

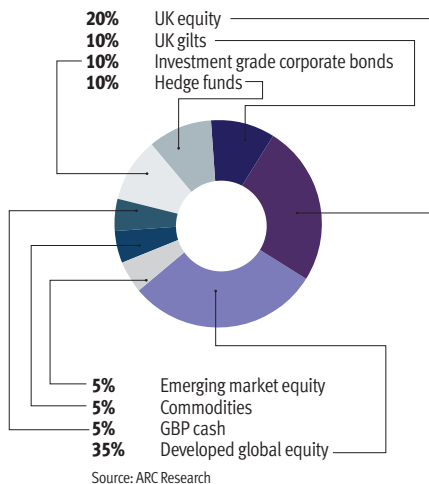


Alpha Asset Allocation Review

Rates and ratings drive portfolio choices

Central banks' tightening policies mark the start of a new phase for financial markets. We discuss where to find value and which mix of investments could outperform

Steady growth asset allocation (60% to 80% global equity risk)



James Norrington's view:

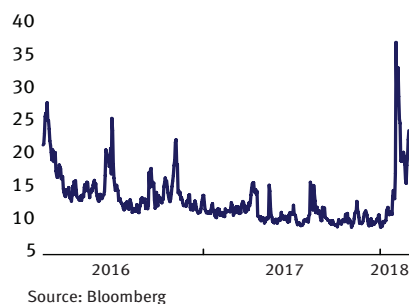
Central banks are tightening monetary policy, and bonds with longer until maturity are vulnerable to price falls as interest rates rise. This may mark the turning point in a bull cycle for bonds, so we make tactical tilts away from bonds, compared with our strategic balanced and steady growth (adventurous) asset allocations. Within fixed income, we focus on short duration – bonds that are less sensitive to interest rates. For global equities allocations, relative to market capitalisation, we tilt our developed market exposure away from the US and towards the eurozone and Japan. For the adventurous allocation, we take a strong overweight position to emerging markets. We maintain our strategic position in UK-listed equities, but the investing strategy in this slice of the portfolios will be decided by the opportunities we unearth in our other Alpha features, including Algy Hall's Alpha stock screens and Simon Thompson's small-cap company reports.

Executive summary

- In February, investors sold markets rather than stocks:** Leading quant analysts highlight the lack of dispersion between sectors in the recent sell-off and relative underperformance of large-caps. Some sectors will fare better than others in a changing interest rate environment and investors should be more wary of companies with weak balance sheets.
- Inflation is the factor that could upset the apple cart:** Interest rates rather than economic disappointments is the headline risk for equity markets. Unexpected inflation triggering faster-than-anticipated rate rises is still a big fear for investors.
- Stretched valuations:** CAPE and implied equity premium data highlight the cheapest markets and those that could be most sensitive if bond yields rise suddenly.
- Risk-rated portfolios:** Using portfolio models chosen according to relative equity market risk, we highlight balanced and adventurous strategic allocations and make tactical adjustments for the current environment.

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The Vix index spiked in Feb 2018



“In 2017, the Vix Index, which tracks the implied volatility of S&P 500 options contracts hit record lows”

Asset markets got exciting again in February 2018. Inflation concerns, on the back of US wage growth, caused Treasury yields to rise and triggered rapid reassessment of valuations. Equity pricing needs to imply a forward risk premium over the supposedly risk-free yield on US government debt and the S&P 500 adjusted violently, suffering one of its largest daily drops of the past 50 years.

By the end of the month stock markets had recovered, but the brief, yet dramatic, sell-off is a timely reminder that returns are reward for potential risk. Massive changes are afoot in global policy as central banks retreat from quantitative easing (QE), arguably the greatest monetary experiment in history, and portfolio managers have cause to reassess fundamental investment cases. As stimulus is unwound there will be dangers, but also opportunities for tactical asset allocation (TAA) – tilting holdings to achieve the highest amount of return per unit of risk – taking advantage of emerging themes in the post-QE era.

Do February’s moves signal the return of volatility?

Following the global financial crisis, QE was such a powerful stimulus that its impact overrode fundamental valuations. A lack of disagreement among market participants, exacerbated by the trend of using passive funds to capture positive beta, meant realised volatility became especially concentrated around episodes such as the Greek debt and euro crises or the ‘taper tantrum’, when the US Federal Reserve became the first major central bank to begin tightening the QE taps.

Implied volatility, which is measured by looking at the rate of change of options prices to give an indication how uncertain investors are about the market, has had spells of being incredibly flat. In 2017, the Vix Index, which tracks the implied volatility of S&P 500 options contracts – making it the de facto ‘fear gauge’ for the US stock market – hit record lows. The Vix spiked dramatically in February, however, recording its biggest ever one-day rise.

Does implied volatility matter to investors? Well, unless you are actually trading an index like the Vix, not directly. Analysis carried out by London Business School (LBS) academics Dimson, Marsh and Staunton in the 2018 Credit Suisse Investment Yearbook, showed zero coefficient between subsequent one-year S&P 500 returns and the rate of change of the Vix.

The unwinding of some trades that are implicitly based on low volatility could, however, have a more pronounced effect on equities. In terms of the direct link, The LBS team do caveat that increases in the absolute level of the Vix impact mutual fund redemptions. Other research by Morgan

“Last year’s low volatility was down to a ‘Goldilocks’ environment when everything was ‘just right’ for risk assets”

Stanley Capital Indices (MSCI) highlights a risk that investment strategies that rely on volatility to set levels of asset class exposure could unwind. So, while the rate of change may not effect equity market returns, The MSCI team suggests that re-setting the equilibrium of implied volatility expectations to a higher level could result in feedback loops that exacerbate periods of market turmoil.

Return of inflation is the catalyst for surprise

MSCI estimates that asset allocation models based on volatility have \$1 trillion under management, dwarfing approximately \$10bn exposed directly to the Vix. This is concerning given the exceptionally benign 2017 investment backdrop could hardly have been expected to continue indefinitely. Last year’s low volatility was down to a ‘Goldilocks’ environment when everything was ‘just right’ for risk assets. Monetary policy of the world’s most important central banks remained accommodative to varying degrees; commodity prices recovered to levels that helped exporter nations, without being a constraint to other economies; GDP growth was steady and co-ordinated around the world for the first time since the financial crisis.

Asset managers surely didn’t disregard the chances of wages and prices increasing again. Market valuations are, however, stretched at this stage of the QE-cycle. Therefore any test of assumptions about the pace of inflation and its influence on monetary tightening can cause markets to become jittery.

Central banks have a delicate balancing act. The US Federal Reserve is unwinding QE, shrinking its balance sheet by not purchasing new issues as bonds redeem (the Fed ended QE expansion in October 2014, having accumulated \$4.5 trillion in assets). The main challenge for the Fed has been controlling the narrative in capital markets as it slowly tightens interest rates. The task is raising the cost of money at a pace that prevents the economy from overheating without choking off growth and, crucially, without spooking markets into a meltdown.

Interest rates hold the key, but a managed increase is not necessarily bad

The Societe Generale (SG) Cross Asset Strategy team does not underplay the role sudden realisation of faster moves in bonds and potential inflation had in one of the largest day corrections in recent memory. They do stress, however, that from their research over the past 20 years, “rising rates in general reflect a backdrop of positive economic growth and do not lead to total market meltdown”.

Absent any other systemic distress in the market (which

“Inflationary surprises and the fear of rates overshooting expectations is the main risk for equity markets, more so than any growth disappointment”

can, of course, never be ruled out), the SG analysis sees one potential scenario where the rising rate environment reflects the backdrop of a continued economic growth story “fuelled by the simmering effects of loose monetary policy”. Where the SG quants do expect significant differentials is in the performance of stock market sectors and styles, with cyclical growth investments seeing improved fortunes. More defensive strategies investing in so-called bond proxy stocks would face challenges.

An optimistic outlook for equities rests on the increase in rates being gradual and expected. Andrew Laphorne, Head of SG’s quantitative research team, emphasises that inflationary surprises and the fear of rates overshooting expectations is the main risk for equity markets, more so than any growth disappointment.

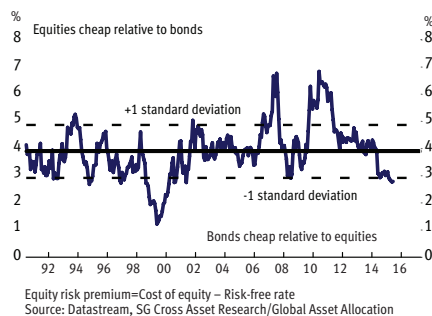
Avoid companies with balance sheet risk

Mr Laphorne noted some interesting features of the February pull-back. Principally, it was rather top-down, with investors seemingly selling out of markets rather than stocks – the fact that the brunt of the selling was borne by larger capitalisation stocks attests to this. There may be cause to assess the effect passive investing strategies will have in future sell-offs. The SG analysis also pointed to the lack of fundamental stock price discrimination and that the worst day of falls in February saw some of “the lowest cross-sectional dispersion (ie the relative difference in sell-off between sectors) in a down market of such magnitude.”

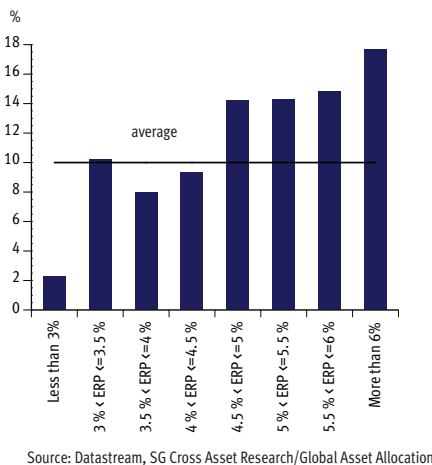
Markets have come back since the initial shock, but Mr Laphorne is wary of companies with balance sheet risk in an environment of rising rates and more pronounced volatility. Future jittery spells may witness greater levels of dispersion – and, if this is the case, companies with weaker balance sheets will suffer the worst share price falls. Although this seems intuitive, it is not always the case. With tighter monetary policy shifting the dynamic for equities, investors will need to pay even more attention to the strength of balance sheets. Focus should also be given to the statement of cash flows, scrutinising whether companies are good at converting profits into cash and how truly solvent they are.

If the road to interest rate ‘normalisation’ is bumpy, Mr Laphorne places emphasis on the crucial role of dividends in total returns. In the UK, the recent experience of Carillion reminds investors to focus on whether a dividend is sensible and funded out of appropriate cash flows.

US equity risk premium is now below one standard deviation below the long-term average



5-year annualised US equity market total return for a given level of equity risk premium



Inflation factors

Savings fund investment in the economy in the long-run is beneficial. More immediately it is better for growth if there is less saving and higher consumption. In the US there has been a significant fall in savings rates from 6 per cent in 2016 to 2.7 per cent – a figure that matches pre-financial crisis levels.

The declining supply of aggregate savings is occurring alongside an increased demand for capital investments and this interaction, fuelled by growth, provides upward pressure for real interest rates.

As we saw in February, there is potential for good news about economic expansion, which impacts on inflation and interest rates, which is why policy makers have to tread so carefully. One of the things that flummoxed central banks in 2017 was the fact that, despite near-record employment levels, inflation had remained stubbornly low. This is worrying in 2018, as inflation could suddenly come back and totally upset valuation models and possibly spread panic in capital markets.

The statistics economists have been watching, to try to make the crucial inflation variable more predictable, are for capacity and productivity. One theory is that, although economies are close to full employment capacity, the slack in productivity, perhaps due to workers’ declining bargaining power or previous years of underinvestment in productive capital assets, has kept wage growth down.

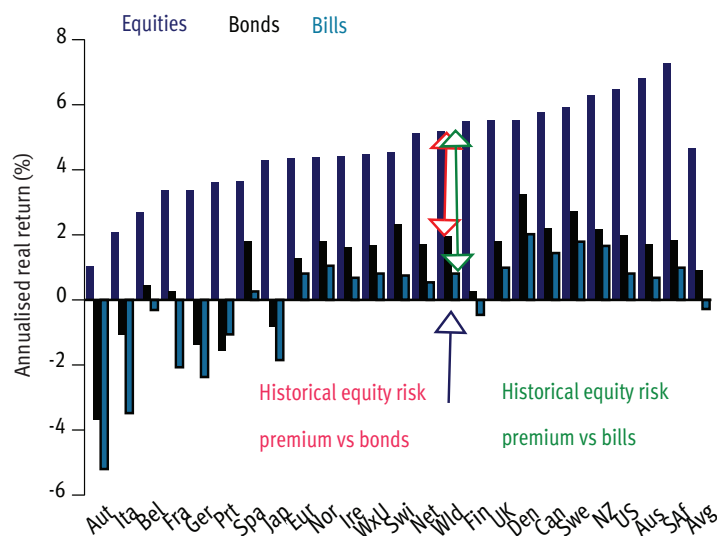
Stretched valuations are at the root of market sensitivity

Equity markets may have shrugged off the volatility of early February, but with index prices high by historical measures, the implication is that investors must accept a slimmer forward rate of return than they used to as compensation for equity risk. When bond yields rise, this lower implied rate of return for equities becomes less worthwhile.

By summing the value of expected cash flows (ie dividends plus buybacks) and the terminal value of the index (having applied a long-term expected compound growth rate, usually over five years or more) it is possible to estimate the end value of equity investments. The discount rate that must be applied, from this total return terminal figure, to get to today’s price is the implied required rate of return, or the cost of equity. The difference between this rate of return and the risk-free rate (the yield on benchmark government bonds) is the equity risk premium.

“Going forward, Dimson, Marsh and Staunton estimate investors only expect an equity premium of around 2.3 per cent over 10-year US Treasuries”

Real returns on equities, bonds and bills around the world



Source: Dimson, Marsh and Staunton; London Business School, Credit Suisse Global Investment Returns Yearbook 2018

Historically (1900-2017), according to Dimson, Marsh and Staunton, the global equity risk premium (ERP) versus US Treasuries has been 3.2 per cent. In their methodology, the average premium for the period is worked out geometrically.

The LBS team prefers quoting the ERP over short-term (0-3 month) Treasury Bills (T-Bills), however, because bonds with longer until maturity are not really ‘risk-free’, as prices fluctuate with interest rates. T-Bills are too short-dated to have such a volatile relationship with rates and are as close to a risk-free rate as it is possible to get. Versus T-Bills the LBS academics calculate the long-run world ERP is 4.3 per cent.

Their estimates suggest this is better than investors expected. Based on the historical equity real return, real dividend growth, change in the price-to-dividend ratio, the average dividend yield and the 0.8 per cent real return on T-bills, investors only expected a premium of 3.3 per cent.

Going forward, Dimson, Marsh and Staunton estimate investors only expect an equity premium of around 2.3 per cent over T-bills. With the yield on T-Bills at 1.65 per cent, this implies a required real rate of return for equities of just under 4 per cent annually. In the past, equities have easily managed to achieve such a rate of return, with the total real rate being 5.2 per cent for 1900 to 2017. There have, however, been periods of great variability over this long timeframe. In the first half of the 20th century, there were two world wars, a great depression and major revolutions in Russia and China. Between 1900 and 1949, the

“The real rate of return for global equities between 2000 and 2017 has been 2.9 per cent, which, if continued, would fall some way short of the rate of return required”

annualised real return on global equities was 2.7 per cent.

By contrast, the phenomenal global economic expansion between 1950 and 1999 fuelled annualised real equity returns of 8.6 per cent. This performance has tailed off in the 21st century, the effects of two savage bear markets in 2000-03 and 2007-09 being that the rate is down to 7.1 per cent if the period surveyed is expanded to 1950-2017. The real rate of return for global equities between 2000 and 2017 has been 2.9 per cent, which, if continued, would fall some way short of investors’ implied requirement.

Not all markets are expensive to the same extent

The US was the glowing success story of the 20th century, in the golden period for equities after the second world war, it delivered an average equity premium of 6.7 per cent over bills (1950-2017). Since the financial crisis, US equities have been one of the asset classes to benefit most from ultra-loose monetary policy. From 2010, the Credit Suisse Global Investment Returns Yearbook has the US equity premium over T-Bills at 12.9 per cent.

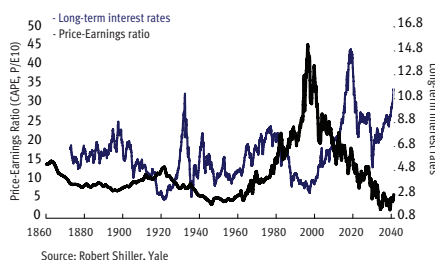
Much of that US premium since 2010 came from when equities were at a very low base following the 2007-09 meltdown and markets were then buoyed by the Fed’s QE (until October 2014) and subsequently by the world’s leading economic recovery story. The Trump tax break was a fillip at the very start of 2018, but there are question marks as to how much more growth can be eked out. This means the S&P 500 is going to be sensitive to rising rates and bond yields.

Other global markets are, however, less stretched. According to the cyclically adjusted price earnings (CAPE) ratio, the US is at its most expensive since the dot-com boom. The modern version of CAPE was formulated by professors Robert Shiller and John Campbell. Simply put, the ratio divides market price by the average of inflation-adjusted earnings over a set period, most commonly 10 years. According to Professor Shiller’s CAPE for the S&P 500 index, the US market is very expensive on a rating of 33 times – a similar level as before the 1929 stock market crash and the only time it has been more expensive was before the dot-com bubble burst.

Citing valuations ahead of momentous market moves in the past does smack of hindsight bias and CAPE is not a good tool for timing the market. Had you sold out of the US market every time CAPE breached its long-term rolling average then you would have missed out on some important periods of upside in the context of overall equity returns. What we can say after CAPE has been high, however, is that the subsequent rate of return for equities has been lower.

After 1929, according to the Credit Suisse Global Investment Returns Yearbook, the real rate of return for US equities was

S&P 500 CAPE Shiller chart



“Investors need to be aware that the world’s largest stock market is not priced to be the powerhouse driving global equity returns, as it was in the last century”

1.8 per cent between 1930 and 1940. Following the 2000 tech crash, US equities actually lost 2.3 per cent to 2010. The overall annualised rate of real gain from 2000 to 2018 has only been 3.5 per cent. CAPE cannot tell us when is a good time to buy and sell into markets, but it does indicate that the world’s largest stock market is not priced for a high forward rate of return. In short, the US is unlikely to be a powerhouse driver of global equity returns, as it was in the last century.

Equity markets that offer value

Where are investors to look for those returns instead? Well, CAPE is a useful measure to assess which markets are priced to deliver a higher rate of return. Research House Star Capital publishes a list of equity markets ranked according to their CAPE ratio. It uses MSCI country indices, so its figure for the US market is different from Professor Shiller, who uses the S&P 500. According to its monthly research (end of February figures are shown below) the US is one of the most expensive equity markets. Going by Star Capital’s CAPE ratios, only the stock markets of Ireland and Denmark are dearer. Interestingly, the UK is one of the cheaper developed markets, with a CAPE of 16.

Some equity investment models have advocated buying baskets of the cheapest markets based on CAPE, although this does not acknowledge either special circumstances or the more volatile nature of investments in some regions. At the end of February, ignoring Greece, Star Capital Research CAPE scores listed the five cheapest markets as Russia, the Czech Republic, Turkey, Poland and Spain (see table on page 16). Buying five exchange traded funds (ETFs) to track these markets could outperform but there is additional risk to be factored in and emerging markets like these should

Country CAPE scores and equity risk premiums

Country/region	Star Capital CAPE score (end Feb 2018)	SG Research equity premium versus domestic bonds	SG Research internal rate of return	Average historic premium versus domestic bonds
World	24.2	3.60%	6.00%	4.00%
Developed markets	25.3	3.30%	5.40%	3.90%
USA	30.7	2.80%	5.60%	3.90%
Japan	27.9	3.70%	3.80%	2.70%
UK	15.7	4.30%	5.90%	5.50%
Germany	20.1	5.40%	6.00%	3.00%
France	21.0	4.60%	5.40%	4.10%
Italy*	17.6	2.30%	4.30%	3.60%
Spain	13.6	4.00%	5.40%	5.70%
Netherlands	23.6	3.50%	4.20%	4.50%
Portugal	14.1	3.60%	5.30%	4.20%
Ireland	39.6	4.40%	5.20%	6.30%
Belgium	25.6	3.50%	4.50%	4.00%
Austria	19.8	4.40%	5.40%	4.20%
Emerging markets	17.6	5.20%	9.90%	5.60%

Sources: CAPE scores taken from Star Capital Research, equity premium data taken from SG Global Asset Allocation

“The Japanese stock market is priced to imply a forward annualised IRR of 3.8 per cent, which is significantly lower than the US at 5.6 per cent or the UK at 5.9 per cent”

not comprise the majority of equity holdings.

The ERP should also be considered when deciding markets to invest in. The ERP figures calculated by the SG Quant Research team are placed alongside CAPE scores from Star Capital to give an idea of the risk and reward trade-off for investing in value markets. A high risk premium doesn't only mean high potential returns, it also signals that high compensation is required and can be a warning sign.

The way to interpret the SG equity premiums is to look at whether the country ERP versus its domestic 10-year government bonds is above or below the long-run average. The implied internal rate of return (IRR) for the US is higher than for markets such as France and Japan, but the US equity premium is below its historic average.

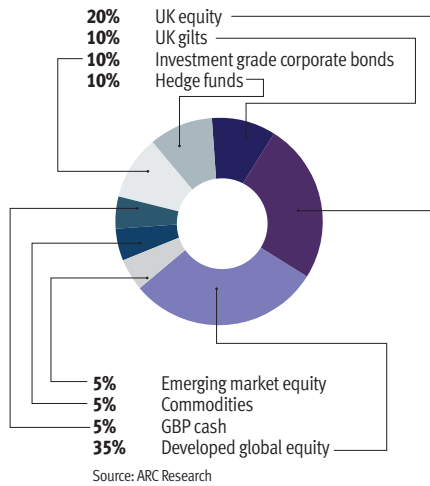
In the case of France, the IRR for the US is only slightly better. Many investors will look to buy funds with remits covering the eurozone and not just in one country. French and German companies together make up around 60 per cent of the MSCI Europe Index. Germany is not only more attractive relative to its past ERP than the US, it is also forecast to achieve a higher IRR. With the two main eurozone markets looking attractive, even if other eurozone equities aren't quite such good value relative to their domestic government debt, there is a strong case for asset allocations to be 'overweight' towards the region compared to its share of global market capitalisation.

What about Japan? The Japanese stock market is priced to imply a forward annualised IRR of 3.8 per cent, which is significantly lower than the US at 5.6 per cent or the UK at 5.9 per cent. With the premium over local debt above the long-run average, however, Japanese equities could have more support if bond yields become volatile.

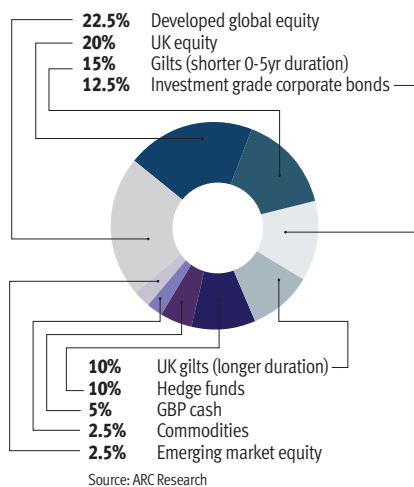
When asked why the local equity premiums imply that the eurozone and Japan are better value than the US equity market, Alain Bokobza, SG's head of global asset allocation and equity strategy, explained that “Japan and euro area equity markets, with their equity risk premia higher than average, have a higher capability to resist to higher bond yields – and/or to rise if yields were to stay quiet”.

Mr Bokobza qualifies this remark, saying: “This reasoning on relative attractiveness of equities is relevant only if you were to believe that markets are driven by valuation and not also by other features including momentum and flows.” These are sensible words to keep in mind when making portfolio allocations, but with strong earnings momentum in Europe and Japan too, there are other reasons to favour tilts towards these regions.

**Steady growth asset allocation
(60% to 80% global equity risk)**



**Balanced asset allocation
(40% to 60% global equity risk)**



**Flexing strategic asset allocation
to get the most return for risk**

Investing more heavily in the cheapest markets is a risky strategy that may not be right for the majority of investors. Where valuations are helpful is in looking at markets with a similar risk profile and investing a higher proportion in those priced to deliver a higher forward rate of return.

Investors Chronicle used the Asset Risk Consultancy (ARC) Suggestus service to generate two strategic asset allocation benchmark models. The first ‘steady growth’ model has a level of peak-to-trough drawdown risk that is estimated to be within 60 to 80 per cent of that of global equities. The ‘balanced’ portfolio is estimated to have 40 to 60 per cent of global equity risk. The asset allocations are shown in the charts on the left.

Strategic asset allocations (SAAs) provide benchmarks for portfolio managers to stick closely to in pursuing an investment policy that is appropriate for risk tolerance and objectives. The SAA isn’t set in stone however and we can make use of valuation models in deciding when and how to make tactical asset allocation shifts. This can be done between and within asset classes.

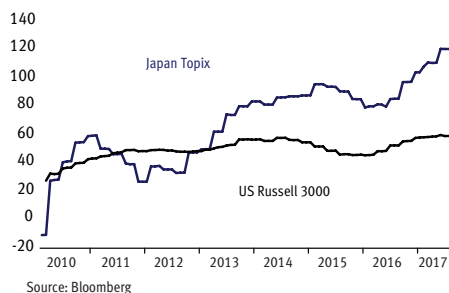
Looking at the steady growth asset allocation for example, the 35 per cent allocation towards developed equity markets would on a market capitalisation weighting be heavily skewed towards the US. As the high CAPE rating and the historically slim implied ERP suggest, the US is not offering a high forward rate of return for equity market risk but other developed regions, like the eurozone and Japan, are better value. Rather than be out of the US entirely, however, a better response is simply to focus investments within the developed market allocation more towards Europe and Japan, so these holdings are proportionately higher than if weightings were according to market cap.

Given relative valuations favour emerging market (EM) equities at the moment, a steady growth investor might also want to invest, say, 10 per cent in EM and reduce holdings in another asset class. Monitoring the effectiveness of these tilts should be done against the benchmark of the SAA. For the majority of investors, these tweaks to strategy are probably a more sensible way to make use of signals given by metrics such as CAPE.

The case for Europe and Japan

With the US expensive, there is more onus on the eurozone and Japan to be the drivers of developed market equity returns. The macro case for investing in Europe has been strong for the past couple of years and, as Morgan

Average EPS Japanese vs US stocks



“Much was made before the financial crisis about EM returns de-coupling from developed economies. This proved not to be the case”

Stanley reported in its assessment of fourth-quarter (Q4) European earnings, the region still has a positive story.

In the latest reporting season, once again more companies beat analysts’ earnings expectations than missed them. The only time in the past three years when misses were ahead of beats was Q3 2017, so the return to the upside trend is welcome, with energy, financials, consumer discretionary and IT stocks delivering the most earnings beats. Healthcare, industrials and telecoms saw more misses than beats.

The Morgan Stanley analysis notes that weighting by market capitalisation, eurozone equities track 4.7 per cent ahead of consensus forecasts overall, with the median stock beating by 2.7 per cent. Sales also surprised to the upside, with 14 per cent more companies beating than missing forecast sales and the median stock beat revenue expectations by 0.3 per cent.

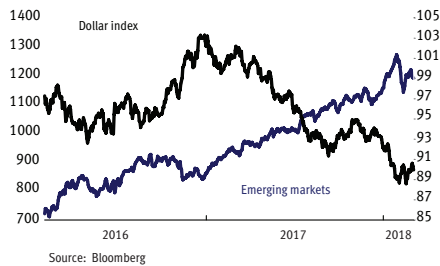
Unlike the US where a widening gap in profitability between the largest and smallest companies has been observed, there is less earnings inequality in Europe. Year on year median stock earnings were up 9.4 per cent in Q4 and earnings revisions remain broadly neutral with a slight downgrade overall being led by defensives. This in itself is interesting and hints at some of the wider dispersions ahead as monetary policy becomes less accommodative.

In the case of Japan, the contrast with the US stock market is stark. Comparing the Topix index (which roughly comprises Japan’s leading 2,000 stocks) with the US’s Russell 3000 is different in terms of the number of constituents but is the nearest thing to equivalents in terms of size distribution. A crude comparison of index EPS by cap weighting, shows Japanese companies far outstripping their US counterparts. This is flawed, but also backs up other measures, such as lower leverage and payout ratios that suggest Japanese companies are in comparatively good health. Although the Japanese CAPE score of 29 is high next to other markets, Japan is something of a special case, having been on a phenomenally high CAPE in the late 1980s and again in the mid-2000s. The current rating is significantly below the record high, which breached 100 in 2006.

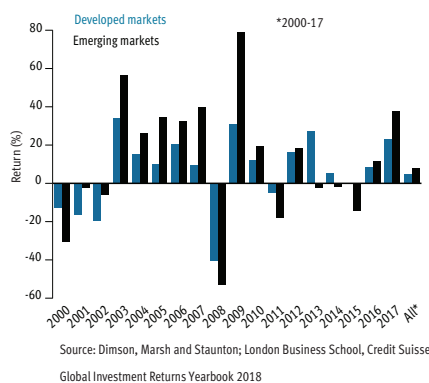
Emerging markets to continue to flourish in 2018?

One of the best performing assets in 2017 was emerging market shares. Much was made before the financial crisis about EM returns de-coupling from developed economies. This proved not to be the case, but specialists still argue that volatility returning to expensive stock markets like the US should not be cause to panic and flee EM. Investment manager Ashmore primarily invests in emerging

Emerging markets vs dollar index



Recent performance of Emerging markets vs Developed markets



markets, so clearly has a vested interest in talking up these investments. While obvious bias must be taken on board, Ashmore’s assertion that EM was unfairly punished by a knee-jerk reaction to equities as a whole at the start of February, has some justification.

Certainly as the CAPE metrics from Star Capital and the equity premiums from SG show, emerging market valuations imply the potential for further upside. What about worries that the US dollar should strengthen (although this seems less likely if President Trump starts a trade war) and increase the debt burden on EM companies where debts are dollar-denominated? Ashmore argues that EM was robust despite a 45 per cent dollar rally before its more recent weak spell. Furthermore, it points to the taper tantrum and the halving of commodity prices in 2015-06 as reasons why investors should not shy away from EM exposure for fear of bad news.

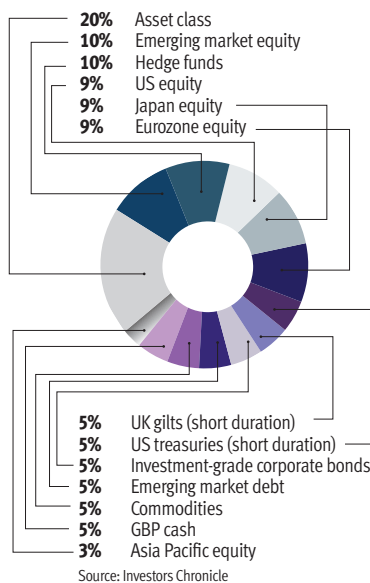
Ashmore also claims that more Fed rate tightening, which may eventually lead to a resumption in dollar demand, is priced into the outlook for EM. This is possibly overconfident as episodes such as the sell-off seen in February remind us that volatility is contagious and it’s impossible to predict the strength of reactions to surprises. Also, just as there is a risk premium for equities, there needs to be an additional country premium that reflects perceptions of political, economic and environmental risk. If risk-free rates move higher then the forward rate of return from EM will need to change too.

Fixed income

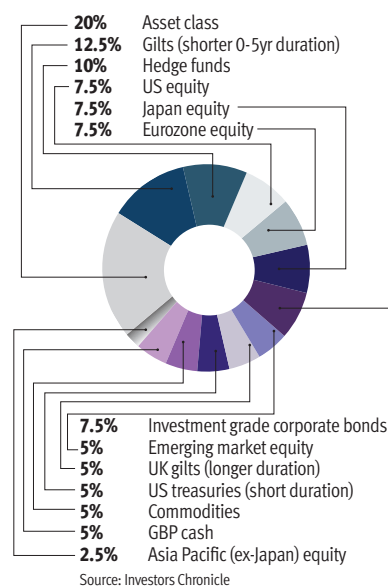
It was the fear of inflation triggering surprise increases in rates that lit the touch paper for February’s volatility spike and the increase in bond term premiums – the excess investors demand from longer-dated bonds to compensate for inflation risk and the opportunity cost of lending their principal sum to the bond issuer for longer. Rising interest rates also carry risk of capital loss for longer-duration bonds. Duration, in years, is a measure of the sensitivity of the bond to interest rates. Outstanding long-term or lower-coupon bond issues (which take longer until the investor achieves their required total return) have higher duration and therefore prices fall more on the secondary market in a rising rate environment.

Bonds have been in a long-term bull market, so the increase in rates and term premiums are a worry for many funds holding longer-duration issues as the more yields rise, the more capital value is eroded. The strategy team at UBS is not worried, however. It argues that there has been a secular fall in global inflation and therefore equilibrium real rates, which should limit upside potential for bond yields.

Steady growth TAA (Mar 2018)



Balanced TAA (Mar 2018)



Again, overconfidence is a worry as it leaves the door open to shock market reactions if inflation does surprise to the upside. As was seen in new Federal Reserve chair Jerome Powell's first address to US Congress, policymakers are attempting to lead a bullish narrative on growth and inflation and adopt credible targets that limit the potential for surprises.

In UBS's view, as the US term premium is already relatively high, being higher than the G4 average (eurozone, US, Japan and UK), it sees the greater risk emanating from Europe and Japan, where there is more space for yields to rise. The differential between US and especially Japanese and euro-denominated sovereign debt pricing means that, so long as term premiums in these areas are compressed, UBS argues there are limits to how much further the US term premium will rise. It points out the risk that future shocks could come if the pace of the European Central Bank's exit from QE is faster than expected.

Tactical asset allocations for Q2 2018

In the light of the current global investment backdrop, what are the tactical adjustments to make to the strategic asset allocation benchmarks generated by the ARC software?

For the balanced portfolio allocation, 37.5 per cent is in bonds. This is a sensible longer-term strategic allocation, but in a rising interest rate environment, given prices are where they are, it seems overexposed to capital losses. Therefore we halve the longer-duration gilts holding to 5 per cent of the portfolio total, and cut corporate bonds by two-fifths, to 7.5 per cent.

The shorter-duration gilts holding will come under less price pressure in a rising rate environment, but we also reduce this slightly, to 12.5 per cent. This frees up 5 per cent for an allocation to US Treasuries with one to three years to maturity. There is capital risk to bonds in a rising rate environment and currency risk for foreign investors (although yields on US three-year notes still look favourable versus short-dated gilts after adjusting for the exchange rate), but there is such a differential between US government yields and comparable debt, that this small holding offers some small hedge against a fall in equity markets.

Overall, the portfolio fixed-income allocation is reduced to 30 per cent. Using the 7.5 per cent taken from fixed income, we can beef up commodities exposure to 5 per cent and add a further 5 per cent to overall equities holdings. Commodities prices should benefit from continued global economic growth and act as something of a hedge against demand-driven inflation.

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cally tilted portfolio, we increase emerging market holdings to 5 per cent of the total. That leaves 45 per cent in developed market equities. The strategic asset allocation has 20 per cent in the FTSE All-Share. The UK is cheaper than other developed markets as the CAPE scores show. Britain does have some fairly unique risks with the on-going political uncertainty around Brexit, but this high domestic market allocation does eliminate currency risk for UK investors. What’s more, thanks to the international nature of companies on the UK exchange, it should be possible to achieve a degree of country diversification from UK-listed equities.

The global equities investments in the balanced allocation are now 25 per cent of the portfolio. In the ARC benchmark, this allocation would be invested via an MSCI World ETF, half of which is composed of large US companies, which as the CAPE and equity premium analysis shows, are some of the most expensive investments on the planet. Rather than invest 12.5 per cent of the total portfolio in such expensive investments, it is better to split the 25 per cent global equities allocation between regionally focused funds. We go for 7.5 per cent exposure to the US, 7.5 per cent to Japan, 7.5 per cent to the eurozone and 2.5 per cent to Asia Pacific excluding Japan.

The more aggressive steady growth allocation model starts out with 60 per cent overall in equities. One-fifth is invested in bonds, which is reasonable, although it would be better for the next six months to reduce duration risk. The 10 per cent gilt allocation is therefore changed to a 5 per cent investment in shorter-dated gilts and 5 per cent is switched to shorter-dated US Treasuries. We also half the corporate bond allocation and invest 5 per cent in emerging market debt.

For equities, we double emerging market exposure from our strategic benchmark, for the reason that the fundamental valuations look more attractive than many developed markets. Across asset classes, this means we have 15 per cent of capital in emerging markets – this is aggressive but less so than following a strategy of, say, buying baskets of the cheapest markets according to CAPE.

The developed world equities investments are reduced to 30 per cent of the portfolio total, to accommodate the shift to emerging markets. Rather than use the MSCI World and have a 15 per cent exposure to the expensive US market, we allocate 9 per cent to the US, 9 per cent to the eurozone, 9 per cent to Japan and 3 per cent to Asia-Pacific excluding Japan.

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Benchmarking asset allocation

The strategic asset allocation benchmarks are tracked using exchange traded funds (ETFs), which makes the benchmarks investable and means we can judge if a passive alternative would do better than our tactical management of the asset allocations.

We need to undertake two layers of benchmarking for our balanced and steady growth portfolios. The first is to assess out management of asset allocation. This can be done by selecting a portfolio of ETFs to replicate our tactical asset allocation decisions and compare these portfolios to the strategic benchmark ETF portfolios.

The next level of our portfolio management, however, is to select individual securities within our asset class allocations. For example, we may decide that rather than use a passive ETF for our Japanese equity exposure, we prefer a managed fund. We might also wish to use investment trusts for some of the exposures.

For the UK equity market, which makes up 20 per cent of both balanced and steady growth portfolios, there is scope to select funds with different degrees of emphasis on international revenues, investing styles and size of companies. We'll also want to include individual shares highlighted by Algy Hall's quantitative stock screens for IC Alpha. For the steady growth portfolio, we shall also include some of the small-cap picks made in Simon Thompson's IC Alpha research.

So, these tactically tilted portfolios represent just our managed asset allocation decisions, not our active investment choices. We will be conducting the latter according to risk and return models, which we will explain in more detail as part of another IC Alpha report.

Country CAPE scores and equity risk premiums

Country/ Region	Star Capital CAPE Score	SG Research equity premium versus domestic bonds	Internal rate of return	10-year domestic govt. bond yield	Average historic premium versus domestic bonds (from early '90s)
Greece	-6.8	-5.90%	-1.60%	4.30%	1.50%
Russia	6.5	1.30%	8.30%	7.00%	5.20%
Czech Republic	9.8	5.50%	7.50%	2.00%	8.20%
Turkey	12.1	1.50%	13.20%	11.70%	1.90%
Poland	12.4	5.10%	7.80%	2.70%	4.30%
Spain	13.6	4.00%	5.40%	1.40%	5.70%
Portugal	14.1	3.60%	5.30%	1.70%	4.20%
Brazil	14.2	1.20%	10.00%	8.70%	1.60%
Singapore	14.4	3.40%	5.60%	2.30%	5.40%
Israel	14.7	6.30%	8.20%	1.80%	4.70%
Hungary	15.2	6.50%	8.00%	1.50%	5.50%
Korea (South)	15.6	3.40%	5.70%	2.40%	4.60%
UK	15.7	4.30%	5.90%	1.60%	5.50%
Norway	15.8	4.70%	6.50%	1.90%	5.10%
Malaysia	17.0	4.60%	8.60%	4.00%	6.00%
Italy	17.6	2.30%	4.30%	1.90%	3.60%
Emerging markets	17.6	5.20%	9.90%	4.70%	5.60%
Australia	18.3	5.40%	8.30%	2.80%	5.90%
Hong Kong	18.3	5.00%	7.00%	2.00%	5.50%
Developed Europe	18.7	4.30%	5.30%	1.00%	4.60%
China H Shares	19.1	7.80%	11.80%	4.00%	10.00%
China A Shares (Shanghai)	–	6.10%	10.00%	4.00%	10.20%
China A Shares (Shenzen)	–	6.00%	10.00%	4.00%	9.20%
Austria	19.8	4.40%	5.40%	0.90%	4.20%
South Africa	19.9	2.10%	11.20%	9.10%	5.20%
Germany	20.1	5.40%	6.00%	0.70%	3.00%
Indonesia	20.8	7.50%	14.00%	6.50%	5.00%
Canada	20.9	4.30%	6.70%	2.40%	3.90%
France	21.0	4.60%	5.40%	0.90%	4.10%
Mexico	21.2	0.30%	7.90%	7.60%	2.00%
Finland	21.6	4.10%	4.90%	0.80%	4.10%
Sweden	21.8	5.80%	6.70%	0.90%	5.20%
Taiwan	21.8	6.60%	7.30%	0.70%	6.30%
Thailand	22.2	6.50%	8.80%	2.30%	7.00%
Philippines	22.3	6.00%	10.80%	4.70%	6.40%
India	22.5	5.80%	13.60%	7.80%	6.50%
Netherlands	23.6	3.50%	4.20%	0.70%	4.50%
New Zealand	24.0	4.80%	7.70%	2.90%	4.70%
World	24.2	3.60%	6.00%	2.40%	4.00%
Switzerland	24.9	4.20%	4.30%	0.10%	3.60%
Developed markets	25.3	3.30%	5.40%	2.10%	3.90%
Belgium	25.6	3.50%	4.50%	1.00%	4.00%
Japan	27.9	3.70%	3.80%	0.10%	2.70%
US	30.7	2.80%	5.60%	2.80%	3.90%
Denmark	36.2	4.60%	5.30%	0.70%	2.60%
Ireland	39.6	4.40%	5.20%	0.90%	6.30%

Sources: CAPE scores taken from Star Capital Research, equity premium data taken from SG Global Asset Allocation

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Registered office: Number One, Southwark Bridge,
London SE1 9HL. ISSN 0261-3115.