Schroders

Marketing material for professional investors and advisers only

Reassessing fixed income – is Goldilocks about to give way to the three bears?

April 2018

The benign backdrop fixed income markets have enjoyed for years is changing. Interest rates are increasing as quantitative easing slowly turns into quantitative tightening. Does this mean that the Goldilocks economy that's not too hot and not too cold is about to give way to a three-headed bear market of rising rates, climbing inflation and returning volatility? We think not. While there will be an inevitable increase in volatility, this environment should still provide plenty of opportunities for those positioned correctly. Unlike the recent past, however, seeking out the true source of returns will be increasingly critical in finding the best managers.

Bob Jolly, CFA
Head of Global Macro Strategy, Fixed Income

What has driven returns?

Investors have not had to look far to find out what has been driving returns for much of the last five or so years. In response to the Global Financial Crisis (GFC), all assets have been boosted by the measures taken by central banks to fend off economic shocks. The flood of liquidity provided by quantitative easing (QE) alongside record low and, in some places, negative interest rates has tended to lift all boats.

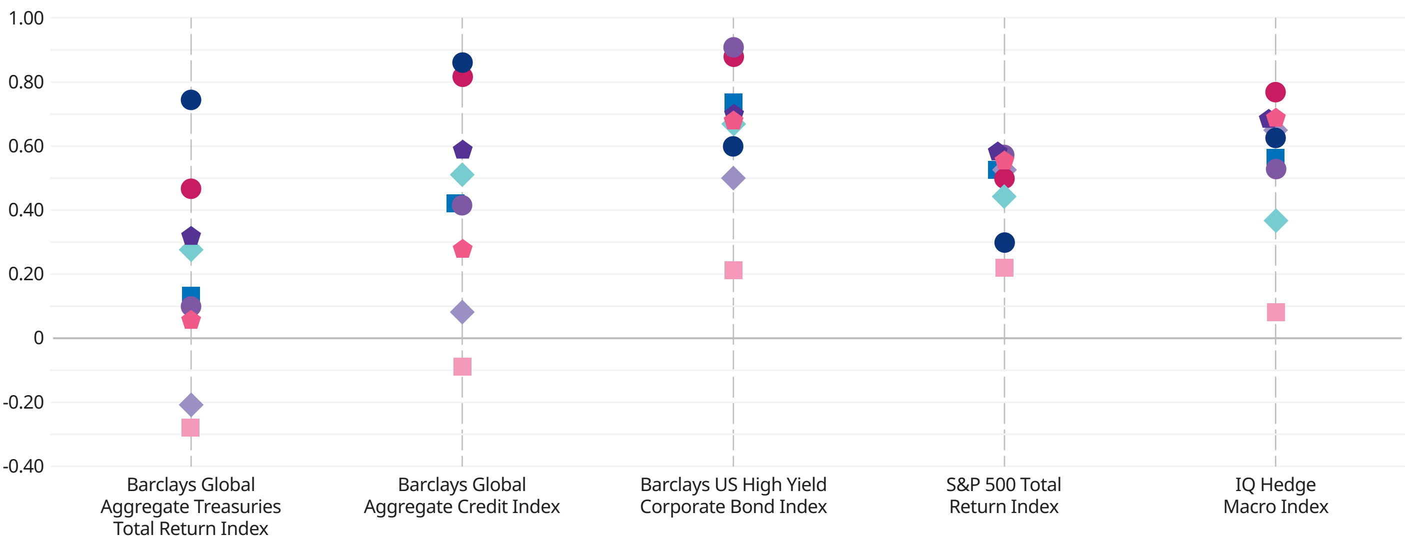
For instance, over the last three years, global Treasuries (currency hedged) have recorded average annual growth of 2.5%, global credit (hedged) 3.6%, US high yield 6.4%, global equities (hedged) 10.0% and US property 9.4%[1]. Even classic cars, fine wine and paintings have performed well, exemplified by the sale last year of Leonardo da Vinci's *Salvator Mundi* for $450 million, half as much again as the previous record for a painting.

Not surprisingly perhaps, fundamental analysis has been usurped by indiscriminate buying of everything and anything, much of it by central banks themselves. Correlations across markets have been unusually high and asset price inflation has been rife almost everywhere.

In this liquidity-fuelled bull market, determining which investors have been generating genuine alpha and which have merely been riding the beta wave is tricky. However, taking the example of absolute return managers, it is clear from Figure 1 that many have benefited significantly from the strong return environment, given the high correlation of their returns with the underlying market betas.

Figure 1: Many "absolute return" strategies have actually been tied closely to indices

Correlation between different types of absolute return fund and their benchmarks

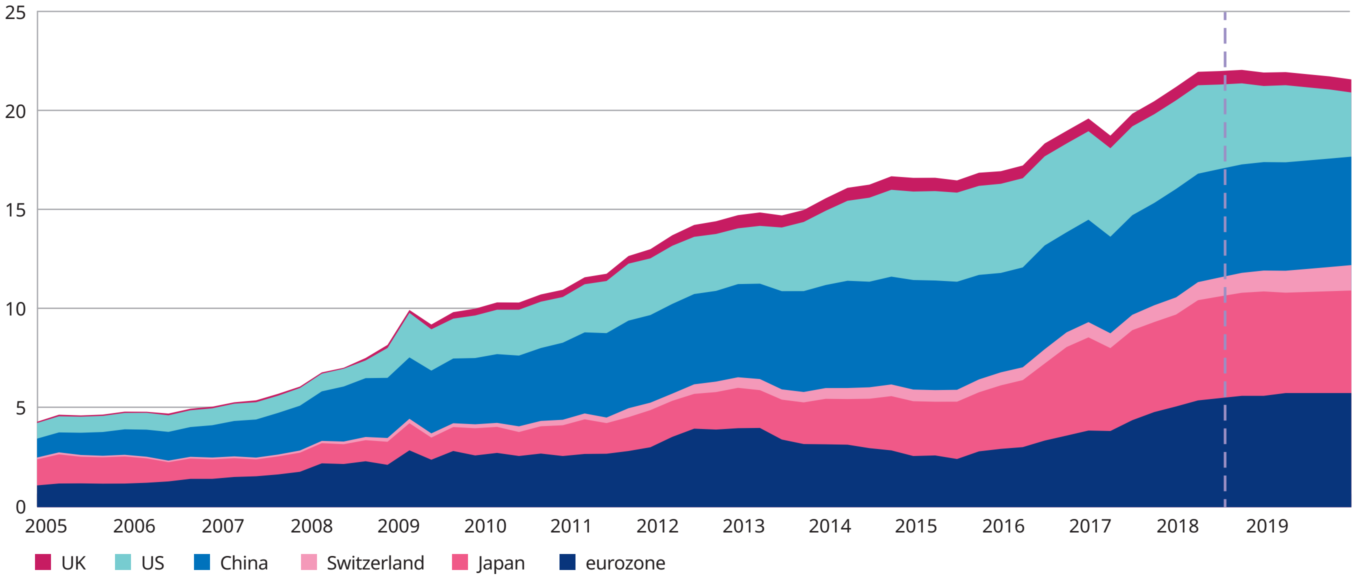


Five-year returns of nine funds following absolute return strategies. Source: Morningstar Direct, as at 28 February 2018.

1 Data for three years to 31 December 2017. Source: global Treasuries – Bloomberg Global Treasury Total Return Index Value Hedged; global credit – Bloomberg Global Aggregate Credit Total Return Index Value Hedged; US high yield – Bloomberg US Corporate High Yield Total Return Index; global equities – MSCI World Index Hedged Net TR USD; and property – NCREIF Property Index. Past performance is not a guide to future performance and may not be repeated.

Figure 2: Central banks' bond holdings have a long way to fall

Value of assets on central banks' balance sheets ($tr)



Source: Schroders Economics Group and Thomson Datastream, as at 22 February 2018.

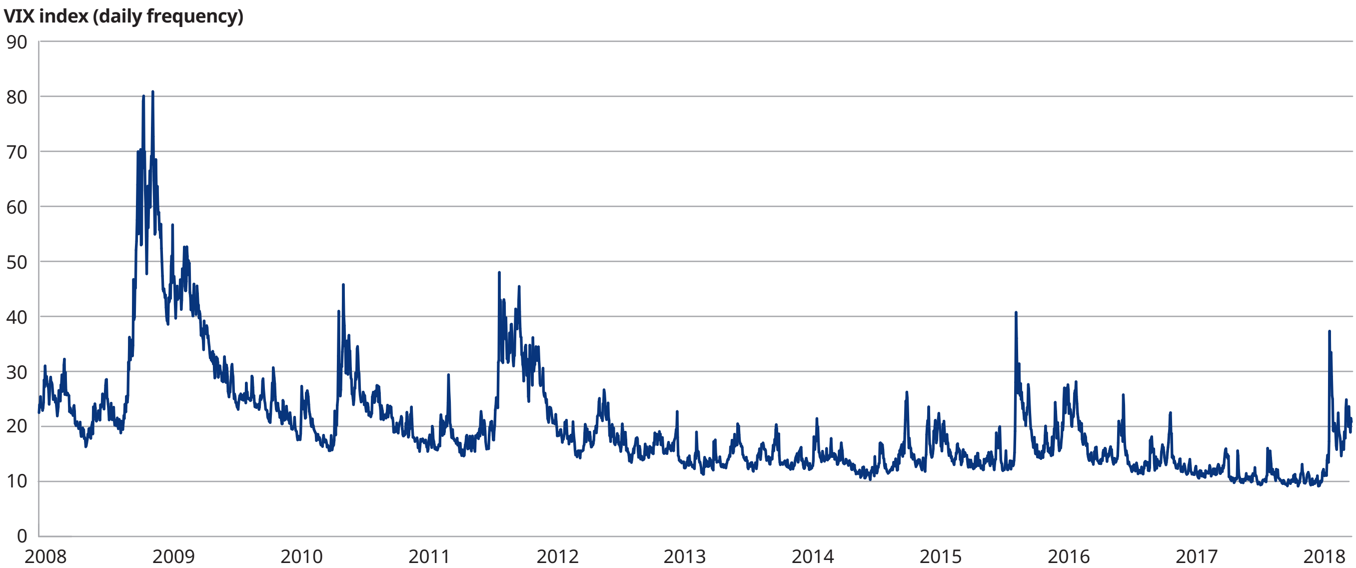
For some, the emperor may be found to be a bit short of clothing

Investors now face a number of bumps in the road that will require them to devote much more attention to the direction of travel:

1. QE becomes QT. Arguably the most important change is that quantitative easing is gradually being replaced by "quantitative tightening" (QT). It is now more than three years since the Federal Reserve (Fed) announced the end of QE, subsequently raising interest rates and then, last year, announcing the beginning of the reduction in the size of its inflated balance sheet. The European Central Bank (ECB) has followed the Fed's lead, cutting back on its own QE programme, and is considering whether to stop QE altogether in September. The Bank of Japan has also been scaling back bond purchases (Figure 2). Bond investors are gradually recognising that they will have to stand on their own two feet as the soothing impact of QE will soon be a thing of the past.

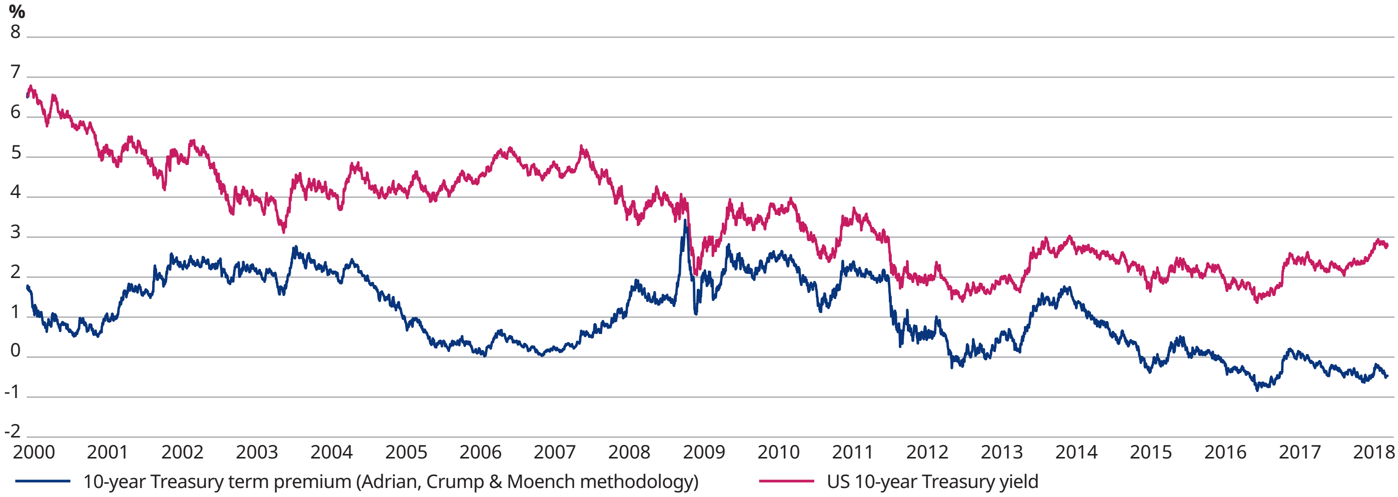
2. Volatility gets more volatile. In late 2017 we saw new all-time lows in equity market implied volatility. However, the lagged effect of marginally tighter monetary policy has jerked the markets out of their slumber. Having set a new low of nine in November, the Chicago Board of Trade VIX index, a measure of market volatility, rose close to 40 in February, on a daily priced basis (Figure 3). Given that this is nearly half way to the peak level of the VIX index hit during the depths of the GFC in 2008, it is clear markets were woken with quite a jolt.

Figure 3: Volatility is off the lows seen in early 2018



Source: Bloomberg and Schroders, as at 9 April 2018.

Figure 4: Minimal term or inflation premium is built into US Treasury bonds



Source: Bloomberg, Schroders, as at 9 April 2018.

Market volatility usually goes up when interest rates rise, and this time has been no exception. However, the unusual feature of this cycle could quite possibly be just how difficult markets have found the transition to a more normal interest rate regime. For the first time since August 2015, when China surprised markets by devaluing its currency, we saw two days in a month where equities fell by more than 3% in a single trading day. The removal of unusually accommodative monetary policy may also mean we will see an unusually aggravated shift to higher volatility across many markets.

3. Term premia are increasing. Rising risks are also likely to be reflected in higher term premia for bonds. While central bank buying of so many bonds had the effect of lowering volatility, it also drove down the usual premium demanded for buying risky assets. One particular risk for fixed income investors is the uncertainty which comes with time: the longer the period over which capital is lent, the higher the risk. Such risks are usually rewarded by a higher yield, or term premium.

What is unusual about current circumstances is that term premia remain extremely low (Figure 4). Yet higher risks abound. As well as rising volatility, they include inflation and uncertainties over the future direction of interest rates. We expect markets to ultimately take their lead from the US, where inflation has been surprisingly strong this year. This, combined with expectations that President Trump's fiscal measures will boost growth, suggest that interest rates may have to rise faster than expected (see more on this below).

4. Macro uncertainties are growing. Risk premia are sought by sensible investors and macro uncertainty needs to be compensated for. However, here again we find central banks' ample liquidity has reduced risk premia across most, if not all, asset classes. The risk of error in market pricing is unusually high. Backward-looking US corporate spreads are trading below their 10–year average (Figure 5). The leverage of US corporates is climbing higher than pre-GFC levels (Figure 6). While the outlook for corporate fundamentals is positive, they are not guaranteed and, with Treasury yields still close to all-time lows, any bad news could lead to a market over-reaction. It could easily be politics that forms the trigger for such bad news. Popular discontent fuelled by stagnant wages and immigration remains a potent force around the world, with globalisation and free trade taking a disproportionate share of the blame.

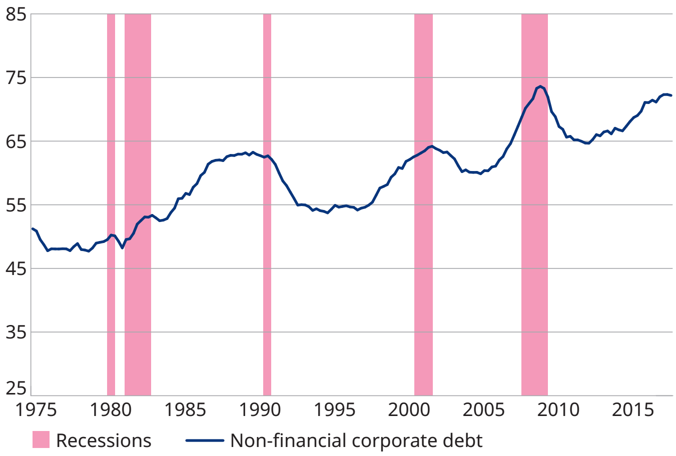
Figure 5: US corporates are well into overvalued territory

High yield bond spreads (basis points)

Source: Bloomberg Barclays US Corporate High Yield Index, as at 16 January 2018.

Figure 6: Current leverage shows late cycle signs

US non-financial corporate debt (% GDP)



Source: Schroders Economics Group and Thomson Reuters Datastream, as at April 2018.

What do these changes mean for the investment environment?

It seems clear that investors will have to navigate increased market volatility, while the withdrawal of QE will remove the "downside insurance" hitherto provided by central banks' bond buying activities. Both will increase risks for investors.

If inflation accelerates more forcefully, bonds may continue to struggle. All the more so given governments are collectively moving in a reflationary direction with higher spending and/or tax cuts to head off populist pressures. We suspect that markets may be too anchored on past low rates of inflation and therefore complacent about where rates will peak in this cycle. Given signs that President Trump is becoming successful in his fiscal activism, we suspect that rates may top out at a slightly higher level than the consensus expects.

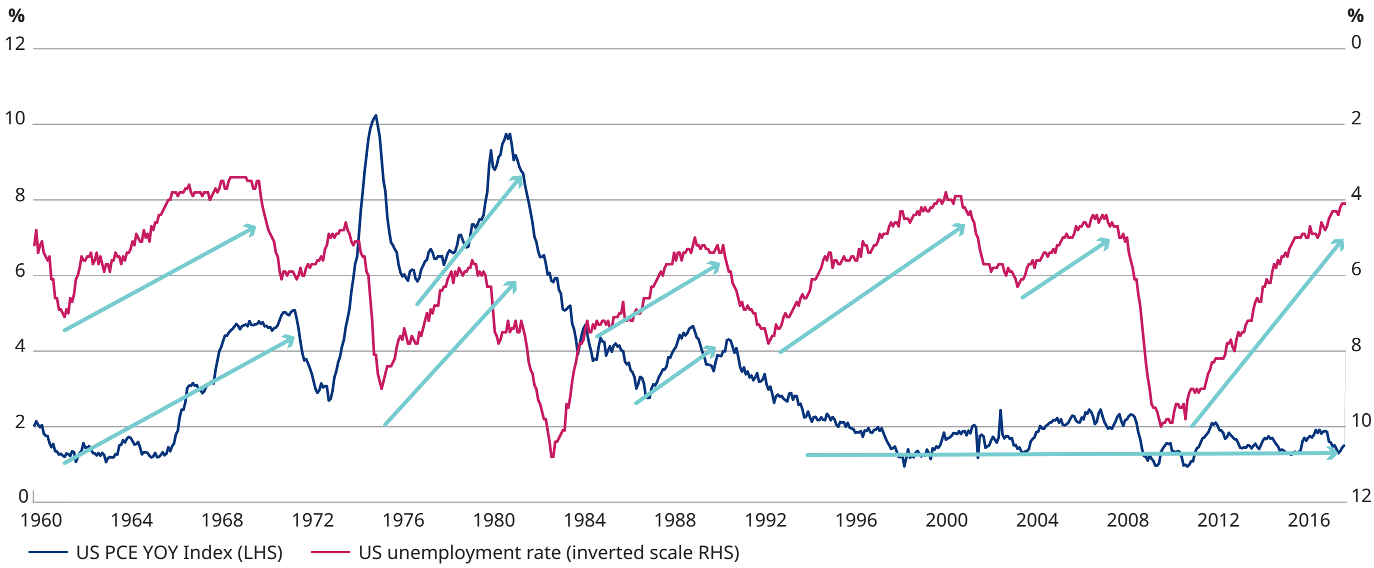
However, it would be easy to get too pessimistic. Inflation is certainly picking up, but it remains subject to forces acting in both directions. At a time when the downward impact of globalisation on the price of traded goods may be slowing, there are signs that the deflationary effects of technology could soon be spreading from products to services. It therefore seems unlikely that the world will scale the peaks of inflation seen in the past.

The influence of technology is also evident in the increased impact of interest rates. The reduction in the power of labour in the workforce and increasing productivity has helped reduce the level of interest rates needed to keep inflation under control. This, alongside the very high level of debt amassed by governments, and in some cases households, means that even quite small changes in rates can have a profound impact on the economy. In economic terms, the rate of interest that is neither stimulatory nor contractionary for an economy at full employment, the so called "neutral rate", has been falling.

Meanwhile, globalisation has opened up many economies to greater influences from abroad through increased trade and immigrant labour, reducing the impact of domestic labour on domestic prices (Figure 7). Global forces now account for a growing share of domestic inflation, so, as with interest rates, the level of unemployment consistent with target inflation – the so-called "non-accelerating inflation rate of unemployment" or NAIRU – has come down in recent years.

Figure 7: Inflation is less sensitive to factors like domestic unemployment

The diminishing link between output gap and inflation?



Source: Macrobond and Schroders, as at 25 January 2018.

What do these changes mean for markets?

As mentioned above, we expect term premia to return as central bank balance sheets shrink and the autonomy of central bankers is increasingly encroached upon by politicians. Overall, we do not expect a traditional bear market for bonds, despite the triple threat they face from rising inflation, rates and volatility. However, there is a need for caution. Monetary policy is extremely loose at a time when the global economy is growing above trend and the global output gap is shrinking fast. Most seriously, the US is experiencing a substantial fiscal boost at a late stage in the economic cycle, with unemployment now probably well below the level at which inflation can be expected to be held back (NAIRU). The danger is that the Federal Reserve may have underestimated the equilibrium interest rate needed to balance unemployment and inflation.

Given the above, our main investment conclusions with regards to government bonds are as follows:

- US Treasuries are expected to lead the move to higher yields
- Inflation linked bonds are attractive relative to nominal bonds
- EM local rates stand to benefit from strong global growth and a relatively contained sell off in developed market duration.

In terms of currencies, value investing has started to reassert itself and should remain important as economic growth becomes increasingly synchronised:

- The cheapest currency on the planet is the Japanese yen. For a long time it was cheap for good reason. However, the reviving economy, greater investment and increasing productivity are leading to higher growth, both now and in the future. Investors will naturally find this attractive, especially when differences between rates of growth in the different regions of the country will continue to narrow.
- Europe is also benefiting from the global growth upswing. While structural flaws remain, notably the political barriers to fiscal transfers, the euro is expected to outperform the US dollar. Countries which are closely tied to European activity have a much brighter outlook, given that they are not held back by the weaker members of the eurozone. We favour the Norwegian krone, Czech koruna and Polish zloty over the euro.
- The pound is expected to be a laggard as the UK faces twin government and current account deficits. Together with Brexit-inspired political difficulties, this environment is likely to lead to a weaker growth trajectory and fewer rate hikes than markets currently discount.
- Emerging markets are gaining from the strong global backdrop, with commodity currencies clear beneficiaries, together with those of manufacturing hubs in Asia and Latin America.

What do these changes mean for investors?

While we do not anticipate a dramatic rise in yields, the opportunity provided by the new environment is expected to be ideal for those who principally manage portfolios according to macro risks (see box: **How best to exploit an increasingly macro-influenced world**):

- For macro managers, a degree of volatility is critical to benefit from changes in sentiment and investment themes. For much of the post-GFC period, central banks have attempted to remove the risk of failure. Defaults have been exceptionally low and correlations across markets and within markets and sectors have been unusually high. However, as we approach the point where the global economy can stand on its own two feet, central banks will begin to normalise policy. Market volatility will no longer be supressed, giving more opportunities to exploit macro themes in rates, forex and credit markets. It is notable that, William Dudley, President of the Federal Reserve Bank of New York, characterised the bout of market volatility in early February as "small potatoes".
- The normalisation of both the level of interest rates and the size of central banks' balance sheets is not going to occur at the same time. The likely divergence between both the pace and magnitude of adjustment will give rise to considerable opportunities between the different interest rate markets.
- The underlying sensitivity of countries to commodity and service sector inflation is likely to differ significantly. This will potentially result in dramatically different terminal interest and inflation rates between regions and countries.

In all likelihood, after an extended period which has rewarded near-passive buy-and-hold type strategies, there will be a change of investment leadership. Market beta will probably generate fairly pedestrian returns, allowing those able to pull macro levers successfully to be rewarded in an environment likely to be marked by rising volatility.

How best to exploit an increasingly macro-influenced world

Many fixed income portfolios are managed on the assumption that different sectors of the economy will benefit at different times. This so-called sector rotation approach will switch the portfolio between different fixed income asset classes, typically including government bonds, investment grade corporate debt, mortgage and asset-backed securities, high yield bonds and municipal government debt.

One of the challenges is that, even if the manager wants to cut risks by reducing the allocation to a specific sector, the portfolio can still have a high sensitivity to that sector derived from other parts of the strategy. Because sector rotation will typically not allow the manager to significantly pull the risk levers of rates and currency, there is often a high correlation between sectors. This is demonstrated in Figure 8, which shows a strong correlation between several of the typical sectors such a strategy would use. As a result, they offer limited opportunities for diversification.

In contrast to sector rotation, the macro risk rotation approach identifies major themes driving markets, such as central banks' suppression of market volatility, the impact of the rise in populism or the potential return of inflation. These themes inform the way the portfolio is then tilted towards a combination of the alpha sources expected to offer the highest risk-adjusted return. The risk bias will be switched between rates, currency and credit, depending on the economic and market backdrop expected to drive markets. As illustrated in Figure 9, the average correlation between these risk factors is zero, whereas that between the major fixed income sectors shown in Figure 8 is 0.6. Given the low correlation of the risk factors with each other, by blending them the returns from the macro risk strategy tend to be less correlated with any specific asset class, helping to increase the portfolio's diversification properties.

Figure 8: Correlations between sectors used in a typical sector rotation strategy

	US Treasury	Euro Treasury	Emerging market debt ($)	Mortgage -backed securities (MBS)	Asset-backed securities (ABS)	Commercial MBS	Muncipal	Investment grade corporates	High yield corporates
US Treasury	1.0								
Euro Treasury	0.7	1.0							
Emerging market debt ($)	0.5	0.4	1.0						
Mortgage-backed securities (MBS)	0.9	0.6	0.6	1.0					
Asset-backed securities (ABS)	0.9	0.5	0.4	0.8	1.0				
Commercial MBS	0.9	0.6	0.6	0.8	0.8	1.0			
Muncipal	0.8	0.5	0.6	0.8	0.6	0.7	1.0		
Investment grade corporates	0.5	0.4	0.8	0.6	0.4	0.7	0.6	1.0	
High yield corporates	0.0	0.0	0.7	0.1	0.0	0.2	0.1	0.6	1.0

Average correlation 0.6

Data cover three years to March 2018. Indices used respectively: Bloomberg U.S. Treasury Index; Bloomberg Euro Treasury TR Hedged in $; J.P. Morgan EMBI Global TR; Bloomberg Global Aggregate Corporate TR Hedged in $; Bloomberg U.S. MBS; Bloomberg US ABS; Bloomberg US CMBS Investment Grade; Bloomberg Municipal Bond; and Bloomberg US Corporate High Yield.Figure 9: Correlations between factors used in a typical risk factor rotation strategy.

Figure 9: Correlations between factors used in a typical risk factor rotation strategy

	Duration	Curve	Country	Inflation	Oil currency	Safe haven currency	Emerging markets currency	Investment grade credit	High yield credit
Duration	1.0								
Curve	0.7	1.0							
Country	-0.6	-0.5	1.0						
Inflation	0.6	0.5	-0.4	1.0					
Oil currency	0.1	0.2	0.0	0.5	1.0				
Safe haven currency	-0.5	-0.3	0.2	-0.1	0.1	1.0			
Emerging markets currency	-0.1	-0.1	-0.2	0.1	0.1	0.3	1.0		
Investment grade credit	-0.3	-0.2	0.3	-0.6	-0.3	0.1	-0.3	1.0	
High yield credit	-0.4	-0.2	0.2	-0.6	-0.5	0.1	-0.2	0.8	1.0

Average correlation 0.0

Data cover three years to March 2018. Example strategies used: duration – US generic government 10–year yield; curve – US 2s/10s yield spread; country – US/Germany 10–year yield spread; inflation – US break-even 10–year yield; oil currency – euro-Norwegian krone cross-rate; safe haven currency – dollar-yen cross-rate; EM currency – Mexican peso spot price; investment grade credit – Bloomberg Barclays Global Investment Grade; and high yield credit – option adjusted spread.

Conclusion

Is Goldilocks giving way to the three bears of inflation, rates and volatility? Probably not, but it seems increasingly probable that markets will periodically fret over the risk that the world is too hot and asset prices do not fully price the risks of what might turn out to be an overheating global economy and more political noise. With volatility so low and asset prices potentially coming to the end of a tremendous bull run, investors would be wise to check their manager line-up is best positioned for more market turbulence.

Important information

The views and opinions contained herein are those of the authors as at the date of publication and are subject to change due to market and other conditions. Such views and opinions may not necessarily represent those expressed or reflected in other Schroders communications, strategies or funds.

This document is intended to be for information purposes only. The material is not intended as an offer or solicitation for the purchase or sale of any financial instrument or security or to adopt any investment strategy. The information provided is not intended to constitute investment advice, an investment recommendation or investment research and does not take into account specific circumstances of any recipient. The material is not intended to provide, and should not be relied on for, accounting, legal or tax advice. Any references to securities, sectors, regions and/or countries are for illustrative purposes only.

Information herein is believed to be reliable but Schroders does not represent or warrant its completeness or accuracy. No responsibility or liability is accepted by Schroders, its officers, employees or agents for errors of fact or opinion or for any loss arising from use of all or any part of the information in this document. No reliance should be placed on the views and information in the document when taking individual investment and/or strategic decisions. Schroders has no obligation to notify any recipient should any information contained herein changes or subsequently becomes inaccurate. Unless otherwise authorised by Schroders, any reproduction of all or part of the information in this document is prohibited.

Any data contained in this document have been obtained from sources we consider to be reliable. Schroders has not independently verified or validated such data and they should be independently verified before further publication or use. Schroders does not represent or warrant the accuracy or completeness of any such data. Third party data are owned or licensed by the data provider and may not be reproduced or extracted and used for any other purpose without the data provider's consent. Third party data are provided without any warranties of any kind. The data provider and issuer of the document shall have no liability in connection with the third party data. www.schroders.com contains additional disclaimers which apply to the third party data.

All investing involves risk including the possible loss of principal.

Exchange rate changes may cause the value of any overseas investments to rise or fall. Past Performance is not a guide to future performance and may not be repeated. This document may contain "forward-looking" information, such as forecasts or projections. Please note that any such information is not a guarantee of any future performance and there is no assurance that any forecast or projection will be realised. For your security, communications may be taped or monitored.

Note to readers in European Union/European Economic Area: Issued by Schroder Investment Management Limited, 31 Gresham Street, London, EC2V 7QA. Registered Number 1893220 England. Authorised and regulated by the Financial Conduct Authority.

Note to readers in Argentina: Schroder Investment Management S.A., Ing. Enrique Butty 220, Piso 12, C1001AFB - Buenos Aires, Argentina. Registered/Company Number 15. Registered as Distributor of Investment Funds with the CNV (Comisión Nacional de Valores).

Note to readers in Australia: Issued by Schroder Investment Management Australia Limited, Level 20, Angel Place, 123 Pitt Street, Sydney NSW 2000 Australia. ABN 22 000 443 274, AFSL 226473.

Note to readers in Brazil: Schroder Investment Management Brasil Ltda., Rua Joaquim Floriano, 100 - cj. 142 Itaim Bibi, São Paulo, 04534-000 Brasil. Registered/Company Number 92.886.662/0001-29. Authorised as an asset manager by the Securities and Exchange Commission of Brazil/Comissão de Valores Mobiliários ("CVM") according to the Declaratory Act number 6816.

Note to readers in Hong Kong: Schroder Investment Management (Hong Kong) Limited, Level 33, Two Pacific Place 88 Queensway, Hong Kong. Central Entity Number (CE No.) ACJ591. Regulated by the Securities and Futures Commission.

Note to readers in Indonesia: PT Schroder Investment Management Indonesia, Indonesia Stock Exchange Building Tower 1, 30th Floor, Jalan Jend. Sudirman Kav 52-53 Jakarta 12190 Indonesia. Registered/Company Number by Bapepam Chairman's Decree No: KEP-04/PM/MI/1997 dated April 25, 1997 on the investment management activities and Regulated by Otoritas Jasa Keuangan ("OJK"), formerly the Capital Market and Financial Institution Supervisory Agency ("Bapepam dan LK").

Note to readers in Japan: Schroder Investment Management (Japan) Limited, 21st Floor, Marunouchi Trust Tower Main, 1-8-3 Marunouchi, Chiyoda-Ku, Tokyo 100-0005, Japan. Registered as a Financial Instruments Business Operator regulated by the Financial Services Agency of Japan. Kanto Local Finance Bureau (FIBO) No. 90.

Note to readers in People's Republic of China: Schroder Investment Management (Shanghai) Co., Ltd., RM1101 11/F Shanghai IFC Phase (HSBC Building) 8 Century Avenue, Pudong, Shanghai, China, AMAC registration NO. P1066560. Regulated by Asset Management Association of China.

Note to readers in Singapore: Schroder Investment Management (Singapore) Ltd, 138 Market Street #23-01, CapitaGreen, Singapore 048946. Company Registration No. 199201080H. Regulated by the Monetary Authority of Singapore.

Note to readers in South Korea: Schroders Korea Limited, 26th Floor, 136, Sejong-daero, (Taepyeongno 1-ga, Seoul Finance Center), Jung-gu, Seoul 100-768, South Korea. Registered and regulated by Financial Supervisory Service of Korea.

Note to readers in Switzerland: Schroder Investment Management (Switzerland) AG, Central 2, CH-8001 Zürich, Postfach 1820, CH-8021 Zürich, Switzerland. Enterprise identification number (UID) CHE-101.447.114, reference number CH02039235704. Authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

Note to readers in Taiwan: Schroder Investment Management (Taiwan) Limited, 9F, 108, Sec.5, Hsin-Yi Road, Hsin-YI District, Taipei 11047 Taiwan, R.O.C. Registered as a Securities Investment Trust Enterprise regulated by the Securities and Futures Bureau, Financial Supervisory Commission, R.O.C.

Note to readers in the United Arab Emirates: Schroder Investment Management Limited, 1st Floor, Gate Village Six, Dubai International Financial Centre, PO Box 506612 Dubai, United Arab Emirates. Registered Number 1893220 England. Authorised and regulated by the Financial Conduct Authority. SCH58114