolio 8bp compared to its benchmark, but this loss was more than offset by our DV equity o/w, which produced a gain of 13bp. Within commodities, underweighting Energy was responsible for an underperformance of 18bp.
- This month, we reduce our **EA Equity** allocation by 3% (5% o/w), lowering France, Italy and Spain by 1% each, while adding 3% to US (5% o/w).
- Within Bonds, we keep our **Govt bonds** u/w at 20%. We close our 2% South Africa position, add 1% to Russia and re-allocate the other 1% to **US IG Corp bonds**.
- We keep our Commodities allocation and Currency hedging unchanged

Model portfolio statistics

	Model Portfolio	Benchmark
Returns (since Sep-13)	22.4%	14.9%
YTD	13.1%	12.8%
2016	3.9%	5.9%
2015	-3.7%	-6.1%
Annualised return	5.0%	3.4%
Volatility	6.4%	6.6%
Sharpe Ratio	0.68	0.42
Sortino Ratio	1.57	0.99
Beta	0.93	
Alpha	1.8%	
Tracking error vol	1.8%	
Information ratio	0.85	

Historical performance





	Portfolio	Benchmark	O/W (U/W)	1m change
DM Equities	36%	30%	6%	
US	23%	17.4%	6%	+3%
Canada	-	1.1%	(1%)	
UK	-	2.4%	(2%)	-
Switzerland	-	1.1%	(1%)	_
Germany	3%	1.1%	2%	_
France	2%	1.1%	1%	-1%
Italy	1%	0.3%	1%	-1%
Spain	2%	0.4%	2%	-1%
JP	5%	2.5%	3%	-
Australia	-	0.8%	(1%)	
Others	-	1.8%	(2%)	-
EM Equities	15%	10%	5%	-
China	5%	2.7%	2%	
				-
South Korea	1%	1.5%	(1%)	-
Taiwan	1%	1.3%	(0%)	-
India	3%	0.9%	2%	-
Brazil	3%	0.8%	2%	-
Mexico	-	0.4%	(0%)	-
Russia	2%	0.4%	2%	-
Turkey	-	0.1%	(0%)	-
South Africa	-	0.7%	(1%)	-
Others	-	1.4%	(1%)	-
Goverment Bonds	10%	30%	(20%)	-
USTs	2%	12.0%	(10%)	-
Canada	-	0.4%	(0%)	-
Bunds	1%	1.7%	(1%)	-
OATs	-	2.1%	(2%)	-
BTPs	-	2.1%	(2%)	-
BONOs	-	1.2%	(1%)	-
Gilts	-	2.3%	(2%)	-
JGBs	7%	6.6%	0%	-
Australia	-	0.4%	(0%)	-
Others	-	1.4%	(1%)	-
IG Corporate Bonds	19%	15%	4%	+1%
US	13%	8.6%	4%	+1%
EA	6%	3.0%	3%	-
UK	-	1.1%	(1%)	_
Others	_	2.4%	(2%)	
HY Corporate Bonds	10%	5%	5%	-
US US	7%	2.8%	4%	-
EA	3%	0.9%	2%	
Others	-	1.3%	(1%)	-
EM Bonds	7%	5%	2%	-1%
Brazil	3%	0.5%	3%	
				-
Mexico	2%	0.5%	2%	
Russia	2%		2%	+1%
Turkey	-	0.4%	-	-
South Africa	-	0.5%	-	-2%
South Korea	-	-	-	-
Others	-	2.9%	(3%)	-
Commodities	3%	5%	(2%)	-
Energy	2%	3.5%	(2%)	-
Industrial Met	-	0.3%	-	-
Precious Met	1%	0.2%	1%	-
Others	-	1.0%	(1%)	-
Currency Hedging	(4%)		(4%)	-
EUR	-	-	-	-
GBP	-	-	-	-
JPY	(4%)	-	(4%)	-
AUD	-	-	-	-
Cash	-		-	-



Disclaimer

This report has been issued by Lombard Street Research Financial Services Limited. It should not be considered as an offer or solicitation of an offer to sell, buy, subscribe to or underwrite any securities or any derivative instrument or any other rights pertaining thereto ("financial instruments") or as constituting advice as to the merits of selling, buying, subscribing for, underwriting or otherwise investing in any financial instruments. This report is intended to be viewed by clients of Lombard Street Research Financial Services Limited only. The contents of this report, either in whole or in part, shall not be reproduced, stored in a data retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without written permission of Lombard Street Research Financial Services Limited.

The information and opinions expressed in this report have been compiled from publicly available sources believed to be reliable, but are not intended to be treated as advice or relied upon as fact. Neither Lombard Street Research Financial Services Limited, nor any of its directors, employees or agents accepts liability for and, to the maximum extent permitted by applicable law, shall not be responsible for any loss or damage arising from the use of this report including as a result of decisions made or actions taken in reliance upon or in connection with the information contained in this report. Lombard Street Research Financial Services Limited does not warrant or represent that this report is accurate, complete or reliable and does not provide any assurance whatsoever in relation to the information contained in this report. Any opinions, forecasts or estimates herein constitute a judgement as at the date of this report based on the information available.

There can be no assurance that future results or events will be consistent with any such opinions, forecasts or estimates. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied is made regarding future performance. This information is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed and it may not contain all material information concerning the company and its subsidiaries. The value of any securities or financial instruments or types of securities or financial instruments mentioned in this report can fall as well as rise. Foreign currency denominated securities and financial instruments are subject to fluctuations in exchange rates that may have a positive or adverse effect on the value, price or income of such securities or financial instruments. Certain transactions, including those involving futures, options and other derivative instruments, can give rise to substantial risk and are not suitable for all investors. This report does not have regard to the specific instrument objectives, financial situation and the particular needs of a client. Clients should seek financial advice regarding the appropriateness of investing in any of the types of financial instrument or investment strategies discussed in this report. Lombard Street Research Financial Services Limited may have issued other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Lombard Street Research Financial Services Limited is Authorised and Regulated by the UK Financial Conduct Authority. FCA Firm Reference Number: 502674.

Registered Office: 9 Cloak Lane, London EC4R 2RU. Registered in England No. 6862824



For more than twenty years Lombard Street Research has provided many of the world's most influential investment institutions with creative, thoughtful and pertinent macroeconomic analysis and investment advice.

Genuine global-macro thinking drives all of our investment themes. This provides our clients with a fully integrated research input that is essential in the modern investment environment to either maximise returns or minimise risk.

Critical conclusions are expressed in actionable ideas for investors.

Services include:

Strategic Asset Allocation (3-6 month portfolio calls)

Tactical Asset Allocation (3-6 months trading ideas)

Investment Advisory (Portfolio construction, quantitative strategies)



Pellipar House, 9 Cloak Lane, London EC4R 2RU www.lombardstreetresearch.com

A worldwide network of offices in London, New York and Hong Kong allows us to provide a global service to a global audience.

London Tel: +44 (0) 20 7246 7870 london@lombardstreetresearch.com New York Tel: +1 212 367 7644 newyork@lombardstreetresearch.com Hong Kong Tel: +852 2521 0746 hongkong@lombardstreetresearch.com