Schroders
Global Market Perspective

Economic and Asset Allocation Views Q4 2015

Schroders

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Introduction

Risk assets suffered during the third quarter as investor doubts about global growth resurfaced. The trigger was China where activity indicators continued to soften and official intervention in the foreign exchange and equity markets left investors puzzled about the direction of policy. There have also been questions about the authorities' ability to control the economy. The US Federal Reserve contributed to the uncertainty by ducking the opportunity to lift interest rates from zero in September, causing investors to ask whether the central bank knew something they did not. Meanwhile, the Greek crisis, which had dominated attention in the second quarter, faded into the background as the EU agreed a new bail out.

The continued divergence between developed and emerging economies remains one of the key themes of 2015 and leading indicators suggest it will persist in the coming months. However, the developed world would not be immune to a significant downturn in China and this quarter's strategy note focuses on the global implications for economies and markets should this scenario play out.

Overall, our asset allocation stance is to continue to favor equities with a bias toward developed markets. This is based on our views of what we would consider to be attractive equity risk premium. However, given the uncertainties facing the world economy we also hold a neutral duration position in our portfolios. The increased risk of a China hard landing is one reason why we have remained underweight emerging market equities despite the value offered by the region.

This quarter's research note focuses on the role of share buybacks in corporate behavior and we have included the annual update of our seven-year return expectations, which assesses the medium-term outlook for a range of asset classes. Of course, these reflect our current views and are intended to be general in nature. As with all forecasts there can be no assurance that these, or any, predictions will be realized as market conditions are constantly evolving.

Keith Wade, Chief Economist and Strategist, Schroders
October 12, 2015

Content

Asset Allocation Views: Multi-Asset Group

Global Overview

Economic View

China and the emerging markets have been the focus of financial market attention since the beginning of August. Our asset allocation committee sees a hard landing in China as the biggest tail risk today and the decision by the US Federal Reserve (Fed) not to raise rates in September was heavily influenced by developments in the world's second largest economy.

In the US, lower commodity prices and a strong dollar are weighing on consumer prices, giving the Fed more time to keep rates at close to zero. The Fed is watching carefully for signs of a hard landing in China which would exacerbate deflationary pressure in the world economy.

Certainly these developments should keep inflation in the US low in the near-term, but we still see domestic price pressure building through the labor market. The unemployment rate has now reached its equilibrium on most estimates and on current trends will fall further in the coming months. It is true that wages have not accelerated as yet, but in our view it is likely only a matter of time before we see wage costs picking up.

Given the deflationary global trends though, we will need to see strong evidence of rising wages before the Fed will be confident that inflation is headed back to its 2% target. This could take some time: if we focus on the Employment Cost Index, seen as the best measure of wage pressure in the economy, we will need to wait for the next release at the end of October, and then probably the one at the end of January, before being able to confidently identify the upswing in wage costs.

However, as external factors are outweighing domestic, it could be argued that the outlook for the Fed now depends on the outlook for China. In our view, China may get a boost from fiscal support in the coming months, but the underlying picture is one of an economy where growth is grinding lower. Our indicators suggest growth will decelerate toward 6% in 2016 as the economy faces structural headwinds from overcapacity. So: no hard landing, but no clear pick-up.

In Europe, Greece eventually accepted the terms of its creditors to unlock additional funds and avoided leaving the euro, but only after a veiled threat of eviction. More recently, as in the US, the focus has shifted to the slowdown in China and the wider impact on growth in the region. In addition, the refugee crisis has dominated the political agenda, with enforced quotas causing fierce infighting between member states.

Meanwhile, the Japanese economy appears to have slipped back into recession in the third quarter with GDP heading for a second consecutive decline. This is disappointing and reflects the impact of weaker external demand from Asian trading partners.

Central Bank Policy

Although Fed Chair Janet Yellen has said she expects to raise rates this year, the decision is data dependent and in the absence of a rapid turn in China and the emerging markets, this timescale seems unlikely. Unemployment is expected to fall further in coming months, but the hurdle to trigger a Fed lift-off has been raised by the global environment. We have now pushed out our forecast for the first Fed funds increase to March 2016 and flattened the rate trajectory such that rates reach 1% by end-2016.

Elsewhere, low inflation is keeping central banks on hold for longer with, for example, the UK not expected to raise rates until May next year. This is likely to keep developed market growth skewed toward services and domestic activity. For the Eurozone, there is a reasonably high probability that the European Central Bank (ECB) extends its quantitative easing (QE) programme beyond September next year. There is also a chance that the Bank of Japan steps up its quantitative and qualitative (QQE) programme. However, this is likely to depend on policy action in China. Our baseline assumption is that China does not move to devalue the yuan (CNY) significantly further. If we are wrong then we could see a destabilizing period where countries seek to gain advantage through devaluation of their exchange rates, an ultimately futile exercise.

Implications for Markets

Looking at our asset class views, we have a positive rating on equities, led by Europe ex UK and Japan. We have lowered our score this quarter on emerging markets to negative. We would need to see a meaningful improvement in the growth outlook for the emerging markets and a stabilization of capital flows to take a more constructive view.

With regard to the duration views, the overall score is neutral, as was the case last quarter. The momentum and cyclical indicators for bonds are positive, with growth and inflation sluggish by historical comparison, although the value indicator is neutral after the rebuild of term premium during the first quarter. We are positive on European bonds with the possibility of further action by the ECB perhaps suppressing real yields, supporting bond prices.

In terms of our credit scores, we have generally become more positive on both US and European credit compared to last quarter as spreads have widened and valuations now look more attractive. Monetary policy looks to be supportive, thus reinforcing the carry case for credit. An increase in the credit default cycle looks to be priced in for sectors such as energy.

The overall score for commodities remains neutral, unchanged from last quarter. We are finally seeing production fall from both US shale oil as well as major OPEC producers, likely putting a near-term floor on energy prices. Meanwhile, although wheat, corn and soybean harvests are on track for another bumper year, El Niño remains a concern, meaning we are on notice for potential disruptive weather in next year's harvest. Gold has been kept at negative, in line with last quarter's score.

Table 1: Asset allocation grid – summary

Equity	+	Bonds	0			Alternatives	0	Cash	-
Region		Region		Sector		Sector			
US	0	US Treasury	0 (-)	Government	0	UK property EU property	+ +		
Europe ex UK	+	UK Gilts	+	Index-Linked	0	Commodities	0		
UK	0 (+)	Eurozone Bunds	+ (0)	Investment Grade Corporate	0 (-)	Gold	-		
Pacific ex Japan	0	Emerging market debt (USD)	- (0)	High yield	+ (-)				
Japan	+ (0)								
Emerging Markets	- (0)								

Key: +/- market expected to outperform/underperform (maximum +++ minimum ---) 0 indicates a neutral position. The above asset allocation is for illustrative purposes only. Actual client portfolios will vary according to mandate, benchmark, risk profile and the availability and riskiness of individual asset classes in different regions. For alternatives, due to the illiquid nature of the asset class, there will be limitations in implementing these views in client portfolios. Last quarter's positioning in brackets. Source: Schroders, October 2015. The views and opinions contained may change and there is no guarantee that any forecasts or opinions will be realized. Please refer to the back of this report for important information.

Regional Equity Views

Key Points

+	Equities	
0	US	We have maintained our neutral view on US equities. We believe that the market will be stuck in a trading range as, although monetary policy is likely to remain growth-orientated and hence supportive, earnings growth is likely to struggle given pressure from the US dollar.
0 (+)	UK	UK equities have been downgraded to neutral from last quarter's single positive. The FTSE 100 index has considerable exposure to commodity-related companies which we expect to continue to suffer from earnings pressure. This weakness is likely to offset domestic sector strength.
+	Europe ex UK	We remain positive on European equities as we are starting to see evidence of improving credit conditions as growth picks up. Leading indicators have picked up slightly and earnings momentum remains strong.
+ (0)	Japan	We have upgraded our view on Japanese equities to positive from last quarter. We like the Japan micro story, which has to do with structural reforms. The Nikkei 400, a new index comprised of companies that meet the requirements of global investment standards, is a big motivator, responsible for an increase in share buyback activities and improved return-on-equity. Japanese earnings are also firmly in the "boom phase" associated with strong equity market performance.
0	Pacific ex Japan (Australia, New Zealand, Hong Kong and Singapore)	We remain neutral on Pacific ex Japan equities this month. Valuations continue to become more attractive, but we maintain our cautious stance due to the region's dependence on China.
- (0)	Emerging markets	Emerging markets (EM) have been downgraded to negative as the ongoing weakness in emerging economies and collapsing commodity prices will hamper earnings. Although negative sentiment is now extreme, we believe that it is still too early to position for a rebound as further restructuring will be needed to restore profitability.

Key: +/- market expected to outperform/ underperform (maximum +++ minimum ---) 0 indicates a neutral position. Regions shown are for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Fixed Income Views

Key Points

0	Bonds	
0	Government	There is no change in our views on government bonds in developed markets. We remain neutral on duration, in aggregate, with momentum and the qualitative picture improving. Value remains neutral after the increase in the term premium earlier this year. Inflation expectations in the US have fallen further following the devaluation of the Chinese yuan. This supports a more neutral view on US Treasuries despite the broadly stronger economy. We have adjusted our curve view where we believe the five-year part of the curve looks expensive while the shorter end has adjusted upward. We remain positive on the UK as gilts remain a significant beneficiary of low interest rates and Eurozone QE. The spread over Bunds continues to look attractive given the positive carry and roll. We continue to prefer curve flatteners, favouring the long end of the curve, and we remain outright positive on the 10-year gilt. We have upgraded our view on bunds as potential further action by the ECB to suppress real yields, and a slightly stronger euro, should support German 10-year bond prices. We have maintained our neutral view on Japanese duration this month. Despite the unattractively low level of yields, the Bank of Japan (BOJ) is still expected to provide support.
0 (-)	Investment Grade (IG) Corporate	After many months of holding a negative view, we have upgraded US investment grade (IG) credit to neutral. Spreads have widened towards the upper decile of their long-term range, and this is also likely to attract support from institutional investors. European investment grade credits have been upgraded to double positive on the back of their strong improvement in valuation over the past months. The euro area should be benefiting from a dovish central bank and moderate improvement in economic activity. The European credit cycle looks a bit less advanced than in the US.
+ (-)	High yield (HY)	We have upgraded our US high yield (HY) view to positive. Credit spreads have priced in extreme risks such as a 40% cumulative default rate in the energy sector, and retail outflows appear to be tapering off. The US also looks attractive relative to European HY. We remain neutral on European HY. The default rate remains low and is unlikely to rise meaningfully under a scenario where supportive monetary policy allows companies to access low-cost financing. Nevertheless, we are continuing to monitor the reduced liquidity in the asset class, which is preventing our views from becoming more positive.
(-) 0	USD-denominated Emerging market debt (EMD)	We have downgraded EM US dollar bonds to single negative. Our momentum indicators have broken key technical levels, and the fundamental outlook continues to deteriorate. In particular we are avoiding the largest issuers such as Turkey, Russia and Brazil.
0	US Index-linked	US inflation-linked bonds have been maintained at neutral after the sharp fall in inflation expectations.

Key: +/- market expected to outperform/ underperform (maximum +++ minimum ---) 0 indicates a neutral position. Sectors shown are for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Alternatives Views

Key Points

	Alternatives	
0	Commodities	Cyclical commodities such as industrial metals and energy have been particularly hard hit by the China slowdown. However future supply is likely to shrink, leading us to maintain a neutral overall score. Energy prices have reached levels where capital discipline is being forced on the oil majors. As a result, prices are likely to be higher in future, with production falling from both the US shale oil as well as major OPEC producers, likely putting a near-term floor on prices. For similar reasons, we are neutral on base metals where supply side adjustment is coming through. Although the hard data is yet to stabilize, China has moved firmly into an easing cycle, bringing forward infrastructure expenditure and easing monetary policy. We remain neutral on agriculture, though note that El Niño continues to strengthen and we have the third strongest event in 65 years, so we are on notice for potential disruptive weather in next year's harvest.
+	UK Property	We expect UK commercial real estate to have another strong year in 2015 with capital growth close to 10% and total returns of around 15%. The main driver will be a decline in yields, although rental growth of 3% should also make a useful contribution. The latest Investment Property Forum (IPF) Consensus Forecast is for capital values to increase by 4% in 2016 and then hold steady through 2017-2018. While we agree with the outlook for next year, we expect that there may be a small fall in capital values in either 2017 or 2018 as the Bank of England tightens policy. We believe that segments with good rental growth prospects and assets which are reversionary are likely to be relatively defensive.
+	European Property	We forecast that total returns on average investment grade European real estate will average 6-8% per year between end-2015 and end-2019. We expect that major cities such as Amsterdam, Berlin, Madrid, Munich and Paris will outperform thanks to stronger economic and population growth. Total returns are likely to be frontloaded, assuming yields continue to decline next year, before stabilizing. Capital values should benefit from steady rental growth from 2016-17. The main upside risk is that office development is "lower for longer", with the result the rental growth is faster than anticipated. The main downside risk is that the Chinese economy suffers a hard landing, which would not only hit exports, but also tourist spending in France and Italy, and capital flows from South East Asia. Furthermore, there are various political risks, including the possibility that the latest settlement with the Greek government will unravel and the possibility that the conservative government in Spain will lose the elections in December.

Note: Property views based on comments from the Schroders Property Research team.
Key: +/- market expected to outperform/ underperform (maximum +++ minimum ---) 0 indicates a neutral position. Sectors shown are for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

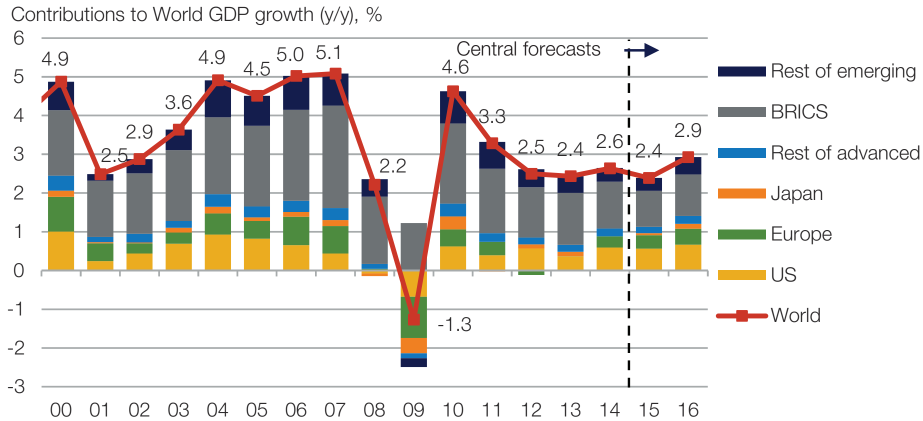
Economic View

Central View

Global update: Strong dollar and cheap oil favor advanced over emerging

We have trimmed our forecast for global growth to 2.4% for 2015 (previously 2.5%) as a result of modest downgrades to the advanced and emerging markets. Although global demand picked up in the second quarter, it has not been quite as strong as expected and there are signs that an excess of inventory has built up, particularly in the emerging markets. However, we still see recovery in the oil-consuming economies as the benefits from lower oil prices continue to support consumer spending.

Chart 1: Global growth and forecast for 2015 and 2016



Source: Thomson Datastream, Schroders Economics, August 15, 2015. The data includes some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. There is no guarantee that any forecasts or opinions will be realized. Regions shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Inflation is expected to remain low in 2015, but downward revisions to advanced economy inflation are offset by upward revisions in the emerging economies. Currency weakness and a lack of pass-through from lower energy costs account for the disappointing performance in the emerging world. The combination of lower growth and higher inflation means that the emerging economies have taken a turn in a stagflationary direction.

For 2016, the picture is improved by an end to austerity in the G20 advanced economies with fiscal policy expected to loosen in the US (where the government sector has been hiring again) and become neutral in the Eurozone and Japan. The UK stands out as the G7 economy pursuing fiscal austerity next year.

For the emerging economies, China is forecast to continue to decelerate in 2016, but signs of stability in Russia and Brazil result in a better year for the BRICs. The global growth forecast for next year is unchanged at 2.9%, but the balance between advanced and emerging has tilted further toward the former. This largely reflects the firm US dollar and a lower profile for commodity prices.

In addition to our central view, we consider seven alternative scenarios where we aim to capture the risks to the world economy.

Economic View (continued)

Macro risks: Scenario analysis

Full details of the scenarios can be found on page 11. The balance of risks is still tilted toward a deflationary outcome of weaker growth and inflation. First on the downside is the "**China hard landing**" scenario where despite government efforts, China's equity market collapses. This causes a loss of confidence in the banking sector which experiences an outflow of deposits, prompting an economy-wide credit crunch. With the housing market also slumping, both consumption and investment are hit. At the global level, the scenario results in lower commodity prices, lower inflation and easier monetary policy around the world.

We retain the "**Tightening tantrum**" scenario where bond markets sell off in response to Fed tightening. Here, tightening has a knock-on effect on the rest of the world. Yields begin to rise causing capital outflows from economies with weak external accounts and negative wealth effects. Equity markets and risk assets generally weaken as the search for yield begins to reverse.

"**Bad Grexit**" replaces the "Eurozone deflationary spiral" scenario. Although the Greek government has secured a third bailout, it is still possible an agreement ultimately falters given the need to secure some level of debt forgiveness, thus leading to a disorderly exit of Greece from the Eurozone. This is a deflationary scenario as a selloff in peripheral debt and loss of confidence hits Eurozone growth. Eurozone activity weakens with knock-on consequences for the rest of the world. Greek inflation is higher as a result of a surge in prices in Greece as the new drachma collapses. Elsewhere inflation will be lower.

As our final downside scenario, we introduce the "**US recession**" scenario. There are fears that the US economy is still fragile and could tip into recession in the face of an unexpected shock. To differentiate this scenario from the others that could trigger a significant US downturn, we have assumed an internally generated shock where a corporate bankruptcy undermines confidence in the business sector, leading to a sharp retrenchment in employment and capital expenditure.

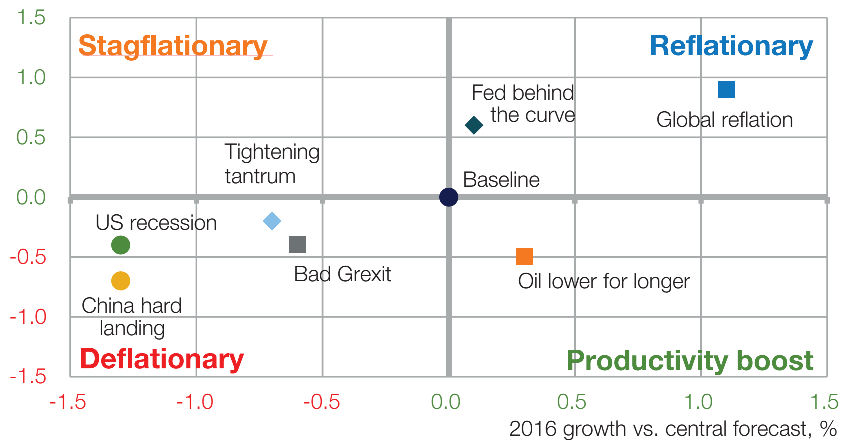
Our first reflationary scenario is "**Fed behind the curve**" where the Fed delays raising rates until the second half of 2016. The labour market continues to tighten, with wages and inflation accelerating. US rates then have to rise more rapidly but still end 2016 at 1.5%, lower than in the baseline. Interest rates would continue to rise in 2017 as the Fed tries to control inflation.

"**Global reflation**" depicts a scenario where frustration with the weakness of global activity leads policymakers to increase fiscal stimulus in the world economy. This then triggers an increase in animal spirits which further boosts demand through stronger capex. Global growth reaches 3% this year and 4% next year. However, higher commodity prices and tighter labor markets push inflation higher.

Finally, in "**Oil lower for longer**", the oil price falls to just below $40 per barrel by end-2015 and stays there as the Saudis turn the screw on the US shale producers and Iraq and Russia continue to grow production sharply. This leads to stronger growth and lower inflation, especially for oil consuming advanced economies.

Economic View (continued)

Chart 2: Scenario analysis – global growth and inflation impact



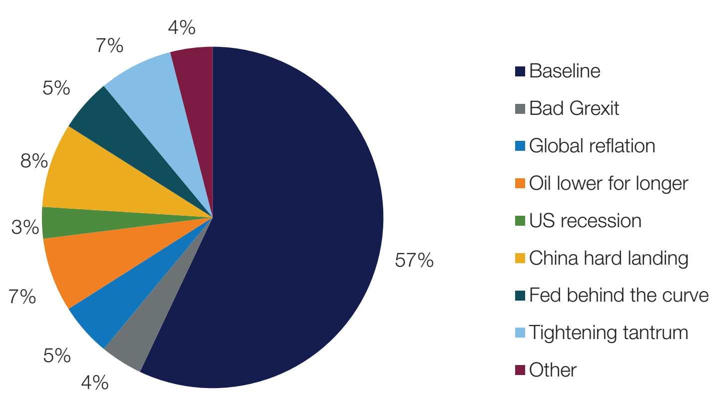
Source: Schroders Economics, August 15, 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

In terms of macro impact, we have run the risk scenarios through our models and aggregated them to show the impact on global growth and inflation. As can be seen in chart 2, four are deflationary, with these scenarios seeing growth and inflation lower in 2016 than in the central scenario.

With regard to probabilities, the combined chance of a deflationary outcome is now 22%, 2% higher than last quarter. This reflects “US recession” and “Bad Grexit” replacing “Secular stagnation” and “Eurozone deflationary spiral” as well as a higher probability being placed on “China hard landing” and “Tightening tantrum”.

The probability of reflation (stronger growth and higher inflation than the baseline) has fallen from 15% to 10%. Furthermore, the probability of a productivity boost scenario occurring has risen from 6% to 7% compared to last quarter.

Chart 3: Scenario probabilities (mutually exclusive)



Source: Schroders Economics, August 15, 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Table 2: Scenario summary

Scenario	Summary	Macro impact
1. Bad Grexit	Talks between Greece and its creditors break down over the issue of debt forgiveness. The ECB withdraws support for the Greek banks and Greece decides to leave the euro. The new drachma immediately devalues by 50%, causing Greece to default on its euro obligations. Despite attempts by the ECB to limit contagion, bond markets across the periphery sell off as investors fear a wider break-up of the euro. The euro falls sharply as international investors exit peripheral bond markets and seek the safe haven of the US dollar.	**Deflationary:** Higher bond yields in the periphery and a hit to business and consumer confidence across the whole region result in weaker Eurozone growth. The subsequent fall in demand and drop in the euro impacts global growth and inflation with major trading partners like the UK particularly vulnerable. The Bank of England puts plans to raise rates on hold whilst the Fed push the first increase in the Fed funds out until Q4 next year when the crisis begins to abate.
2. Global reflation	Frustration with the weakness of global activity leads policymakers to increase fiscal stimulus in the world economy. This then triggers an increase in animal spirits which further boosts demand through stronger capex. Global growth reaches 3% this year and 4% next. However, higher commodity prices (oil heading toward $90/barrel) and tighter labour markets push inflation higher by nearly 1% in 2016.	**Reflationary:** Stronger growth and higher inflation compared to the baseline. The Fed raises rates to 4% by end-2016 and starts to actively unwind QE by reducing its balance sheet. Higher wage and price inflation is welcomed in Japan as the economy approaches its 2% inflation target, with the BoJ likely to signal a tapering of QQE. Inflation concerns result in tighter monetary policy in the emerging markets with all the BRIC economies raising rates in 2016
3. Oil lower for longer	Saudi Arabia becomes frustrated at the slow response of US oil production and drives prices lower in an effort to make a permanent impact on US shale producers. Meanwhile, Iraq and Russia continue to grow production. This means a significant period of low prices with Brent crude falling to just below $40 by end-2015 and remaining there through 2016.	**Recovery:** Better growth/ lower inflation especially for oil-consuming advanced economies. For the emerging economies, activity is only marginally better. Lower inflation allows the Fed to delay slightly, but interest rates still rise. The rate profile is also lower in China, Brazil and India, but Russia has to keep policy tighter to stabilise the currency.
4. US recession	The US economy tips into recession following the announcement by a large firm that their profits have been overstated and that they are going into liquidation. Corporate confidence and the equity market are badly hit, resulting in widespread retrenchment. Capex and spending on durable goods is curtailed causing US GDP to contract. Weaker demand from the US hits global activity.	**Deflationary:** Weaker global growth and inflation compared to baseline as the fall in US demand hits activity around the world. The fall in inflation is given added impetus by a drop in commodity prices, which then adds to pressure on energy and mining firms. The Fed hikes once in March, but then reverses course as the economy enters into recession. Interest rates are generally lower around the world.
5. China hard landing	The equity market collapses despite government efforts, inflicting losses and a crisis of confidence across the financial sector. With government credibility crushed, bank guarantees are called into question and bank runs begin. Lending activity halts and the housing market slumps, impacting consumption and investment. Growth in China slows to less than 5% this year and under 3% in 2016.	**Deflationary:** Global growth slows as China demand weakens with commodity producers hit hardest. However, the fall in commodity prices will push down inflation to the benefit of consumers. Monetary policy is likely to ease or stay on hold while the deflationary shock works through the world economy.
6. Fed behind the curve	Concerns about the strength of the economic recovery and impact of tighter monetary policy causes the Fed to delay raising rates until H2 2016. As the labour market continues to tighten, wages accelerate and inflation increases. US rates then rise more rapidly but still end 2016 at 1.5%, lower than in the baseline. Interest rates would continue to rise in 2017 as the Fed battles to bring inflation under control.	**Reflationary in 2016:** Stronger growth and higher inflation compared to the baseline. Note that this scenario will turn stagflationary in 2017 as growth slows whilst inflation remains elevated. Better growth in the US provides a modest stimulus to activity elsewhere, however this is likely to be tempered by a more volatile financial environment with long yields rising as inflation expectations rise.
7. Tightening tantrum	Bond markets sell off in response to Fed tightening with US 10-year Treasury yields rising 200 basis points compared to the baseline. This has a knock on effect on the rest of the world as yields rise in both the developed and emerging markets. Equity markets and risk assets generally weaken as the search for yield begins to reverse causing capital outflows from economies with weak external accounts and negative wealth effects.	**Deflationary:** Weaker growth and inflation vs. baseline. Economic weakness causes the Fed to bring its tightening cycle to an early end with rates peaking at 1% and then reversing toward the end of 2016 as further stimulus is required. Emerging markets experience weaker growth, but are more resilient than in the 2013 "taper tantrum" given improvements in their external financing requirements. Global policy rates are generally lower by end-2016.

Source: Schroders Economics, August 15, 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Strategy: Macro and market consequences of a China hard landing

Poor quarter for risk assets as China dominates sentiment

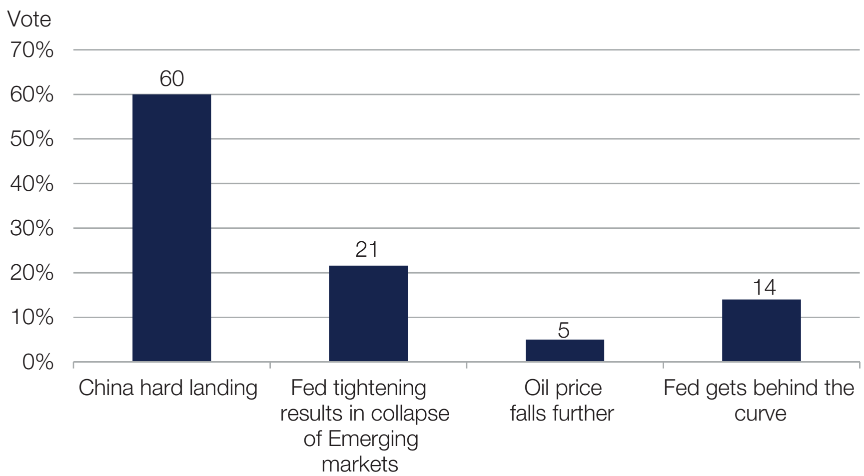
Risk assets suffered during the third quarter with both developed and emerging market equities falling as concerns over global growth increased. Some of the biggest falls were seen in commodity markets where we saw renewed weakness in energy as well as significant declines in agriculture and industrial metals. Government bonds proved to be the safe haven with yields declining across the developed markets. However, bond performance deteriorated further along the risk curve with emerging market bonds and credit markets experiencing a more mixed quarter (see table on page 28 for a full breakdown).

The catalyst for the turn in sentiment was China, where confidence in the ability of the authorities was shaken by events in August. First, they caught markets by surprise with a modest devaluation of the CNY and, second, a sharp fall in the A-share equity market was met with a hasty response. Investors were left with the sense that the Chinese economy was in a worse state than previously thought and that the authorities were losing control.

Such concerns were reflected in our recent European conference where clients said they saw a hard landing in China as the biggest tail risk facing the world economy (see chart 4). Our asset allocation committee has the same concern and the decision by the Fed in September not to raise rates was heavily influenced by developments in the world's second largest economy.

Chart 4: Survey shows China risk dominates investor sentiment

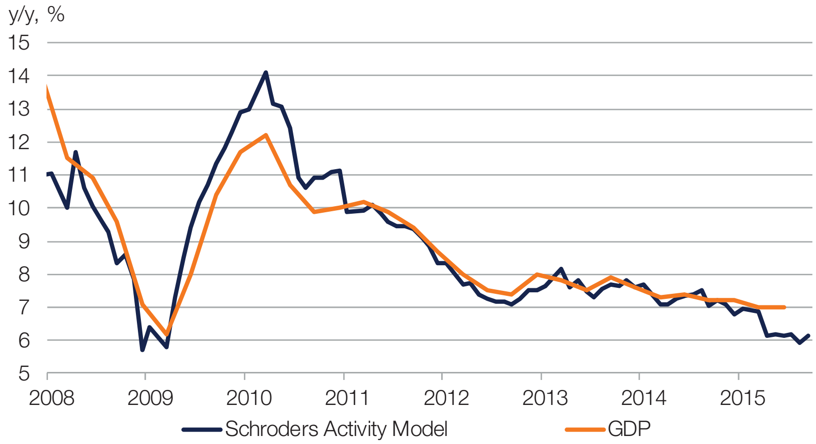
The biggest risk to the world economy is:



Source: Schroders Investment Conference, September 17, 2016. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Our central view on China remains that the economy will continue to struggle in coming quarters, but will not experience a sudden collapse. This is supported by our G-tracker (chart 5) which shows the economy slowing, but not collapsing. The picture is better than that shown by indicators such as the Li Keqiang index, which is biased toward heavy industry and the "old" China of the state-owned enterprises (SOEs). These dinosaurs are a drag on Chinese and global activity, but to solely focus on them is to ignore the more dynamic service and property sectors which represent about two-thirds of activity and are better captured in our tracker.

Chart 5: China: slowdown not slump



Source: Schroders Economics Group, September 29, 2015. Total return in USD. Performance shown is past performance. Past performance is not indicative of future performance. The value of an investment can go up/down and is not guaranteed. Indices shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

China's authorities are now preparing further fiscal stimulus which should be apparent in the growth figures in coming months. Nonetheless, the risk of a hard landing has risen over the quarter and we now focus more closely on its impact on the rest of the world.

Impact of a China hard landing

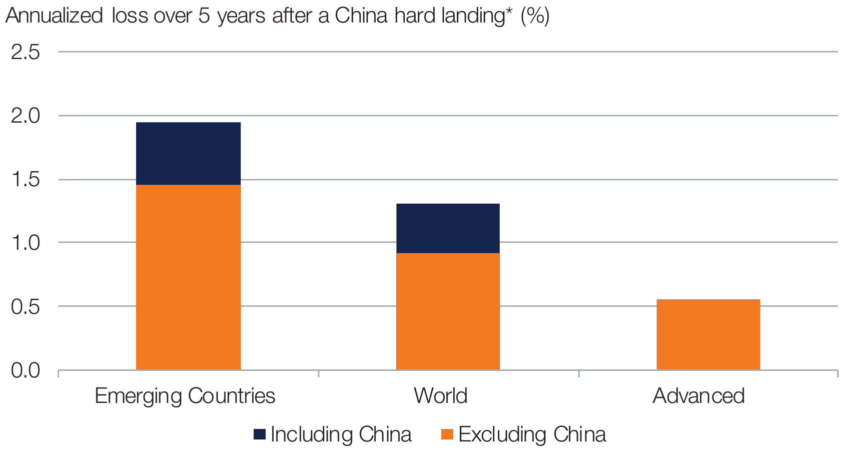
Analysis from macro models[1] shows that the emerging markets would feel the brunt of a China hard landing. In this analysis a hard landing is primarily generated by a slowdown in investment and is defined as a slowdown in Chinese GDP growth to 3% by 2017 where it then remains until the end of 2019. This is compared with a base case where growth slows more gradually to 6.4% by end-2019.

Emerging economies feel the brunt of the hit from China

On this basis. global growth is just over 1% per annum (p.a.) weaker compared to the base, with the emerging markets (EM) some 2% p.a. weaker. Much of this is due to the slowdown in China itself, but even excluding China, the emerging economies grow at 1.5% p.a. less than in the base case. For the advanced economies, the hit is 0.5% p.a., not insignificant but considerably less and such that the growth gap between emerging and developed economies narrows (chart 6).

1 For example, see Towards Recoupling? Assessing the Global Impact of a Chinese Hard Landing through Trade and Commodity Price Channels. Ludovic Gauvin and Cyril Rebillard. Banque de France July 2015.

Chart 6: Impact of hypothetical China hard landing scenario on global activity



Source: Banque de France, July 2015. *China hard landing assumes Chinese GDP growth falls over 2 years to 3% y/y and then remains at that level for the rest of the forecast horizon compared to base where economy slows to 6.4% by end-2019. Regions shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell. There can be no guarantee that these trends or event will occur.

The transmission mechanism is initially through lower oil and metals prices which hit the value of exports and fiscal balances in the commodity exporters. Weaker incomes then result in weaker exports generally to China, particularly hitting China's geographical neighbors in Asia. Investment is then cut in the commodity sector and by governments as fiscal constraints bite. Negative multiplier effects are then likely to hit trade further. Finally, an appreciation of the US dollar will hit those economies who are pegged or closely linked to the US currency.

Japan and Germany are most vulnerable of the developed economies

Looking in more detail at the country breakdown, we can see that cutbacks in investment account for much of the reduction in growth in commodity-rich Brazil and Russia. For India it is a loss of exports that has the greater effect on GDP. Amongst the developed economies, Japan is most affected by nature of its close trade links to China (18% of exports) and suffers annual losses of just over 1% p.a. However, Germany is not far behind as weaker Chinese demand hits trade in capital goods and cars. Meanwhile, the impact on France, the UK and US is considerably less (chart 7).

Chart 7: Impact of China hard landing – country breakdown

Source: Banque de France, July 2015. Schroders. Countries shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell. There can be no guarantee that these trends or event will occur.

These effects probably understate the full impact as they do not take account of financial linkages. For example, the hard landing is also likely to trigger an increase in risk aversion, hitting global equity markets as growth expectations are revised down. Investors would also be alarmed if the Chinese authorities responded by devaluing the CNY. Although China would see this as an attempt to boost growth, we believe investors would see it as another leg in the currency wars with adverse impacts on the rest of the world.

The central bank "put" is becoming less credible

Central banks: running out of ammo?

More generally, there is a concern that the ability of central banks to respond to adverse shocks is constrained: interest rates are already at, or close to zero, and there are doubts about the effectiveness of further QE. Even in the UK, where the economy is performing reasonably well, the Bank of England's chief economist is talking of negative interest rates and the new leader of the Opposition has proposed "Peoples" QE where the Bank of England prints money to directly fund infrastructure spending. We seem to be moving closer to Milton Friedman's helicopter money.

From an investor's perspective, such talk is not encouraging and is consistent with an increased risk premium on equities and other assets that rely on economic growth. The central bank "put" whereby monetary policy can underwrite growth for investors is becoming less credible as the authorities begin to run out of ammunition.

Fed doves rule the roost

Reassessing the Fed rate path

Such considerations would have been in the minds of the US Fed when they decided to leave policy on hold in September. Citing global factors, the Fed said it wanted to see a further improvement in the labour market before it could be confident that inflation would return to its 2% target. In subsequent comments, Bill Dudley of the New York Federal Reserve and Fed Chair Janet Yellen have both indicated that given the deflationary pressures from abroad, they would deliberately look to overheat the jobs market in order to gain the confidence that inflation will return to target.

Although Yellen has said she expects to raise rates this year, the decision appears to be more data dependent and in the absence of a rapid turn in China and the emerging markets, this timescale seems unlikely. Unemployment is expected to fall further in the US in coming months (as in our baseline), but the hurdle to trigger a Fed lift-off has been raised by the weakness of the global environment. We have now pushed out our forecast for the first Fed funds increase to March next year and flattened the rate trajectory such that rates reach 1% by end-2016. Our previous forecast had rates at 2% at this point and we still believe that such a tightening would be appropriate for the baseline view of the US. The change reflects the rise in the US dollar, greater global risks and a recognition that the Yellen Fed is simply at the dovish end of the spectrum.

Asia crisis in late 1990s triggered fears of global deflation…

World economy looking more like 1997

There have been comparisons with 2013 recently with the Fed ducking a decision to tighten policy in response to market pressures. Back then it was the decision to start to taper QE, which was subsequently delayed until the following January. However, today's global environment seems more like that of the late 1990s, specifically 1997-98 when the Asian financial crisis eventually caused the Fed to pause in its tightening cycle and then cut rates in 1998 following the Russian default. There were similar concerns then about deflation and a global recession.

In the event, that recession did not materialize but the hit to emerging markets was significant with growth decelerating from 6.1% to 2.5% between 1997 and 1998. Many Asian economies experienced significant falls in GDP. With the exception of Japan though, the developed economies maintained robust growth (see table 3).

Table 3: 1997 – 98 crisis vs. base and China hard landing scenario

GDP y/y%	1997	1998	2015f	2016f	(2016)
DM	3.5	3.0	1.8	2.2	(1.3)
EM	6.1	2.5	3.4	4.1	(2.2)
China	9.3	7.8	6.8	6.4	(2.8)
World	4.5	2.8	2.4	2.9	(1.6)

2015f and 2016f are baseline forecast, figures in brackets are Schroders China hard landing scenario for 2016.

Source: Thomson Datastream, Schroders forecasts October 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Regions shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

…and led to the Great Moderation: an extended period of low inflation and interest rates

The 1997-98 experience suggests that the developed markets might sail through an emerging market crisis. However, as can be seen in table 3, we are starting from a slower rate of global growth (circa.2% rather than 3.5% in the developed world), today the emerging markets are a bigger part of global GDP and as discussed above, the central banks have less ammunition to fight a downturn. Global growth rebounded rapidly after the 1997-98 crisis, an outcome that looks less likely today. So although the scale of the shock would be less than in 1997-98, the deflationary risks remain high.

One consequence of the Asia financial crisis was that it brought a long period of low inflation sometimes known as the "Great Moderation". The emerging economies devalued much as they are doing today, and as their domestic economies were squeezed by a withdrawal of capital they re-orientated their efforts towards exporting. We see evidence of the latter in the steel industry today where Korea and India have put on anti-dumping legislation to protect their industries from Chinese exports.

Investment consequences

We should reiterate that a China hard landing is not our central view, but the risk of such an event means investors should be considering the risk and appropriate hedges. In this respect, a hard landing will hit growth, suppress inflation and keep central banks on hold for longer. Lower policy rates will keep developed market growth skewed toward services, property and domestic activity in general. This would suggest that investors keep some duration in their portfolios in the form of long-dated government bonds. In equities, investors should prefer growth over value and, where possible skew stock selection towards domestic rather than international firms.

Such an environment also means we could see more financial market bubbles (as in the late 1990s) and, given the scarcity of global demand, the currency wars could continue as countries seek levers to boost growth. In this respect the biggest risk would be that we see a further and more significant CNY devaluation.

The conspiracy theorists believe that the Fed was influenced by geopolitics such that the decision not to lift-off in September was in return for promises from China not to devalue the CNY. President Obama was meeting his Chinese counterpart Xi Jinping at around the same time in Washington. Of course, the suggestion undermines the independence of the Fed, but nonetheless it highlights the interdependence of financial decisions in today's globalized economy.

Keith Wade, October 8, 2015

Seven-year asset class forecast returns
2015 update

Introduction
Our seven-year returns forecast builds on the same methodology that has been applied in previous years and has been updated in line with current market conditions and changes to the forecasts provided by the Global Economics team. This document compares our current return forecasts to those last published in July 2014. Full details of our methodology can be found in the back of this report.

Summary
The table below summarizes our asset class forecasts for the next seven years. Note the generally negative real returns for cash and bonds, against (in some cases extremely) positive real equity returns. Most credit and alternative investments may also provide positive returns after inflation. Pacific ex Japan equities offer the highest real returns of any asset.

Table 4: Seven-year asset class forecasts (2015 – 2022), % per annum

		Nominal	Inflation	Real
Cash			% p.a.	
US	USD	1.8	2.0	-0.2
UK	GBP	2.2	2.2	0.0
Euro	EUR	1.2	1.4	-0.2
Japan	JPY	0.3	1.2	-0.9
Bonds				
US	USD	2.9	2.0	0.9
UK	GBP	1.4	2.2	-0.8
Euro	EUR	-1.1	1.4	-2.5
Equity				
US (S&P 500)	USD	3.0	2.0	1.0
UK (FT all share)	GBP	5.1	2.2	2.8
Europe ex. UK (DS)	EUR	5.2	1.4	3.8
Japan (DS)	JPY	3.0	1.2	1.8
Pacific ex. Japan (DS)	Local	13.9	3.4	10.2
Emerging Markets (DS)	Local	13.5	5.1	8.1
MSCI World	Local	4.2	1.9	2.3
Credit				
US HY	USD	4.9	2.0	2.8
US IG	USD	4.4	2.0	2.3
UK IG	GBP	2.4	2.2	0.2
EU IG	EUR	-0.1	1.4	-1.4
Alternatives				
EMD$	USD	6.5	2.0	4.4
Commodities	USD	3.3	2.0	1.3
Private Equity	GBP	9.2	2.0	7.1
Hedge Funds	USD	4.2	2.0	2.2
UK Property	GBP	5.4	2.2	3.2
Europe ex UK Property	EUR	6.0	1.4	4.6

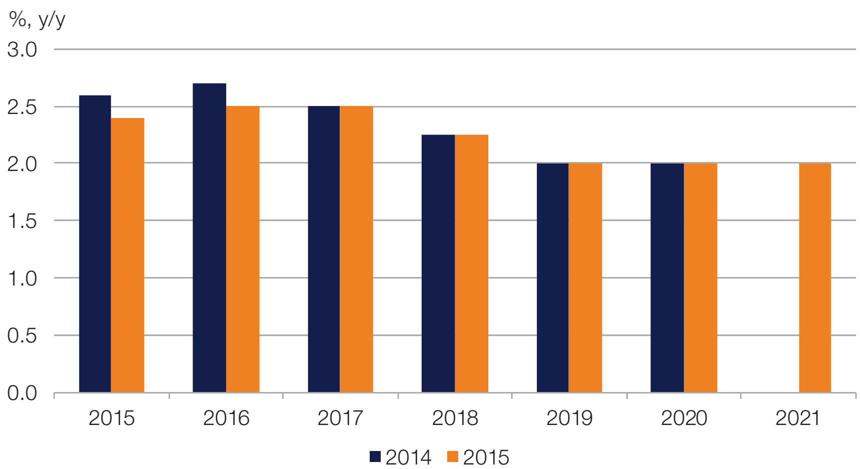
Source: Schroders Economics Group, Schroders Property Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Sectors shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Macro outlook

Our overall growth forecast for the next seven years shows a recovery in the world economy, although one which is sub-par by past standards. We have downgraded our short-term growth forecasts for the US (chart 8) to reflect a more pessimistic outlook for labour force and productivity growth. Demographics are expected to weigh on the participation rate, and we do not see productivity growth returning to pre-crisis rates.

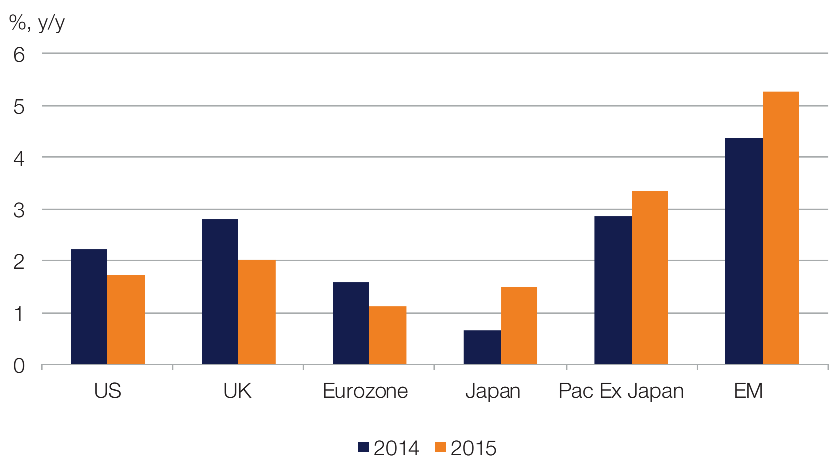
After deflationary pressure from a slowing Chinese economy and softer commodity prices, a lack of reform in a number of major emerging market economies has created supply side bottlenecks and contributed to a persistence of inflation. Emerging markets (EM) economies will have to implement structural reform to tackle their inflation problem, notably Brazil. Japanese inflation has been revised up on the impact of Abenomics, while cheaper oil and commodities have led to downward revisions in the rest of developed markets (DM) (chart 9).

Chart 8: US growth forecast (2015 – 2021 vs. 2014 – 2020)



Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Chart 9: Inflation forecast (2015 – 2021 vs. 2014 – 2020)



Source: Schroders Economics Group July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Regions shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Cash

Our forecasts for cash and bonds are based on the projected path of rates and yields over the next seven years. Real returns are improved compared to those forecasts made in 2013, with the largest upgrades in the Eurozone and Japan, driven chiefly by lower inflation, though higher rates in Europe also contribute. Nonetheless, overall real cash returns remain negative in all regions bar the UK.

Table 5: Cash return forecasts

%p.a.	2015 – 2022			Change from 2014 forecast		
	Nominal Return	CPI	Real Return	Nominal Return	CPI	Real Return
Cash						
US	1.8	2.0	-0.2	-0.4	-0.6	0.2
UK	2.2	2.2	0.0	-0.1	-0.3	0.2
Euro	1.2	1.4	-0.2	0.2	-0.4	0.5
Japan	0.3	1.2	-0.9	-0.2	-0.5	0.4

Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Regions shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Government bonds

We expect real returns on US Treasuries to rise from our previous forecast levels, partly due to lower inflation, though nominal returns are also higher thanks to the recent rise in yields and our expectations of a lower terminal rate in the US. Lower returns are forecast for the UK for the opposite reason; yields have fallen markedly since last year and the rate hike has been pushed out. The same is true for the Eurozone in the wake of QE by the ECB. Expectations of divergent monetary policy have resulted in divergent real returns; US bonds are forecast to generate a positive real return, against negative returns in the UK and Europe.

Table 6: Government bond return forecasts

%p.a.	2015 – 2022			Change from 2014 forecast		
	Nominal	Inflation	Real	Nominal	Inflation	Real
Bonds						
US	2.9	2.0	0.9	0.4	-0.6	1.0
UK	1.4	2.2	-0.8	-1.0	-0.3	-0.7
Euro	-1.1	1.4	-2.5	-0.7	-0.4	-0.3
Japan	0.3	1.2	-0.9	-0.2	-0.5	0.4

Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Sectors shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Equities

Table 7: Equity assumptions

Equity Market	Trend growth of real EPS (p.a.)	PE (t)	Terminal PE
US (S&P 500)	2.4%	20.4	18.5
Japan (DS)	5.1%	18.4	19.5
Pacific ex. Japan (DS)	4.3%	13.6	16.0
Emerging markets (DS)	4.0%	14.6	13.5

Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Indices shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

We model equity returns by assuming that real earnings-per-share (EPS) returns to its long-run trend level by the end of the seven-year period, whilst the valuation metric (price/earnings) returns to a long-run fair value. Four years ago, we considered the effect of a world in which growth is structurally lower, reducing the trend rate of real EPS growth by between 33% (US and EM) and 24% (Pacific ex Japan). We have also reduced trend EPS growth for EM to 4.0%, as China begins to transition away from its investment-led growth model, with negative implications for commodity exporters. China's economy is now slowing, despite government stimulus efforts, and a return to past growth rates seems unlikely. A more recent structural change has been in Japan, where Abenomics and QQE have driven EPS higher. We have applied a Christiano-Fitzgerald filter in an effort to extract the new terminal growth rate. A fuller discussion can be found in the appendix.

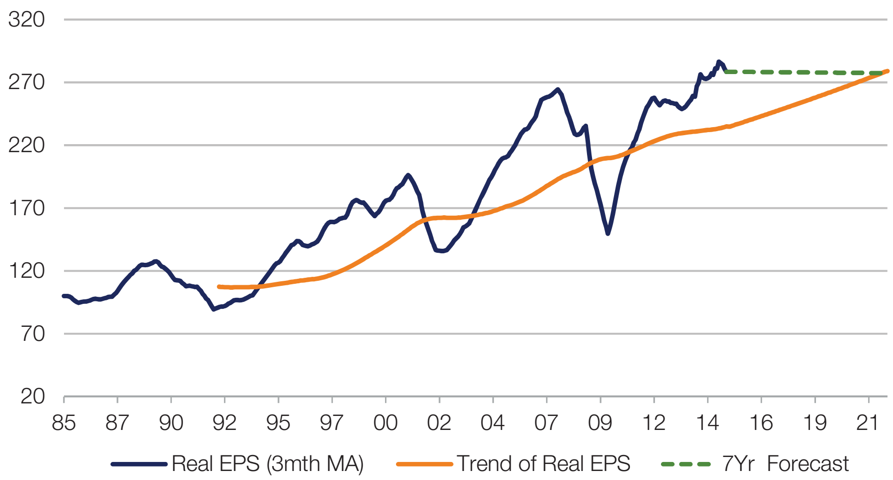
Table 8: Equity market return forecasts

%p.a.	2015 – 2022			Change from 2014 forecast		
	Nominal	Inflation	Real	Nominal	Inflation	Real
Equity						
US (S&P500)	3.0	2.0	1.0	-0.8	-0.6	-0.2
UK (FT all share)	5.1	2.2	2.8	-0.4	-0.3	-0.1
Europe ex.UK (DS)	5.2	1.4	3.8	-0.5	-0.4	-0.1
Japan (DS)	3.0	1.2	1.8	-0.4	-0.5	0.1
Pacific ex Japan (DS)	13.9	3.4	10.2	1.0	0.0	1.0
Emerging markets (DS)	13.5	5.1	8.1	-1.0	-0.2	-0.7
MSCI World	4.2	1.9	2.3	-0.6	-0.5	-0.1

Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Indices shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

With EPS significantly above trend, we expect almost zero EPS growth in the US (chart 10). US valuations, measured by the price-to-earnings (PE) ratio of the market relative to its history, have become more elevated since 2014. In general, market valuations are up from this time last year, the US recovery appears to be on track, growth has picked up in the UK, policy has turned more supportive in Europe and Abenomics has spurred a rally in Japan – a very similar environment to last year. While a below-trend PE is positive for future equity returns due to the implied re-rating, the improvement in PE ratios brings them closer to their trend levels, which is less positive for future equity returns. Nonetheless, equity returns remain positive, and are set to continue to outperform government bonds and cash though in the US, equities only just maintain their edge.

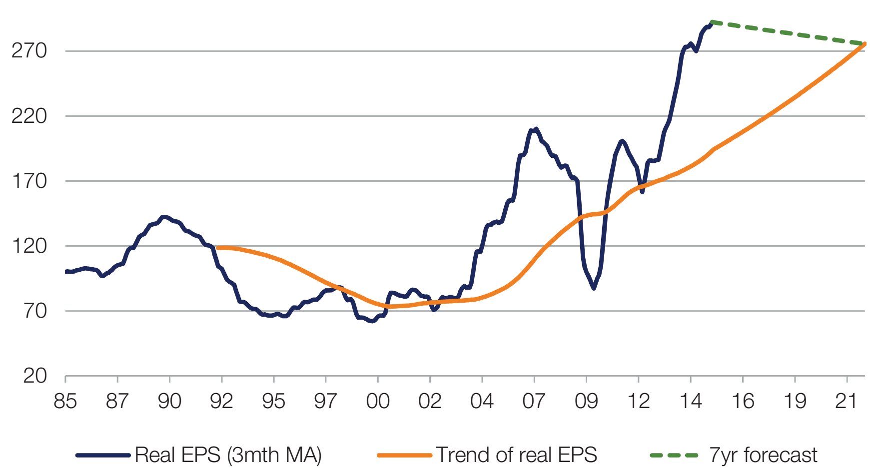
Chart 10: US earnings relative to trend



Source: Thomson Datastream, Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

In Japan, equity valuations are much closer to trend and so have less scope for further gains. In addition, we have seen a sharp increase in real EPS (chart 11), implying a greater decline as it returns to trend. However, as we have upwardly revised our estimate of long-run EPS growth, we end up with a slightly higher return to Japanese equities than in 2014.

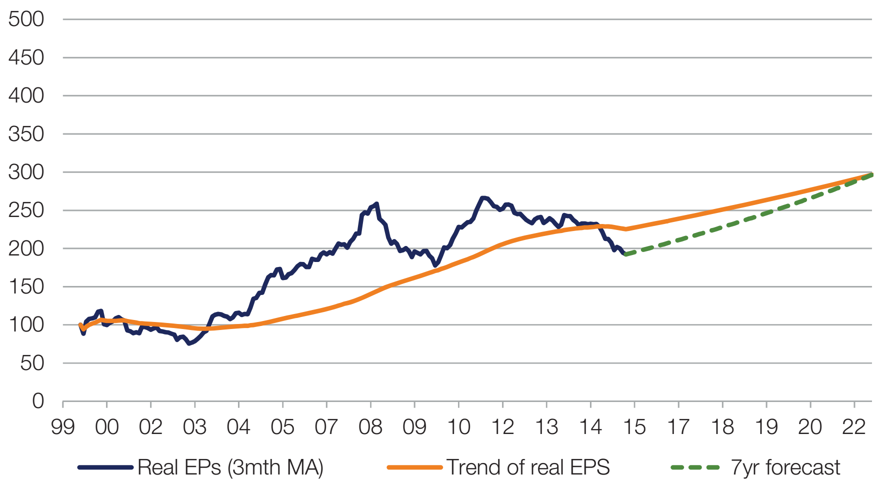
Chart 11: Japan earnings relative to trend



Source: Thomson Datastream, Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Our downgrade of trend EPS growth for EM in 2013 was based on the belief that the EM growth story is structurally weaker now that China's investment-led model is reaching the limits of its ability to generate growth. Demand for commodities, which had supported growth in many EM markets, will be much slower in the future. Sure enough, this has played out as expected since the adjustments were made. Meanwhile, EPS looks to be slightly below current trend levels, so a return to trend EPS growth implies accelerated EPS growth over the medium term (chart 12). Valuations, based on PE, are above trend, which weighs on returns over the forecast period.

Chart 12: Emerging market earnings relative to trend



Source: Thomson Datastream, Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Credit

Credit return forecasts are calculated as a spread over a relevant government bond, and so our assumptions for Treasury yields have increased our credit return assumptions for both US investment grade and high yield credit. US credit now offers a higher return than US equities as a result. Similarly, downgrades to the outlook for UK and Eurozone bonds have a knock-on effect for investment grade credit in those markets.

Table 9: Credit market return forecasts

%p.a.	2015 – 2022			Change from 2014 forecast		
	Nominal	Inflation	Real	Nominal	Inflation	Real
Credit						
US HY	4.9	2.0	2.8	1.1	-0.6	1.6
US IG	4.4	2.0	2.3	-0.1	-0.6	0.4
UK IG	2.4	2.2	0.2	-2.2	-0.3	-1.9
EU IG	-0.1	1.4	-1.4	-1.5	-0.4	-1.1

Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Sectors shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Alternatives

Assumed emerging markets dollar debt (EMD$) returns (table 10) have risen since last July, thanks to higher forecast returns on US Treasuries. The forecast return on commodities has edged lower due to lower US inflation. Our methodology assumes that hedge funds and private equity generate equity-like returns, which we proxy with the MSCI World return. So with equity returns lower, private equity and hedge fund nominal returns fall by the same amount, but real returns are supported by lower inflation. Property forecasts are provided by the Schroders Property Team, and a table detailing their underlying assumptions can be found in the appendix.

Table 10: Alternative asset class return forecasts

%p.a.	2015 – 2022			Change from 2014 forecast		
	Nominal	Inflation	Real	Nominal	Inflation	Real
Alternatives						
EMD$	6.5	2.0	4.4	0.4	-0.6	1.0
Commodities	3.3	2.0	1.3	-1.0	-0.6	-0.4
Private Equity	9.2	2.0	7.1	-0.6	-0.6	0.1
Hedge Funds	4.2	2.0	2.2	-0.6	-0.6	0.0
UK Property	5.4	2.2	3.2	N/A		N/A
Europe ex UK Property	6.0	1.4	4.6	N/A		N/A

Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Sectors shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Conclusions

As in previous years, investors looking for positive real returns should look to equity, credit and alternatives, with Pacific ex Japan equities promising the highest real returns, and EM not far behind. However, an important caveat is the higher level of volatility associated with EM equities when compared to the S&P or FTSE. As always, there is a risk-reward trade-off. Cash and government bonds would act as a hedge against equity market volatility, but are likely to deliver returns below inflation over the medium term.

Craig Botham, Emerging Markets Economist, July 2015

Focus: The economic implications of US share buybacks

Share buybacks have faced criticism

In the second quarter edition of the Global Market Perspective we looked at some of the adverse consequences of QE where we argued that the extended period of low bond yields had encouraged companies to favor distributions to shareholders at the expense of capital expenditure. In this research note we focus on one aspect of this: share buybacks.

The process where companies buy their own shares to boost shareholder returns has attracted much criticism in recent years, particularly in the US where currently corporates are cash rich and profit levels as a share of nominal GDP are close to record levels. We briefly discuss the motivations and driving factors behind share repurchases and touch upon the implications wide-scale repurchases may have on the broader US economy.

Share buyback theory leads to conflicting signals for investors

Buybacks can signal unrecognized future profitability

The reasoning behind share buybacks has long been a subject of debate with no clear conclusion as to whether they can be viewed as positive or negative from an investor's standpoint. In short, the arguments to support share repurchases claim that the act of buying back shares signals to the market that management believe their stock to be undervalued and that the market underestimates future profitability. Added to this, others believe share buybacks act as a form of takeover defense during times of high acquisition activity. Furthermore, share repurchases offer a more flexible payout policy whereby they can be reduced easily without the market responding negatively to such an announcement, in contrast to dividends which if cut, the market typically views unfavorably.

An additional advantage of share buybacks over dividends can also materialize due to the varying tax treatment of capital gains and dividends. For example, in the US, ordinary dividends are taxed at an individual's marginal income tax rate, whereas long-term capital gains are taxed at a rate that is generally lower than the marginal income tax rate. Despite dividends being subject to the same tax rate as long-term capital gains, where tax rates on capital appreciation are lower than dividends, companies will be tempted to favor buybacks as a shareholder payout.

Those that argue against share buybacks are of the opinion that companies returning cash to shareholders through repurchases do so on the grounds of having limited investment opportunities available to them, thus signaling potentially slower future growth. Added to this, by reducing the number of shares available, ceteris paribus, earnings-per-share is boosted, a variable in which both the share price performance and, increasingly, management remuneration is based upon. It could be viewed that management turn to buybacks in times of slowing growth in order to artificially create a sense of strong trading performance, consequently pleasing shareholders and increasing stock-based compensation.

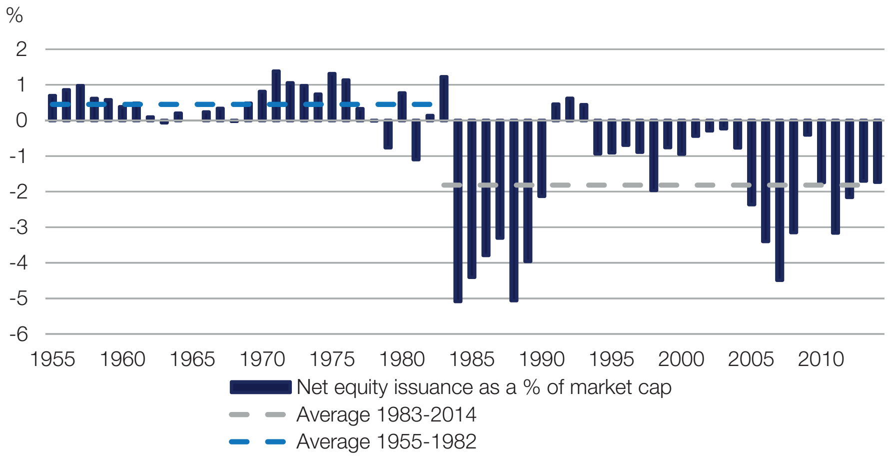
Changing US regulation has encouraged share repurchases

Observing the data, we see a noticeable shift in the form in which US-based companies look to return cash to shareholders. A visible change in buyback activity took place post-1982 following the implementation of Rule 10b 18 in the US. Introduced by the Securities Exchange Commission (SEC), the legislation enabled a corporate's board to authorise senior executives to buy back a certain dollar amount of stock over a specified or open-ended timeframe. This facilitated management's ability to repurchase shares whilst simultaneously reducing any doubts of being accused of share price manipulation.

The extent to which this regulation has changed corporate behavior can be seen in chart 14. From 1955 to 1982 the average net issuance stood at 0.45% p.a. for a non-financial corporate equity. This compares to -1.8% p.a. for the period 1983 to 2014, illustrating the clear change in corporate payout policy.[2] In fact, a collection of studies find that share repurchases have surpassed dividends as companies' favored form of returning funds to shareholders in the US. For example, over the last 15 years the aggregate amount of cash devoted to share repurchases for companies in the S&P 500 has exceeded that of dividends in 51 of the 60 quarters.[3]

2 (Prince, C. J. (2008), 'The Buyback Bust?', Chief Executive, Nov/Dec, pp. 52-55).
3 Source: Bloomberg

Chart 14: US non-financial corporate net equity issuance

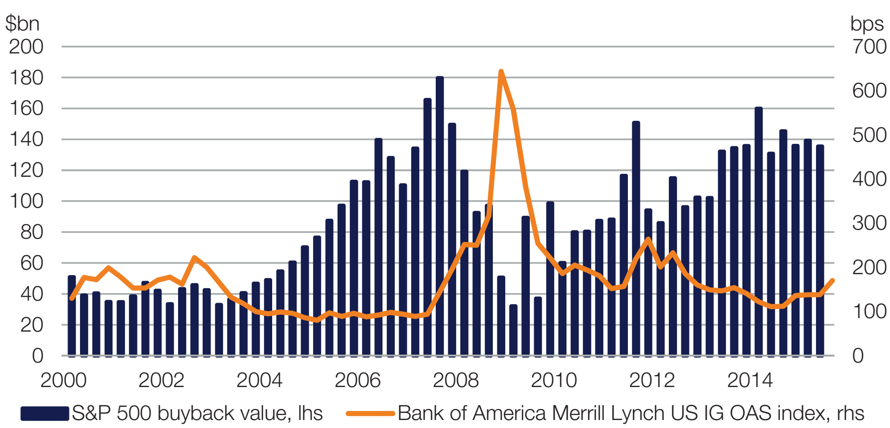


Source: US Flow of Funds, Schroders Economics, October 1, 2015. Does not reflect any actual portfolio.

Cheap debt is often used to fund buyback activity

Aside from regulation influencing buybacks, an important driver to share repurchases is the availability of credit. It is widely known that companies look to credit markets to fund such purchases, taking advantage of low credit premiums to buy back stock in order to bring down the cost of capital, as seen in chart 15. Furthermore from an EPS perspective, assuming earnings yields are higher than the company's after-tax interest cost, taking on debt to repurchase shares remains an accretive exercise. The extent of levering up corporate balance sheets in order to buy back shares was less marked in the years leading up to the bursting of the dotcom bubble but became more evident pre the Global Financial Crisis. No doubt more recently, quantitative easing has played a pivotal role in fuelling the trend of repurchases as lower credit premiums have facilitated companies issuing debt with low coupons.

Chart 15: Low credit premiums encourage debt-fuelled buybacks



Source: Thomson Datastream, Bloomberg, Schroders Economics, October 2, 2015

Shifting the focus of corporate financing towards inexpensive debt and away from equity in the short term could be seen as an efficient way to bring down the weighted average cost of capital. Signs that the period of relatively cheap debt financing has come to an end have started to emerge, however. Although the slump in commodity prices and high level of issuance this year has raised credit risk premia, the prospect of a US rate rise has also begun to be priced into corporate bond yields. As policy normalization begins to unfold, debt sustainability for those companies that have levered up heavily to fund share repurchases may be brought into question.

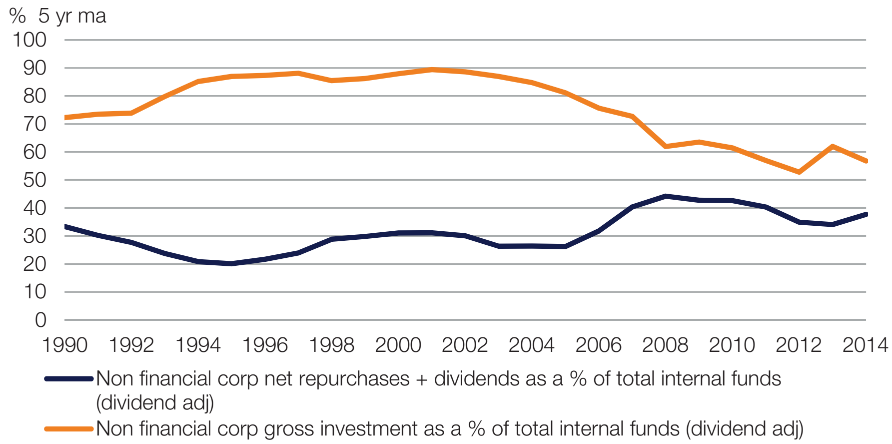
Repurchasing shares can come at the expense of investment

Adverse consequences of share buybacks: impact on capital spending

Considering the broader implications of share buybacks on the US economy, there is an argument that large scale repurchases stifle investment given the historical reliance on retained earnings to fund such investment. The progressive decline in capital investment over the last 15 years (as measured by non-financial corporate gross investment as a percentage of total internal funds, adjusted for dividends) has coincided with an increased tendency to repay cash to shareholders via both dividends and more importantly share repurchases, as seen in chart 16.

The leftover earnings used to fund fixed asset investment has therefore noticeably diminished. Consequently the average age of non-residential fixed assets held by US corporates climbed to its highest level in over 40 years in 2013. This observation must however be considered in the context of a changing US economy. Over the last several decades there has been a shift from manufacturing to services together with disproportionate growth in the digital and internet economy, traditionally a less capital intensive sector.

Chart 16: Repurchases reduce available funds for investment



Source: US Flow of Funds, Schroders Economics, September 10, 2015.

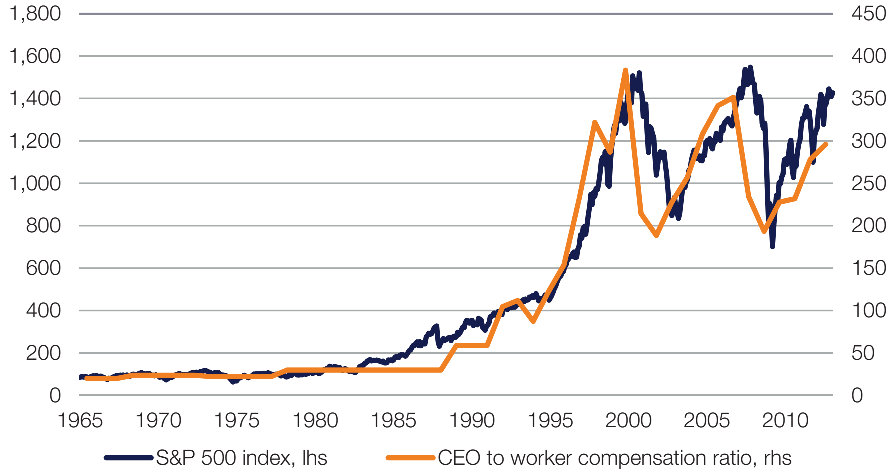
This shift in corporate attitudes to investment poses a potential strain on economic growth and competitiveness. Not only is the productive capacity of the economy likely to shrink, holding everything else constant, long-term shareholder returns are likely to suffer if companies fail to invest for the future. Exacerbating the problem of prioritizing share buybacks over investment has been the tepid economic recovery in the US post the Global Financial Crisis. As CEO confidence has failed to return to its pre-crisis levels, many management teams have felt the risks of committing to investment projects have outweighed the possible rewards. As a result, capital expenditure in general has been postponed to a later date.

CEO stock-based pay encourages financial engineering

Effects on income distribution

Alongside this, in the past, national income was more evenly distributed between workers and senior management. With the rise of stock-based pay, buybacks have provided a means for corporate executives to increase their compensation levels relative to the remaining workforce via financial engineering. By boosting EPS growth through share repurchases, stock options become increasingly valuable to senior management. According to the Economic Policy Institute, from 1978 to 2013 the inflation-adjusted growth rate of US CEO compensation stood at 937%, compared to just 10.2% for a typical worker over the same period. With this in mind, the CEO-to-worker compensation ratio has risen from 29.9 in 1978 to 295.9 in 2013.

Chart 17: US CEO remuneration is closely tied to stockmarket movements



Source: Thomson Datastream, Economic Policy Institute, Schroders Economics, October 2, 2015. For illustrative purposes only. Performance shown is past performance. Past performance is not a guide to future performance.

Chart 17 highlights the relationship between the performance of the US equity market, as measured by the S&P 500 index, and CEO pay relative to the average worker. As stock options and grants have gained popularity overtime as a form of CEO compensation, total executive pay has become heavily linked to stockmarket performance, giving CEOs an incentive to repurchase shares for their own benefit. By placing a greater emphasis on extracting value rather than creating it, shareholders and CEOs have contributed towards greater income inequality in the US.

Summary

Changing regulation in the US initiated a structural change in corporate payout policy in the early 1980s. Since then, a number of factors including the availability of cheap credit and the increased prevalence of performance-related pay in the form of stock options and grants, have contributed to the share buyback wave in the US. Despite corporates defending their repurchase actions on the grounds of optimizing capital structure and having limited confidence in investment projects, wide-scale buybacks have broader economic implications than many might initially believe. The use of retained earnings to fund large buyback programs can come at the expense of investment, a factor that could influence long-run growth and competitiveness. We believe that companies should consider not just the short-term implications of buybacks such as boosting EPS, but also the longer-term consequences of diverting funds from capital expenditure.

Marcus Jennings, Junior Economist, October 2015

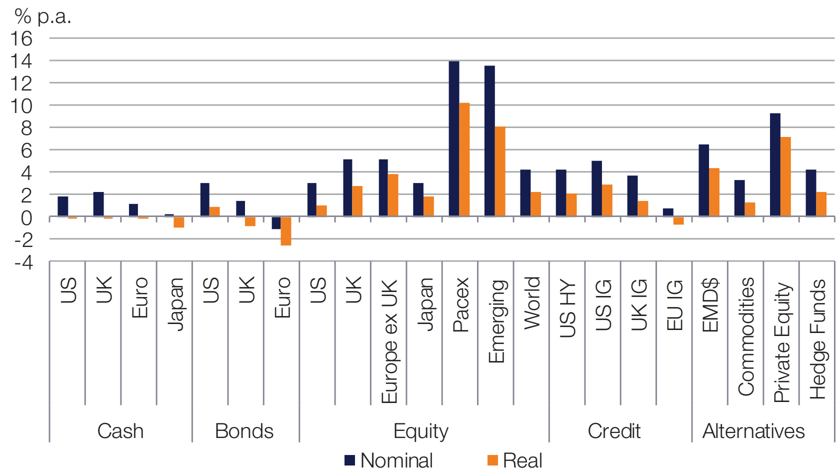
Market Returns

	Total returns	Currency	September	Q3	YTD
Equity	US S&P 500	USD	-2.5	-6.4	-5.3
	UK FTSE 100	GBP	-2.9	-6.1	-4.9
	EURO STOXX 50	EUR	-5.0	-9.2	1.4
	German DAX	EUR	-5.8	-11.7	-1.5
	Spain IBEX	EUR	-6.8	-10.6	-4.4
	Italy FTSE MIB	EUR	-2.6	-4.9	14.9
	Japan TOPIX	JPY	-7.5	-12.8	2.0
	Australia S&P/ ASX 200	AUD	-3.0	-6.6	-3.7
	HK HANG SENG	HKD	-3.2	-19.8	-8.9
EM equity	MSCI EM	LOCAL	-1.7	-12.0	-6.9
	MSCI China	CNY	-1.9	-22.7	-11.3
	MSCI Russia	RUB	-5.6	-2.6	17.3
	MSCI India	INR	-0.8	-3.9	-1.5
	MSCI Brazil	BRL	-3.7	-14.8	-9.0
Governments (10-year)	US Treasuries	USD	1.4	3.0	2.5
	UK Gilts	GBP	1.8	3.8	2.0
	German Bunds	EUR	2.0	2.2	0.5
	Japan JGBs	JPY	0.5	1.3	0.8
	Australia bonds	AUD	0.3	4.0	3.5
	Canada bonds	CAD	0.4	2.5	4.8
Commodity	GSCI Commodity	USD	-6.3	-19.3	-19.5
	GSCI Precious metals	USD	-1.4	-5.2	-6.4
	GSCI Industrial metals	USD	-1.4	-9.9	-19.2
	GSCI Agriculture	USD	3.1	-12.9	-13.7
	GSCI Energy	USD	-10.0	-24.4	-22.2
	Oil (Brent)	USD	-4.5	-22.4	-14.9
	Gold	USD	-1.4	-4.7	-6.1
Credit	Bank of America/ Merrill Lynch US high yield master	USD	-2.6	-4.9	-2.5
	Bank of America/ Merrill Lynch US corporate master	USD	0.5	0.4	-0.1
EMD	JP Morgan Global EMBI	USD	-1.4	-2.0	-0.3
	JP Morgan EMBI+	USD	-1.1	-0.9	0.1
	JP Morgan ELMI+	LOCAL	0.5	1.1	3.7
Currencies	EUR/ USD		-0.3	0.2	-7.9
	EUR/JPY		-1.4	-1.9	-7.5
	JPY/ USD		1.1	2.1	-0.4
	GBP/USD		-1.4	-3.7	-2.8
	AUD/USD		-1.2	-8.5	-12.8
	CAD/USD		-1.3	-6.1	-12.4

Source: Thomson Datastream, Bloomberg, September 30, 2015. Note: Blue to red shading represents highest to lowest performance in each time period. Performance shown is past performance. Past performance is not indicative of future performance. The value of an investment can go up/ down and is not guaranteed. Indices shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell. Investors cannot invest directly in any index. Sectors shown are for illustrative purposes only and should not be viewed as a recommendation to buy/sell. Definitions: EUR=Euro, USD=US dollar, JPY=Japanese yen, GBP=British pound, AUD=Australian dollar, CAD=Canadian dollar

Appendix 1 – Forecast overview

Chart 13: 7 year return forecasts (2015 – 2022)



Source: Schroders Economics Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Sectors/regions shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

	Change (2015 – 2014)		
	Nominal	Inflation	Real
Cash			
US	-0.4	-0.6	0.2
UK	-0.1	-0.3	0.2
Euro	0.2	-0.4	0.5
Japan	-0.2	-0.5	0.4
Bonds			
US	0.4	-0.6	1.0
UK	-1.0	-0.3	-0.7
Euro	-0.7	-0.4	-0.3
Equity			
US (S&P 500)	-0.8	-0.6	-0.2
UK (FT all share)	-0.4	-0.3	-0.1
Europe ex. UK (DS)	-0.5	-0.4	-0.1
Japan (DS)	-0.4	-0.5	0.1
Pacific ex. Japan (DS)	1.0	0.0	1.0
Emerging Markets (DS)	-1.0	-0.2	-0.7
MSCI World	-0.6	-0.5	-0.1
Credit			
US HY	1.1	-0.6	1.6
US IG	-0.1	-0.6	0.4
UK IG	-2.2	-0.3	-1.9
EU IG	-1.5	-0.4	-1.1
Alternatives			
EMD$	0.4	-0.6	1.0
Commodities	-1.0	-0.6	-0.4
Private Equity	-0.6	-0.6	0.1
Hedge Funds	-0.6	-0.6	0.0

Source: Schroders Economics Group, Schroders Property Group, July 2015. The opinions stated include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized. Sectors shown for illustrative purposes only and should not be viewed as a recommendation to buy/sell.

Appendix 2 – Property returns

Schroders Property Team assumptions

Component	UK	Euro
Future income return	4.9	5.25
Potential income growth already in portfolio	0.25	0.25
Rental growth	2	2
Depreciation	-2	-0.75
Refurbishment capital expenditure	-0.7	-1.25
Adjustment for depreciation and modernization	1.7	1.25
Stamp Duty & Trading Fees	-0.75	-0.75
Nominal Total Return	**5.4**	**6.0**
of which:		
Yield	4.9	5.25
Capital Gain (Expected Income Growth)	0.5	0.75

Source: Schroders' Property Team. July 2015.

Appendix 3 – Forecast methodology

Cash

Cash returns represent the annualised cash return anticipated over the next seven years based on an explicit interest rate profile.

Government Bonds

Government bond represent the annualised return anticipated over the next seven years based on explicit year-end government bond yields.

Credit

High yield

Credit returns are based on our seven-year US growth forecast. There is a good relationship between US growth and high yield spreads. We use this relationship to forecast the evolution of spreads over seven years. We combine this with our government bond forecasts to provide an estimate of high yield returns.

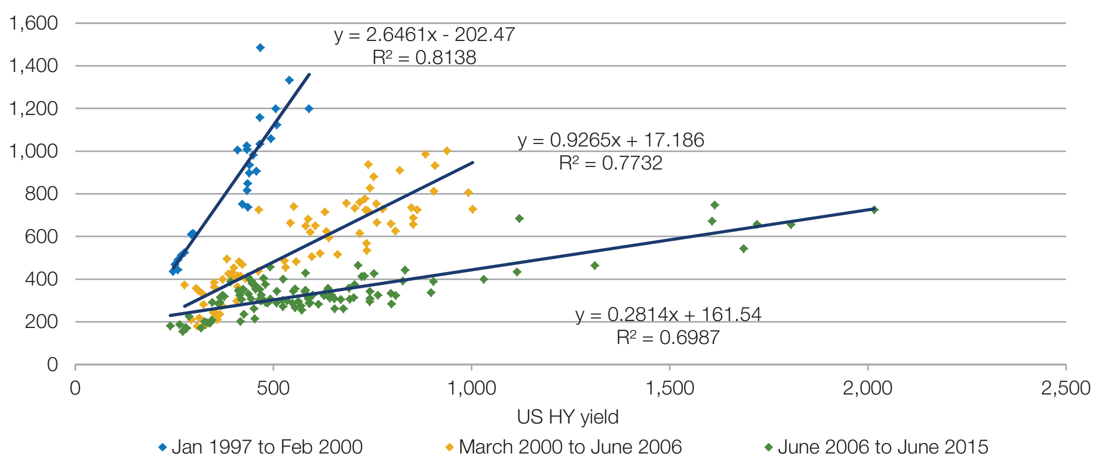
Investment grade

Investment grade spreads track high yield spreads closely. We use this relationship to forecast investment grade spreads. We combine this with our government bond forecasts to provide an estimate of investment grade returns.

EMD$

Emerging market debt also has a close relationship with high yield spreads. However this relationship has gone through three distinct phases:

1. 1997 – 2000 where there were problems in the EMD market as several countries went through a restructure or default
2. 2000 – 2006 where both high yield and EMD markets functioned normally
3. 2006 – 2014 where high yield spreads went from being very tight to an historic wide, whereas EMD spreads remained reasonably well supported



Source: Thomson Datastream, Schroders Economics Group, July 2015.

We believe that with the increasing quality of EMD debt (countries are gradually being upgrade to investment grade) we will see the relationship between EMD spreads and high yield spreads settle between phases two and three outlined above.

Commodities

We break our commodity forecast into 4 components.

Commodity Returns = US inflation + Index rebalancing – Roll yield + US cash.

We assume that
- In aggregate commodity prices broadly track US inflation
- That commodity prices mean revert over time, as capacity will be increased where there is a production shortage. Rebalancing the index therefore generates excess return by booking temporary price gains
- The roll yield will be negative due to synthetic storage costs
- Investors receive the return on the collateral which backs the synthetic commodity investment

Equities

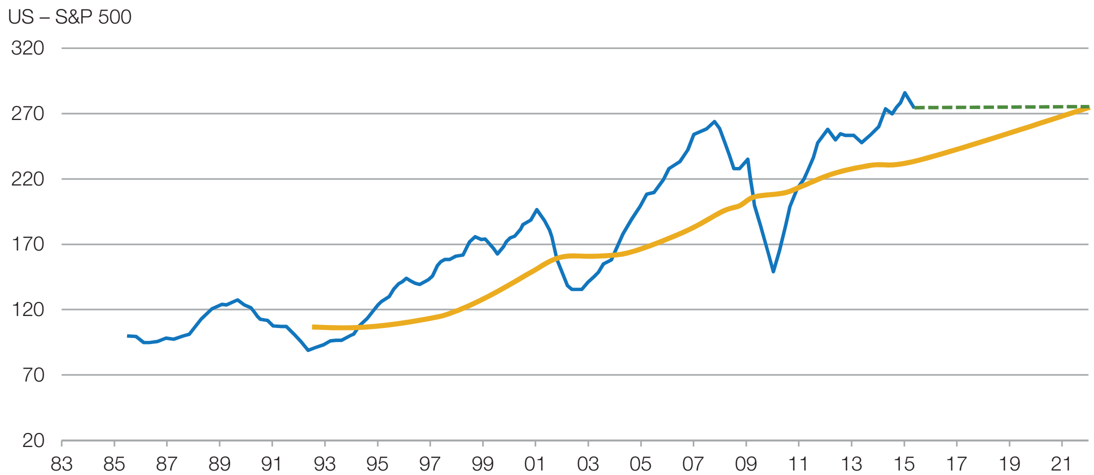
Equity returns consist of two components income and capital returns.

Income

The income component is determined by the initial dividend yield and growth in dividends. The dividend growth rate is determined by a combination of future earnings growth and the equilibrium payout ratio.

The US terminal earnings growth rate is based on the 30 year exponential trend in earnings, and the current trend level is estimated using a seven year moving average. Earnings are assumed to revert to trend over the forecast period.

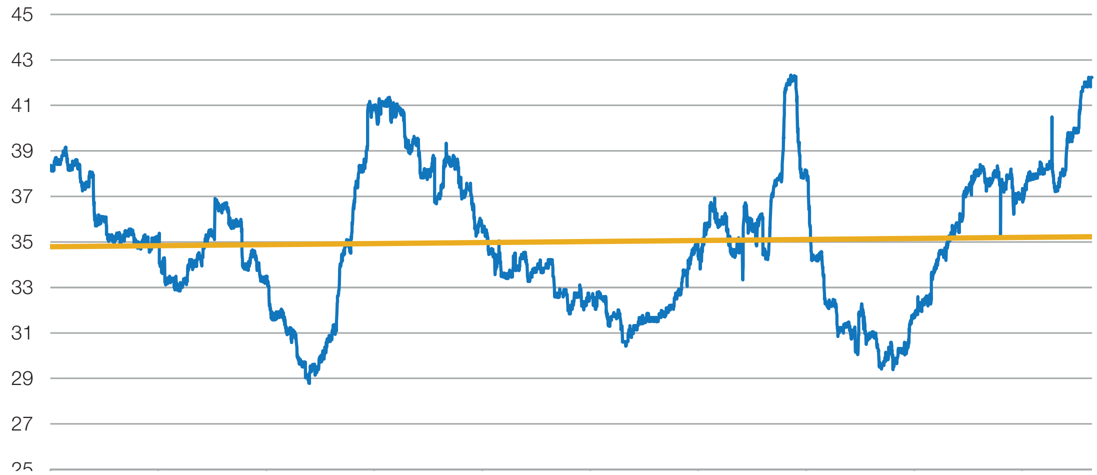
S&P 500 real earnings



Source: Schroders Economics Group, July 2015.

The earnings growth rate is then adjusted to give the dividend growth rate. We assume that the payout ratio will revert to trend over this time period

S&P 500 payout ratio



Source: Thomson Datastream, Schroders Economics Group, July 2015.

Capital growth

Computing capital returns require two assumptions, the rate of earnings growth and the terminal PE.

The terminal PE ratio is assumed to equal the 30-year trimmed mean. The method for calculating the earnings growth rate is described above.

Other markets

The European, UK and US market returns have historically tracked each other closely. We use this historic relationship to generate our return forecasts for Europe and the UK.

For Asian and emerging markets there is not a close relationship with US market performance. We therefore use the same method as outlined above for the US economy, making adjustments to account for our expectations of lower structural growth rates in EM from this point on.

2015 change to methodology

This year, we have also altered our methodology for Japanese earnings. We judged that our previous estimates of the terminal EPS growth rate were too low because the exponential trend could not take account of the structural shift implied by Abenomics and QQE. We looked at a range of options before settling on using a Christiano-Fitzgerald filter, with a 5-30 year cycle component, to de-trend the data. This provided a modestly higher terminal EPS growth rate consistent with other evidence on the Japanese economy. In future iterations of this work we will consider extending this approach to all markets.

The Christiano Fitzgerald filter is a band pass filter which aims to decompose a data series into three components: trend, cyclical, and noise. It is a more forward looking filter than the Hodrick Prescott filter often used.

GLOBAL-PERSP