Global market perspective

Economic and asset allocation views

Q4 2018

For professional investors and advisers only

October 2018

Contents

Editors:

Keith Wade and Tina Fong

Introduction

The trade war between the US and China intensified in the third quarter with both sides announcing a second round of tariffs. So far the market response has been a striking divergence between the US and Chinese bourses with the S&P 500 powering ahead whilst the MSCI China has slumped. Clearly, investors see the advantage to the US and we discuss the trade wars in more detail in the Strategy note (page 13).

US outperformance also owes something to the cyclical picture with the economy rebounding strongly whilst the rest of the world generally disappointed on the growth front. Our downgrade to global growth in August was led by cuts to our forecasts for Europe and Japan. We also trimmed our emerging market forecasts in response to the slowdown in China and the likely escalation of the trade conflict with the US (page 9).

Meanwhile, the US Federal Reserve continued to tighten monetary policy as the economy strengthened and inflation picked up. Tighter liquidity impacted emerging market currencies and bonds with those countries with significant external borrowing requirements experiencing extreme volatility. However, increased volatility was not confined to the emerging markets as Italian bond spreads widened sharply following the budget announcement from the new government in Rome. We look at the debt dynamics of the eurozone's third largest economy (see page 16) and also look ahead and consider the message from the yield curve and how markets have reacted to an inversion in the curve which we believe will become more of a focus in 2019 (see page 21).

Keith Wade

Chief Economist and Strategist, 8th October 2018

Asset allocation views: Multi-Asset Group

Global overview

Economic overview

For the second consecutive quarter, we have trimmed our activity forecast and now expect global growth of 3.3% this year and 3% next. The forecast for 2018 remains robust, so when combined with our forecast for rising inflation we would still say the world economy is in the expansion phase of the cycle. However, the outlook indicates that we are heading in a more stagflationary direction towards the end of 2018 as growth cools and inflation rises.

The latest downgrade to global growth is driven by significant cuts to Europe and Japan and lesser reductions in the US and emerging markets for 2018. For next year, the reduction reflects a more pessimistic view of the trade wars with the dispute between the US and China expected to escalate as both sides defend their red lines.

In terms of our scenarios, the balance of risks remains tilted towards stagflation. This would reflect the combination of three scenarios: 'trade war: China versus rest of the world', 'oil back to $100' and 'Italy debt crisis 'with the greatest risk to our central view being the trade war.

Central bank policy

For the US, the Federal Reserve (Fed) is expected to raise rates one more time this year and twice in 2019 to take the policy rate to 3% by the middle of 2019. Meanwhile, UK rates are also on hold this year, although we expect further rises in 2019 as the path of Brexit becomes clearer. The European Central Bank (ECB) is expected to end QE in Q4 this year and raise rates in 2019. In Japan, the Bank of Japan (BoJ) is not expected to move again over the forecast period. In contrast, lower inflation and growth concerns means that the People's Bank of China (PBoC) eases the reserve requirement ratio (RRR) and policy rates lower. Russia is expected to ease next year, but the interest rate cycle is expected to turn upwards this year in India and next year in Brazil.

Implications for markets

Looking at our asset class views, we have upgraded global equities to a positive. We believe that the economic fundamental backdrop and strong earnings momentum remain supportive of equities. Global equity valuations appear fair compared to long-term history. However, we recognise that equities are still vulnerable to the tightening in global liquidity conditions.

Within equities, we continue to prefer the US as the economy remains the most resilient in terms of growth and earnings momentum. The US market has also been boosted by the increase in share buybacks. We have also retained our positive stance on emerging markets despite the volatile performance. The economic fundamentals are still intact and this region offers an attractive valuation discount versus their developed peers.

On Japanese equities, we have turned positive over the quarter in recognition of the early signs of earnings recovery and relatively attractive valuations compared to history and other markets.

In comparison, we expect Europe ex UK, Pacific ex Japan and UK to perform in line with global equities. From a valuation perspective, European equities are trading at a discount relative to other markets. However, the backdrop for European banks remains challenging and the market is exposed to tightening in financial conditions. Meanwhile, we remain neutral on UK equities due to the continued uncertainty over the Brexit negotiations and the impact on the economy.

With regard to the duration view, we have stayed negative on government bonds. Bond valuations have turned less rich but are still unattractive at current levels. Importantly, US economic data remains relatively robust along with rising inflationary pressures. Among the bond markets, we are negative on US Treasuries, German Bunds and UK Gilts but neutral on Japanese government bonds (JGBs). We are also neutral on emerging market debt (EMD) bonds denominated in USD and local currency.

Turning to the credit markets, we have remained negative on US and European investment grade (IG) bonds. On high yield (HY), we have stayed neutral on US HY but negative on European HY. Valuations are unattractive across the credit segments. While corporate fundamentals are in a stronger position in Europe compared to the US, the region is vulnerable to political risk and there are also signs that the cycle is maturing.

Our outlook on the broad commodity complex has been downgraded to a single positive as price momentum behind the market has deteriorated and carry has turned flat. Nonetheless, the cyclical environment remains supportive and there is on-going supply-side discipline among certain commodity segments.

Within the commodity universe, we have retained our overweight stance on energy as we expect oil supplies are sufficiently at risk in a number of countries to support prices. We have also kept our positive stance on industrial metals given that the Chinese government has recently started to ease policy to aid a slowing domestic economy. On agriculture, we have remained positive driven by favourable supply dynamics. We have downgraded gold to negative as we believe that a firm USD will put a dampener on prices.

Table 1: Asset allocation grid – summary

Equity	+ (0)	Bonds	-			Alternatives	+	Cash	+
Region		Region		Sector		Sector			
US	+	US Treasury	-	Government	-	UK property EU property	- +		
Europe ex UK	0	UK Gilts	-	Index-linked	+	Commodities	+(++)		
UK	0	Eurozone Bunds	- -	Investment grade corporate	-	Gold	- (0)		
Pacific ex Japan	0	Emerging market debt (USD)	0	High yield	- (0)				
Japan	+ (0)	Emerging market debt (local currency)	0						
Emerging markets	+								

Key: +/- market expected to outperform/underperform (maximum ++ to minimum - -) 0 indicates a neutral position.
Note: 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. The views for equities, government bonds and commodities are based on return relative to cash in local currency. The views for corporate bonds and high yield are based on credit spreads (i.e. duration-hedged).
Source: Schroders, October 2018.

Regional equity views

Key points

+ (0)	Equities	
+	US	Despite elevated valuations historically and relative to other markets, US equities remain competitive due to strong earnings momentum supported by the strength in the economy. In addition, the US market also been boosted by the increase in share buybacks. Nevertheless, the normalisation of monetary policy by the Fed is likely to put a squeeze on corporate margins and profitability. Overall, we expect US equities to outperform global equities.
0	UK	We remain neutral on UK equities due to the continued uncertainty over the Brexit negotiations and the impact on the economy. Against this backdrop, there is also the uncertainty around the outlook for sterling. This has an important impact on the corporate profitability of UK multinationals which dominate the FTSE 100 index.
0	Europe ex UK	European equities are expected to perform in line with the global market. From a valuation perspective, the region is trading at a discount relative to global peers and versus history. However, the backdrop for European banks remains challenging with the need to recapitalise and the prospect of a flatter yield curve with the ECB hiking interest rates. Meanwhile, the weakness of the currency has not helped corporates as this has coincided with concerns around global trade and tightening in financial conditions. Hence, we remain neutral on the market.
+ (0)	Japan	We have upgraded Japanese equities to a positive in recognition of the early signs of earnings recovery and relatively attractive valuations compared to history and other markets. Despite the recent improvement in the economic data, the domestic economy is expected to weaken driven by severe weather disasters in Q3. Against this backdrop, there is the prospect of fiscal stimulus by the authorities. We also expect the BoJ to retain an accommodative monetary policy.
0	Pacific ex Japan (Australia, New Zealand, Hong Kong and Singapore)	We expect Pacific ex Japan equities to perform in line with global equities. Within the region, we are neutral on Australian equity where earnings momentum is solid. However, valuations appear uncompelling and the economy faces structural challenges. While Singapore equities offer attractive valuations and stronger earnings, we are neutral on the market given that the economy is vulnerable to continued tightening in the property sector. On Hong Kong equities, we remain positive on the market given robust earnings momentum, although valuations are less compelling when compared to the other Pacific ex Japan countries.
+	Emerging markets	We remain positive on emerging market equities, as the economic fundamentals are still intact and we believe that we are over the worst of the sharp losses in the recent months. This region also offers an attractive valuation discount versus their developed peers. Moreover, the Chinese authorities have recently started to ease policy to support their domestic economy. However, trade tensions remain in the spotlight and a relatively firm US dollar could remain a near-term headwind to the performance prospects of this market.

Note: The scores for equities this quarter have been adjusted upwards to reflect the revised scoring framework which uses returns relative to cash, making scoring consistent across different markets. These do not reflect upgrades in our outlook.
Key: +/- market expected to outperform/underperform (maximum ++ minimum - -) 0 indicates a neutral position.

Fixed income views

Key points

-	**Bonds**	
-	Government	We remain negative on government bonds. Bond valuations have turned less rich but are still unattractive at current levels. Importantly, US economic data remains relatively robust along with rising inflationary pressures. Our cyclical indicators also continue to point towards a macro environment where government bonds could perform poorly. On US Treasuries, we have retained an underweight position. Treasuries still look expensive on valuation grounds through a combination of negative term premium, large supply increase and higher currency-hedged yields available overseas. We have stayed double negative on German Bunds as we believe that weaker growth has already been priced, but inflation risks have not. While the ECB remains reluctant to hike rates too early, we deem the central bank to be less dovish compared to market expectations. Despite the uncertainties around Brexit that could delay further rate hikes by the BoE, we have kept our negative stance on UK Gilts. Valuations remain expensive. On JGBs, we have kept our neutral positioning as the BoJ's recent changes to QE will allow it to maintain easy monetary policy for longer.
-	Investment grade (IG) corporate	We remain negative on US IG bonds given uncompelling valuations and deteriorating fundamentals. In particular, both merger and acquisitions (M&A) activity and leverage continue to increase. European IG spreads are highly correlated with the US such that we are also negative on this segment. European corporates are in a stronger position, though the recent rise in M&A and shareholder activism is potentially indicative of a maturing cycle in the region.
- (0)	High yield (HY)	The combination of strong corporate earnings and low projected default rates have meant that US HY has done well this year. However, we remain neutral on this credit segment as the market is expensive and vulnerable to less favourable technicals in the second half of this year. While corporate fundamentals in Europe remain generally stable, valuations remain stretched historically and spreads are vulnerable to the withdrawal of QE support. Political instability in the region, particularly in Italy, also continues to linger and is likely to cap spread tightening, hence we retain our negative view.
0 0	EMD USD-denominated EMD local currency-denominated	We have maintained our neutral positioning on emerging market debt denominated in USD. We believe that the regional mix and fundamentals marginally favour high quality EM sovereigns over their high yield counterparts. Consequently, we are overall neutral on this EMD segment. Meanwhile, we remain neutral on EMD local currency as cyclical headwinds prevent us from taking advantage of the improvement in local market valuations.
+	Index-linked	In the US, underlying inflation trends should remain supported by solid growth and the prospect of higher wages. While seasonal effects will turn negative, stagflationary concerns towards the end of the year should offset this technical factor.

Note: The views for government bonds are based on return relative to cash in local currency. The views for corporate bonds and high yield are based on credit spreads (i.e. duration-hedged). Key: +/- market expected to outperform/underperform (maximum ++ minimum - -) 0 indicates a neutral position.

Alternatives views

Key points

+	Alternatives	
+(++)	Commodities	We have downgrade commodities to a single positive as price momentum behind the market has deteriorated and carry has turned flat. Nonetheless, the cyclical environment remains supportive and there is on-going supply-side discipline among certain commodity segments. On the energy sector, we have retained our overweight stance. Global oil demand remains stable while oil supplies over the next 3 to 6 months are sufficiently at risk in a number of countries, particularly Iran, Libya and Venezuela. On agriculture, we have remained positive driven by favourable supply dynamics. Drought conditions in the key grain and livestock exporting markets should tighten sector supply. Weather conditions point to a greater chance of an El Niño phenomenon (a period of above-average sea surface temperatures), which is also supportive. Meanwhile, we have kept our positive stance on industrial metals. Against a backdrop of a slowing domestic economy, the Chinese government has recently started to ease monetary, fiscal and regulatory policies, calling for more financing aid for infrastructure projects, which should support commodity demand. In addition, China winter production cuts are likely to hit supply more than demand, putting upward pressure on prices. On gold, we have downgraded this asset class to negative as we believe that a firm USD will put a dampener on prices.
-	UK property	In the occupier market, we expect retail and industrial rental growth will fall over the next couple of years. On the latter, we expect that there will be a rise in the development of large warehouses and some second hand space will come back to the market from failed retailers. For once, office markets appear to be well placed to weather any slowdown in the economy. In most cities demand and supply are in equilibrium and the total amount of office space is only growing modestly, as new building is offset by residential conversion. Overall, we expect office rents in the South East and big regional cities to be flat, or rise slightly over the next couple of years. In the investment market, much of the decline in investment deals has been in the retail sector where a number of potential deals have fallen through. There have also been fewer sales of big City offices, possibly because of the uncertainty created by Brexit. Conversely, the regional office and industrial investment markets have remained very competitive and yields have continued to edge down. There is also a lot of interest in private rented housing, despite the low level of yields. Overall, we expect that City office and retail capital values will fall by 12 to 15% and 20 to 25%, respectively between end-2017 and end-2020, whereas industrial and regional office capital values should increase, or hold steady.
+	European property	While the prospect of higher German Bund yields could put upward pressure on eurozone property yields, we think that the increase in office and logistics yields between end-2019 and end-2022 will be limited to 0.25 to 0.4%, assuming that the eurozone continues to grow and prospects for rental growth remain favourable. The exception could be the retail sector where investors' concerns about on-line diversion and future rental growth could lead to an earlier and sharper increase in yields. We forecast total returns of 5 to 6% per annum on average for investment grade European real estate between end-2017 and end-2022. The main component will be an income return of 4%, while capital value growth will be derived from rental growth.

Note: Property views based on comments from the Schroders Real Estate Research team. The views for commodities are based on return relative to cash in local currency. The views for corporate bonds and high yield are based on credit spreads (i.e. duration-hedged).
Key: +/- market expected to outperform/underperform (maximum ++ minimum - -) 0 indicates a neutral position.

Economic views

Central view

Global growth downgraded further

We are revising down our forecast for global growth for the second quarter running. For 2018 the forecast goes to 3.3% from 3.4% and in 2019 to 3% from 3.2%. The most significant changes are in Europe and Japan where growth has disappointed in the first half of 2018, but we have also nudged down our forecast for the US to 2.8%. The emerging market forecasts are also slightly weaker this year and next led by a downgrade to our forecast for China in 2019 to 6.2%.

Looking further out, the downgrade for 2019 has been driven by our revised expectation of a deeper and more prolonged trade war between the US and China. This is expected to persist beyond the US mid-term elections and result in tariffs on all goods traded between the two nations with China also applying non-tariff barriers to US companies.

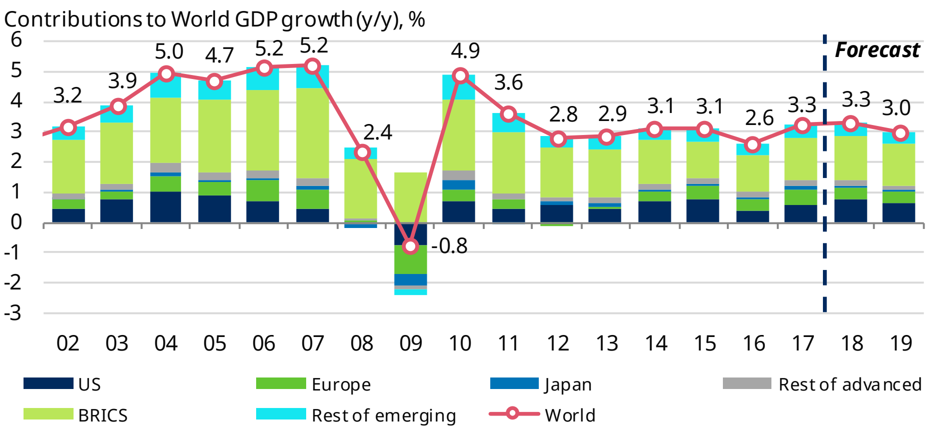
Our global inflation forecast remains at 2.7% for 2018, where we continue to be above consensus on US inflation, and we have revised up our inflation forecast for 2019 to 2.7% (from 2.4%). The latter reflects increased tariffs as well as a higher profile for oil prices next year (as projected by the futures curve). Gauging the effects of tariffs on inflation requires a view on currency moves and the degree of pass through to final prices.

On the monetary policy front, we still expect one more rate hike in the US this year and two next year with the fed funds rate reaching 3% by the middle of 2019. We see this as the peak as the lagged effect of tighter monetary policy will combine with a fade in fiscal stimulus to slow the economy.

Meanwhile, the ECB is expected to end QE by the end of Q4 this year and raise rates twice in 2019, ending the era of negative policy rates in the eurozone. However, the Bank of Japan is not expected to move again over the forecast period. Although we expect the next move to be tightening, we see this outside the forecast horizon due to subdued inflation and a too narrow window to move ahead of the consumption tax hike in Q4 next year.

In contrast, lower inflation and liquidity concerns mean that China heads the other way with the PBoC easing the reserve requirement ratio and policy rates lower. The interest rate cycle is expected to turn upwards in India this year and Brazil next year.

Chart 1: Global growth and forecast for 2018 and 2019



Source: Thomson Reuters Datastream, Schroders Economics Group. 15 August 2018.

Macro risks: Rising risk of trade war

Full details of the scenarios can be found on page 12.

Scenario analysis

For this quarter, we have updated our scenarios to reflect the revised baseline and current tail risks in the world economy. Trade wars continue to be a focus although more is incorporated into the baseline than before. On the negative side we see a risk that the EU weighs in alongside the US to impose tariffs on China (**Trade wars: China versus rest of the world**). This would significantly increase the proportion of China's exports affected by tariffs from 19% to 38% and as a result we would expect China to devalue the yuan (CNY) by 20% at the start of 2019. Such a move helps to offset part of the effect of tariffs on Chinese goods, but is also likely to create considerable volatility in financial markets as the dollar strengthens. The overall effect is for a stagflationary outcome with global trade slowing, but prices rising as a result of higher import duties.

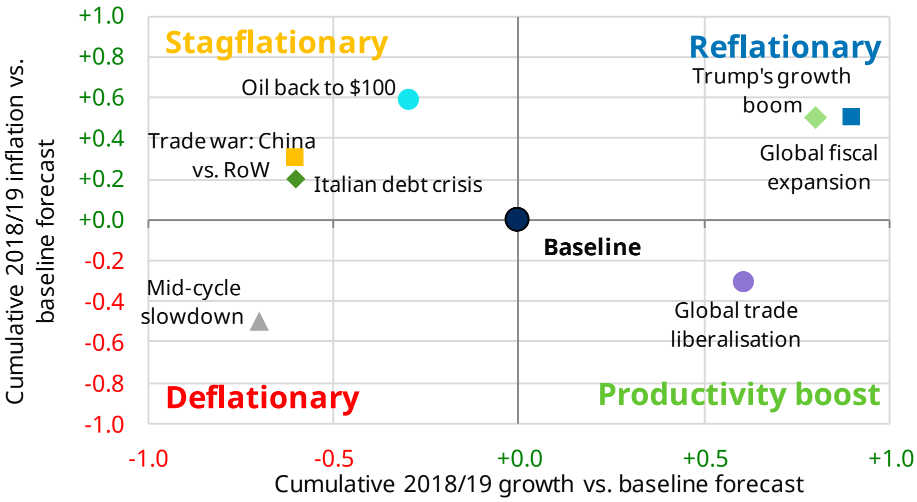
On a more optimistic note, we have a **global trade liberalisation** scenario where the US and EU strike a deal to remove tariffs thus prompting China to follow suit. The resulting opening up of markets leads to a boost to trade, productivity and growth. Inflation is expected to be lower in this scenario as input costs fall and competition intensifies.

To reflect the increase in political risk in Europe we have a crisis scenario where the new Italian government clashes with the EU over budget plans (**Italian debt crisis**). This results in a widening of spreads and a sharp fall in the euro. The situation is only stabilised after the ECB restarts QE and a technocrat prime minister is installed. However, there is a significant loss of output in Europe and the political situation is expected to remain volatile.

Our third new scenario is designed to capture the strength of confidence in the US economy (**Trump growth boom**). Rather than slowing from the heady 4% pace of the second quarter, the economy maintains momentum as rising business confidence leads to stronger investment and employment. Global growth is stronger, but the Fed has to raise rates more rapidly (to 4% by the end of 2019) and the dollar strengthens.

Otherwise, we continue with our scenarios for a **mid-cycle slowdown** where we see a greater near-term impact on business and consumer confidence from the tariffs which impacts spending on capital investment and consumer durables. **Global fiscal expansion** sees a loosening of fiscal policy across the G7 and emerging markets as governments try to boost growth and quell populist unrest. Finally, the risk of a rise in energy costs as a result of US sanctions on Iran is captured by **'Oil back to $100'**.

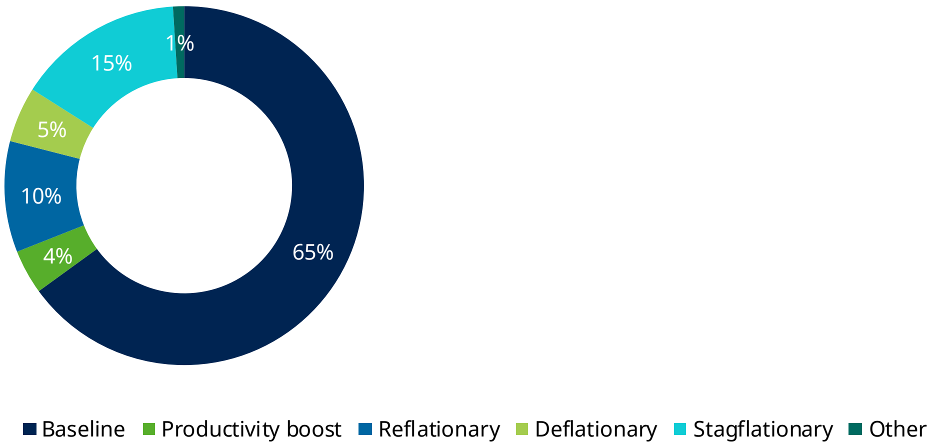
Chart 2: Scenario analysis – global growth and inflation impact



Source: Schroders Economics Group, 15 August 2018.

Chart 2 summarises the impact each scenario has on global growth and inflation relative to the baseline. In terms of probabilities, we would see the risks as being skewed toward stagflation with three scenarios falling into this quadrant. The second highest outcome would be reflation with two scenarios. Higher inflation remains a concern, but that this is more likely to be combined with weaker rather than stronger growth.

Chart 3: Scenario probabilities



Source: Schroders Economics Group, 15 August 2018.

Table 2: Scenario summary

Scenario	Summary	Macro impact
1. Italy debt crisis	The populist Italian government decides to pick a fight with Brussels and announces a 5% of GDP fiscal loosening. Markets baulk at the announcement, pushing the 10-year BTP yield up to 6%. After a couple of failed auctions, the government is forced to seek help from the rest of the EU in the form of a bail-out. A technocrat is installed as prime minister, and the ECB's OMT (Outright Monetary Transmission) programme is activated. QE is also restarted in 2019 as the eurozone faces a deep recession. The threat of restructuring/default on Italian debt remains, but yields return to more manageable levels thanks to the ECB and change in domestic policy.	**Stagflationary:** For the eurozone, this is a stagflationary scenario due to EUR falling to 1.02. However, it becomes a deflationary scenario from the middle of 2019. The US and Japan see their currencies appreciate, and combined with lower oil prices and a shock to financial markets, both see lower growth and inflation compared to the base. The impact on EM is more mixed. China intervenes to prop up the CNY, but Brazil, India and Russia all see FX depreciation, while trade growth falters, making this a stagflationary scenario in EM.
2. Global fiscal expansion	Following the populist expansion in fiscal policy in the US, other countries decide to follow its lead either due to changes in governments, or in response to populist movements. The G7 and BRIC economies all loosen fiscal policy significantly through a combination of tax cuts and spending increases.	**Reflationary:** Fiscal loosening against a backdrop of above trend growth boosts confidence further, along with GDP growth. Some economies with low rates of unemployment see wage pressures rise, causing domestically generated inflation, while others with slack remaining, still see higher inflation through commodities and higher import prices. Central banks respond by tightening monetary policy more quickly, which eventually cools activity.
3. Trade war: China versus rest of the world	The EU and US declare a trade ceasefire and ally against China, with the EU joining the US in imposing tariffs on Chinese goods in an attempt to force concessions on industrial policy and intellectual property protection. With 25% tariffs imposed on the bulk of its trade in Q4 2018, China retaliates with a 20% devaluation in Q1 2019, offsetting much of the impact of the tariff on its exports but at a cost to global activity and domestic price levels.	**Stagflationary:** Tariffs drive costs higher in Europe and US, leading to some inflationary pressure, partly offset by lower oil prices as activity slows. Safe haven currencies strengthen but the euro and EM currencies suffer, generating further inflation. Global activity takes a hit as trade weakens and the dollar strengthens.
4. Oil back to $100	President Trump's withdrawal from the Iran nuclear deal and imposition of sanctions results in 1 million barrels per day being removed from oil supply as the agreement collapses. Risk premium on oil rises as threat of conflict in the region between Iran, Saudi Arabia and Israel spreads beyond Syria. Given the tightness of the oil markets, oil prices surge to $100 where they remain over the forecast period.	**Stagflationary:** Higher oil prices feed through rapidly into inflation putting a squeeze on oil consumers world wide. Oil producers benefit but do not increase spending rapidly enough to offset cut backs elsewhere. In the US, stronger shale gas capex and output initially offset the shock, but once this fades the effect on household budgets and global trade drag on growth. Policy tightening by the Fed is more limited as the central bank weighs higher inflation against weaker growth.
5. Global trade liberalisation	Talks between the US and EU heralds the beginning of an era of free world trade. The removal of all tariffs and non-tariff barriers encourages more countries to follow suit, including China. Global trade increases sharply as a share of GDP, with the most competitive benefiting the most. While those with the highest tariffs seeing increased demand for imports.	**Productivity boost:** More integrated global supply chains boost productivity and lowers costs in manufacturing. Savings are passed on thanks to new intense competition, helping to lower global inflation. Lower prices mean increased demand for goods, helping to boost GDP growth.
6. Mid-cycle slowdown	The moderation in global growth seen in first half of the year becomes extended as concerns over trade wars dent business and consumer confidence. Global trade slows, capital spending plans are put on hold and consumers save the bulk of their tax cuts. The world economy hits a soft patch which extends into early 2019. Thereafter, activity begins to pick up again as relations between the US and the rest of the world improve thus lifting confidence and spending.	**Deflationary:** Lower oil prices and slower growth reduce inflation. After raising rates in June, the Fed reverses tack and eases at the end of the year. Rates are cut once more in 2019 before a modest recovery allows the Fed to resume hiking toward the end of the year. Rates are also lower in the UK, eurozone and China.
7. Trump's growth boom	After a strong Q2, growth momentum continues to build in the US on the back of rising business confidence which spurs capex and employment. The tax cuts also support stronger spending from households and firms. Growth is expected to remain robust and unemployment continues to fall over the next 12 months before capacity constraints cause higher inflation and a moderation in the second half of 2019.	**Reflationary:** The boom in growth is welcomed by the Trump administration but the build up of inflationary pressure forces the Federal Reserve to keep tightening policy. The fed funds rate hits 4% by the end of next year. Although growth elsewhere benefits from stronger US demand, the US dollar strengthens thus tightening financial conditions in emerging markets.

Source: Schroders Economics Group, 15 August 2018.

Global strategy: Will trade wars derail the US expansion?

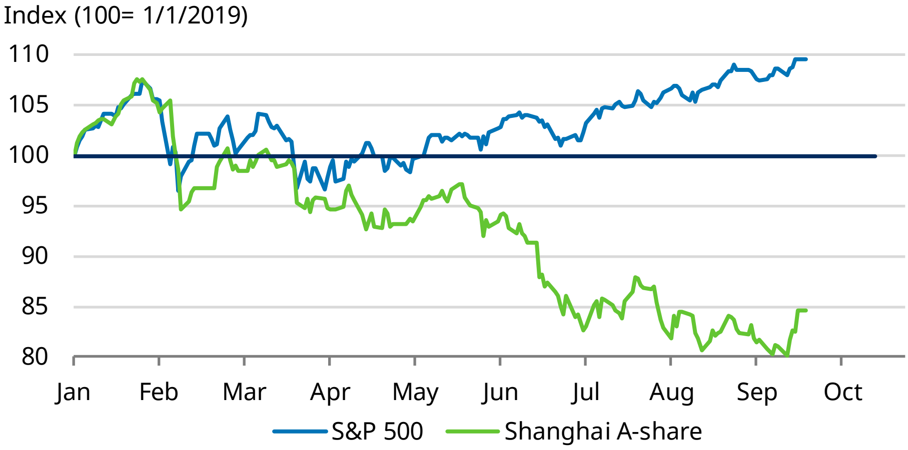
Keith Wade
Chief Economist
and Strategist

US-China trade war steps up

Financial markets continue to focus on trade wars following the US decision to impose tariffs on another $200 billion of imports from China from 24 September. This brings the total to nearly $250 billion, around half of total imports from China. In response, China has put tariffs on an additional $60 billion of imports from the US such that duties will now apply to $110 billion of products. This covers nearly 90% of all China's imports from the US. Unless progress is made in trade talks, the latest tariffs will rise from 10% to 25% on 1 January 2019. The US has threatened to follow up with a third round of tariffs on the remaining $267 billion of imports from China.

Clearly, any subsequent weakening in trade growth will have a greater impact on China than the US. The $250 billion equates to around 11% of China's exports or 2% of GDP. Should the US impose a third round this would hit 3.5% of China's GDP. The equivalent calculation for the US suggests that only 1% of GDP would be affected if China put tariffs on all its imports from the US. Markets have done the same calculation, judging from the significant outperformance of the S&P500 against the China A-share index (chart 4). As Donald Trump said: 'trade wars are good and easy to win' and the markets appear to be backing him.

Chart 4: Equity markets suggest that the US is winning the trade war



Source: Thomson Reuters Datastream, Schroder Economics Group, 24 September 2018.

However, as we have argued before, China has options beyond tariffs. For example, many US companies have chosen to trade with China through their locally based subsidiaries. Companies such as GM sell more cars in China than in the US whilst Apple sells twice as many iPhones, for example. As Korean companies in China have found, the authorities can make life very difficult through zealous enforcement of regulations should they fall foul of the government. More generally, US companies may find they are at a disadvantage when bidding for contracts and China is also currently considering a restriction on sales of exports such as rare earths which would affect US supply chains.

Heading for a prolonged dispute

In our view, the situation between the US and China has the makings of a prolonged dispute. The red lines on each side are too ideological and entrenched to allow much room for manoeuvre. China sees its trade policies as an essential part of the growth strategy that will allow the economy to hurdle the middle-income trap, in line with its 'Made in China 2025' policy. Meanwhile, President Trump came to power promising to put 'America first' and he has assembled a team that believes China is a root cause of the decline in parts of the US economy from which he draws his base support. From this perspective, there will be no deal where both sides get around the table and agree a way forward. Tariffs are the new reality.

Ideological red lines mean neither side is likely to give way

Clearly, it is not just China's economy which is affected, but the whole supply chain which includes many emerging Asian economies such as Korea, Taiwan and Malaysia. Hence the impact on emerging equity markets which have struggled year to date.

There will be winners though as importers in the US and China switch to alternative suppliers. For example, Brazil is likely to see increased demand from China for its soybeans following the imposition of tariffs on US imports. We could also see China switching toward suppliers in Japan and Europe for goods such as chemicals and manufacturing products.

Meanwhile, US companies will face a difficult decision on whether to pay the tariffs and try to pass them on in final prices, or to absorb them into their margins. The former leads to higher inflation whilst the latter will hit corporate profits. Neither outcome would be particularly good for growth as higher inflation will hit consumers, whilst weaker profits will dampen capital investment. For the Trump administration, the hope is that those companies will bring production back home. However, this is likely to involve considerable cost, especially given the shortage of labour in the US. In the meantime, the uncertainty created by the trade wars may well dampen capital expenditure (capex) and certainly foreign direct investment (FDI) flows between the two countries.

So trade wars would hit global growth and affect emerging markets, particularly Asia, more than the US. On their own though they are not enough to derail the US expansion. In our view the trade wars would need to become worldwide to have a significant effect on global growth. For example, the Bank of England reports that a US tariff of 10% on all its trading partners could take 2.5% off US output and 1% off global output over three years through trade channels alone[1]. Tighter financial conditions or greater uncertainty would make this worse.

Trade war would need to escalate beyond the US and China to derail the cycle

Alternatively, a scenario where other countries join the US in putting tariffs on China could result in significantly weaker global growth as a greater volume of trade is affected and could bring destabilising consequences such as a significant devaluation of the renminbi (RMB). This forms the basis of our 'China vs. rest of the world' scenario where global growth is some 0.6% weaker by the end of 2019 than in the baseline[2].

However, even in the absence of such an escalation we should not dismiss the threat from trade wars as they create another headwind for the world economy, which alongside tighter monetary policy from the Federal Reserve (Fed) and a fading in fiscal stimulus will weigh on growth in 2019 and 2020. Our forecast sees US growth slowing to a 2% pace by the second half of next year with the cycle likely to end in 2020.

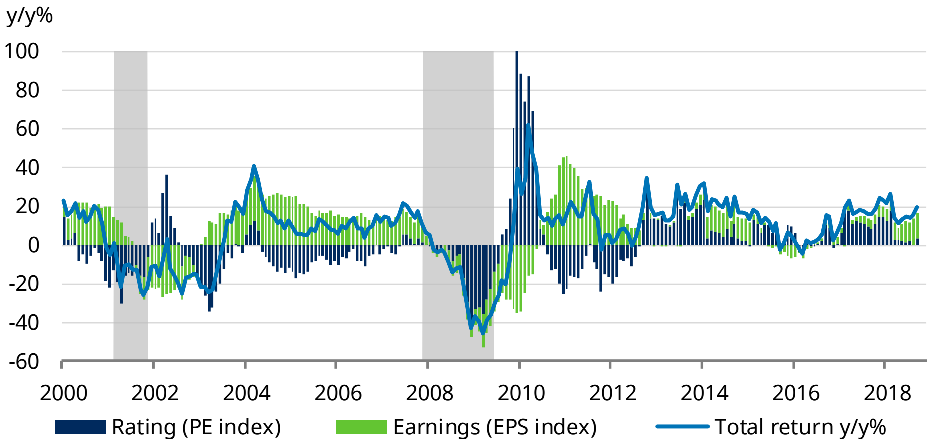
[1] From Protectionism to Prosperity' given by Mark Carney at the Northern Powerhouse Business Summit – Great Exhibition of the North, 5 July 2018, see www.bankofengland.co.uk/speeches.
[2] See the September Economics and Strategy Viewpoint for more details here.

Earnings have driven US equities

Developed versus emerging – market implications

At this stage the US equity market seems unmoved by these concerns and is focused more on the strength of earnings growth. Looking at the breakdown, we can see that earnings per share growth has been the principal driver of returns this year (chart 5). Share buybacks and tax cuts will have helped drive this outcome alongside the strength of economic activity. The de-rating of the market which many feared in the face of Fed tightening has not materialised. Valuations have actually been a small positive for returns, which may well reflect the relatively subdued rise in US bond yields.

Chart 5: US equity market drivers

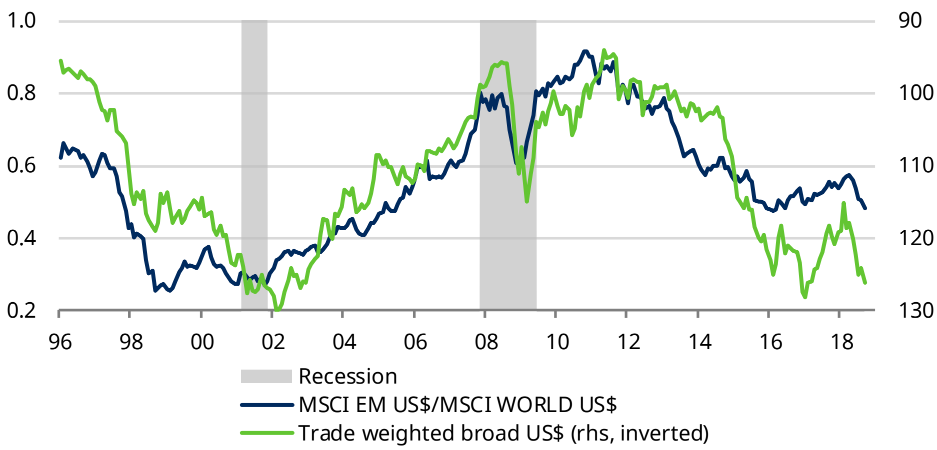


Source: Thomson Reuters Datastream, Schroders, 24 September 2018

Turn in the USD may offset the trade wars for emerging market equity

However, this does highlight the vulnerability of the US equity market. Should growth slow as we expect next year then this would remove the key driver of returns. Whilst this does not bode well for risk assets, slower growth in the US is likely to be accompanied by a weakening in the US dollar. Currency markets tend to move ahead of the interest rate cycle and so will anticipate the peak in US rates in 2019. This would provide some relief to the emerging markets whose relative performance is closely tied to the USD (chart 6). Relative emerging market performance will then depend on the balance between a longer trade war between the US and China and the easier liquidity which a weaker USD would bring.

Chart 6: Emerging versus developed equity market performance and USD



Source: Thomson Reuters Datastream, Schroders, 24 September 2018.

Research note I: Bond vigilantes at the gates of Italy

Azad Zangana
Senior European Economist
and Strategist

Italy's highly indebted government remains a big concern for investors in Europe

When it comes to Europe's public finances, Italy has always been the 'elephant in the room'. With debt at around 132% of GDP, Italy is highly vulnerable to macroeconomic shocks and/or a loss in confidence by investors. Though not the most highly indebted in Europe – Greece still holds that title – Italy is simply too big to bail out.

Despite its fragilities, past governments have managed keep a tight rein on Italy's finances through both the global financial crisis and the sovereign debt crisis. Possibly too tight, as populists are now in charge, and they have threatened to let loose and not only cut taxes and increase public spending, but also to unwind some of the structural reforms implemented in recent years.

A fight with Brussels is inevitable, but it is not Brussels that Italy needs to fear. Bond vigilantes are circling, and they will ultimately decide whether Italy (and the eurozone) will face another debt crisis.

Investors demand a premium to buy Italian debt

The 2019 budget target has disappointed investors, but is not as bad as previously feared

The 2019 budget target was unveiled on 27 September 2019, with the government defying the advice of Giovanni Tria, Italy's Minister of Economy and Finance. Tria had recommended a deficit of 1.6% of GDP, which would have largely satisfied the European Commission, however, the target has been set at 2.4% of GDP, with additional funds being prepared for pre-election promises.

Italy is now on a collision course with the European Commission, which will assess all member states' budget plans from 15 October. It is very likely that the Commission will instruct Italy to lower its target, although it has little power to force Italy to comply. The Italian government will point to France, which plans to overshoot its previous 2019 target. The European Commission will probably manage to persuade the Italian government to lower its target slightly, but France's behaviour is not helping matters.

The initial reaction in markets to the news has been negative. The Italian FTSE MIB equity index fell by around 4% the following morning, with Italian banks suffering the most, as they are large holders of Italian government debt.

The recent threat of a fiscal splurge has led higher yields...

The yield spread between the 10-year Italian government bond (BTP) and German 10-year bond rose by around 35 basis points (chart 7). However, the spread remains well below the peak seen over the summer, when uncertainty over the 2019 budget and rumours over the possible sacking of the more moderate finance minister helped push the spread to highs not seen since 2012.

This period of fear followed the formation of Italy's populist coalition government. The coalition members, the League and Five Star Movement parties, joined forces by agreeing a fiscal programme that, if fully implemented, would likely expand Italy's budget deficit by around 5% of GDP (to around 6.6%) over a two to three-year period. Policies that have been promised include scrapping a planned hike in VAT, the introduction of a flat income tax, a tax amnesty, a minimum citizens' income and an unwind of pension reforms.

...and more demand for protection against a bond default, and an exit from the euro

Chart 7: Bonds yield spreads

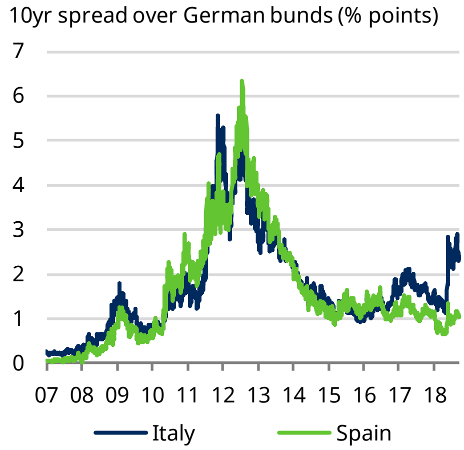
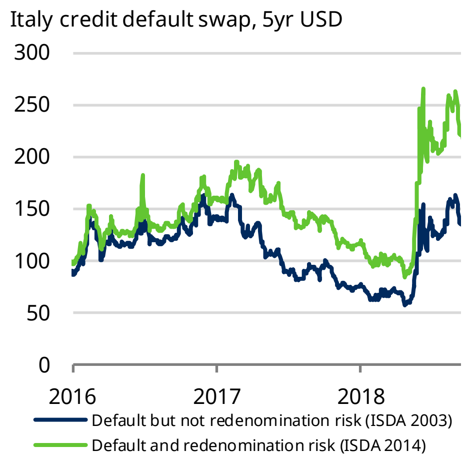


Chart 8: Redenomination risk is high



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

In addition, it is worth noting that through the summer, the equivalent spread for Spanish bonds did not follow the Italian spread higher. This suggests that investors are distinguishing between the political risk in Italy and its fragile public finances, and Spain, which also has its political issues, but its faster growth rate and lower level of debt makes it less risky.

Investors were not only concerned over the debt sustainability of Italy, but also the risk of it leaving the monetary union. Chart 4 shows the Italian five-year credit default swap (CDS) rates. These represent the annual cost of insuring against a restructuring or default by the Italian government for a five-year period. However, in 2014, a new contract standard was introduced (ISDA 2014) which included protection against redenomination risk. Therefore, comparing the previous contracts which still trade today (ISDA 2003) with the newer contracts, we can identify periods when investors are prepared to pay a premium to protect against Italy leaving the euro. The spike in the difference spread between these two CDS contracts occurred just after the election result was announced, and has remained elevated ever since.

Yields are up, but interest payments are still falling

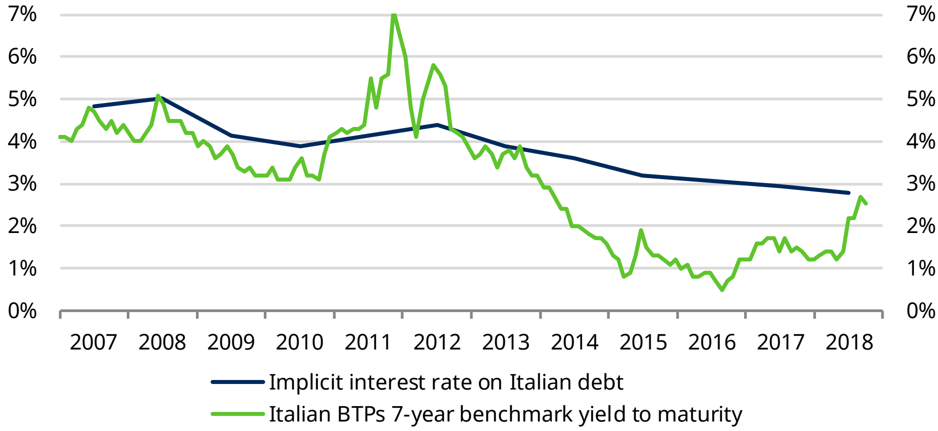
While yields have risen, it takes a long-time for the impact to register in the public finances

The rise in BTP yields has of course triggered concerns over the sustainability of Italy's public finances. Italy is often cited as the reason why the European Central Bank (ECB) cannot possibly raise interest rates. The argument goes that higher bond yields will quickly make Italian debt unsustainable.

In reality, it takes time for changes in yields to have an impact on the interest expenditure by a government. This is because governments issue a range of bonds with varying maturities. The longer the average maturity of a nation's debt, the longer it takes for a rise or fall in yields to have an impact.

In Italy's case, the average maturity of its debts is just under seven years, although the distribution is skewed heavily to shorter-dated maturities (median maturity by value of just under five years). This suggests that rather than using the 10-year bond as the key reference, the seven-year bond would be more useful in looking at the impact on public finances. Chart 9 does this, comparing the seven-year BTP yield to maturity with the average interest rate paid on the existing stock of debt. We can think of the seven-year BTP yield as the marginal interest rate paid on new borrowing. Therefore, when this (the green line) is below the implied interest rate (blue line), then the average interest rate paid is falling. This has been the case since the end of 2013, with most of the impact of those years still yet to feed through (as bonds issued in 2011–2012 will be refinanced at much lower yields).

Chart 9: Average interest payments vs. current yields



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

Italy maintained strict fiscal discipline through the financial crisis, but interest payments are the main cause of its budget deficit

Moreover, the recent rise in the seven-year yield has barely reached the current average interest rate, and so has had a negative impact on Italy's budget. Were yields to rise further, then there would be an increase in interest paid at the margin, however, probably not in a meaningful way unless we saw a 200–300 basis points increase in a short space of time. Even then, it would take several years to show up.

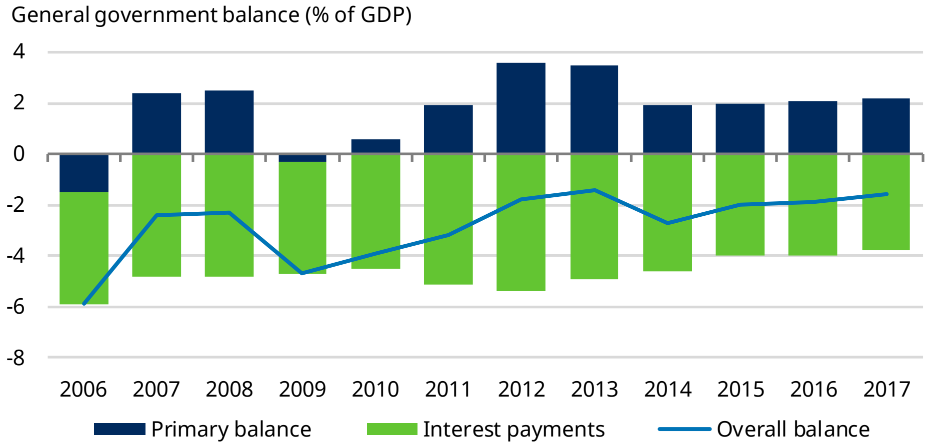
A slow rise in yields, caused by, say, higher ECB interest rates, is therefore less of a concern than a sharp rise caused by a buyer's strike. If investors' confidence is shaken and panic sets in, then refinancing maturing bonds and interest payments due becomes an issue and could even cause a sovereign default.

Budget risk is overdone for now

As mentioned earlier, past Italian governments have always been careful not to let spending get out of hand. Since 2007, the government's primary balance (budget deficit excluding interest payments) only went into deficit in 2009 (0.3% of GDP), before bouncing back to surplus the following year (chart 10). To put this into perspective, in 2009, the US ran a primary deficit of 9% of GDP, while many other countries also ran large deficits including the UK (8.3%), Spain (9.3%) and France (4.6%). Italy's management of its finances during the era of both the global financial crisis and the sovereign debt crisis is a remarkable achievement.

As Italy has run a primary surplus in 10 out of the past 11 years, clearly the problem is the interest on its existing stock of debt, which when taken into account, means the government is running an overall budget deficit.

Chart 10: Breakdown of Italy's budget deficit



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

Looking ahead, the small expansion of policy (0.8% of GDP) announced in the 2019 budget is by no means a disaster, as with growth and inflation taken into account, Italy should see debt fall as a share of GDP next year. The European Commission will protest over the fiscal slippage in the coming months, but markets are likely to be relieved that the government has only partially followed through with its manifesto promises. Full implementation of those promises could have led to a far higher rise in bond yields, and a quick deterioration in public finances. Charts 11 and 12 show our simulations of the general deficit and gross debt levels given three scenarios: the baseline scenario, which is based on what was announced in the budget; a 3% of GDP deficit; and lastly, the full stimulus package, worth around 5% of GDP, spread over a couple of years. The full stimulus package would have caused the deficit and debt numbers to balloon within a few years.

A big fiscal splurge would have quickly caused government debt to spiral out of control

Chart 11: Simulated deficits projections

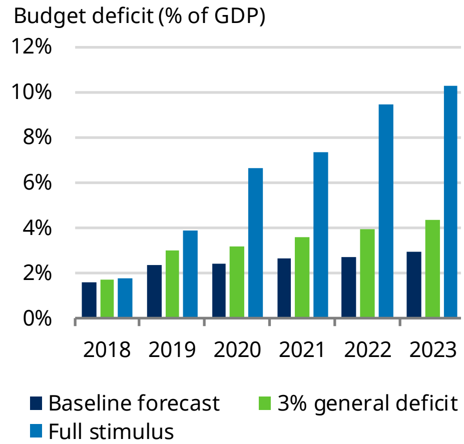
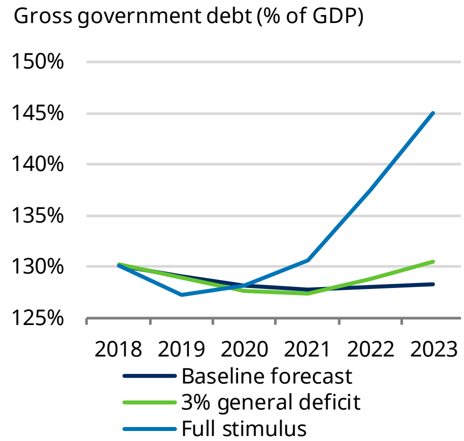


Chart 12: Simulated debt projections



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

Short-term risk is abating, but long-term risk remains

In the near term, we expect fears over Italy's finances to abate, as the higher yields on offer are hard to beat for European investors

In the near term, we expect most investors to warm back up to Italy. Despite all the bluster, the government only plans to loosen fiscal policy slightly, and within the tolerance of markets. Moreover, the yield on offer in Italy will be difficult to ignore, especially when European investors have few places remaining to generate a decent income. We expect the spread between Italian and German bonds to narrow in the coming months, and for the news flow to become more neutral.

A sense of calm is likely to return; however, the elephant is still in the room. Italy's government has not suddenly become a coalition of liberal fiscal conservatives. The political pantomime will probably repeat itself this time next year when setting the 2020 budget. Meanwhile, Italy will remain vulnerable to any hit to growth, be it cyclical or a shock.

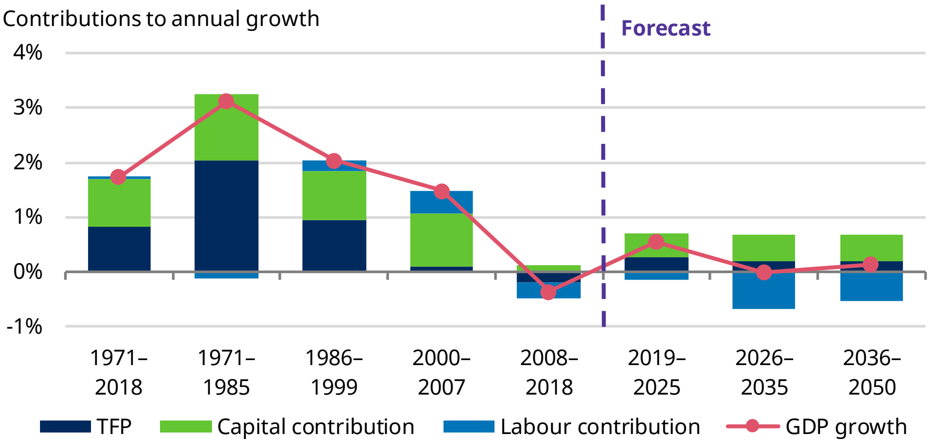
In the long term, Italy will struggle to keep public borrowing under control. Our trend growth projections show an improvement in real growth compared to the past decade, but not a recovery to the period prior to the global financial crisis. Chart 13 provides a breakdown of the contributions to trend growth including the contribution from capital (total investment), the labour contribution (total hours worked), and finally total factor productivity (TFP), which can be thought of as the extra output produced by combining labour and capital together.

Our forecast shows growth in capital not recovering to pre-crisis levels, but this is common in most countries given the impact of the financial crisis. The labour contribution is however very poor, with most of the impact being driven by an ageing population. Italy still has low labour participation rates, which we forecast to rise, but the benefit of these improvements will not be enough to make up for the falls forecast in the working age population. Indeed, Italy's total population is already shrinking. Its new government's restrictive policy on migration is unlikely to help matters.

Lastly, productivity growth is forecast to recover to growth rates that are better than those estimated for 2000–2007 and 2008–2018. The improvement is driven by expectations of further reforms, especially in reducing bureaucracy in business administration, along with legal reforms that should reduce costs. However, despite the higher TFP growth rate, it is still not enough to make up for the drag from labour supply.

In the long term, poor trend growth will make it difficult for Italy to keep public finances sustainable

Chart 13: Italy's trend growth to worsen due to demographics



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

In aggregate, the forecast for Italy's growth beyond the next six years is dire. To keep public finances sustainable, Italy will have to make up for the fall-off in real growth by either running higher inflation, lowering interest costs, or running a larger primary surplus. The first two options are almost impossible without control of its own monetary policy, while the third is politically a non-starter.

The bond vigilantes may not be knocking at the door, but they are certainly at the gates.

Research note II: What does a yield curve inversion mean for the US economy and markets?

Tina Fong, CFA
Strategist

Introduction

With the US economy experiencing the second longest expansion since the 1800s, the continued flattening of the yield curve has garnered a lot of market attention. In the past, the inversion of the US yield curve has been a good predictor of future recessions. In this note, we examine the implications of a curve inversion for the US economy and markets. In particular, we discuss the reliability of the term spread as a recession predictor. Furthermore, we explore the performance of markets at the late stage of the cycle defined using the yield curve inversion and our US business cyclical indicator.

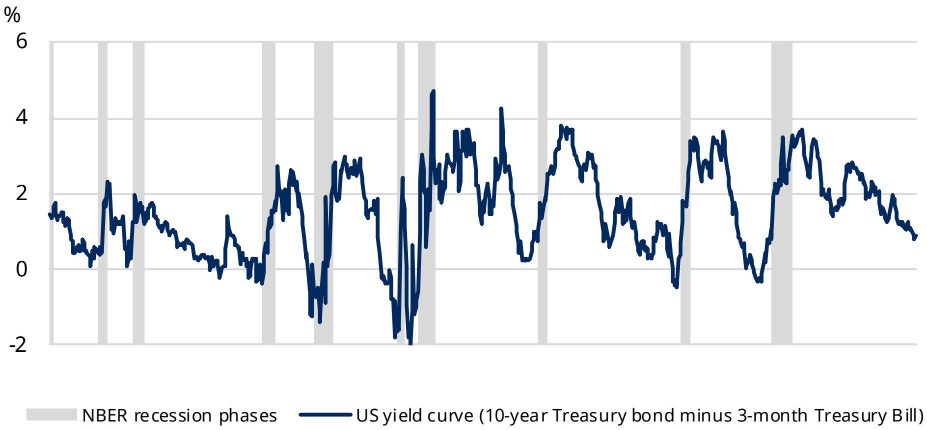
Yield curve inversion and the economy

Reliability of the yield curve as a recession indicator has been questioned by the impact of QE...

Some commentators have questioned the reliability of the yield curve – the difference between the long-term and short-term interest rates – as an indicator of future recession. They have argued that the predictive power of the yield curve has been dimmed by quantitative easing depressing long-term bond yields and term premium. The latter is the extra compensation that investors need to hold a long-term bond compared to a shorter-dated one and is currently negative.

There is an abundance of research trying to estimate the impact of QE on yields. The Fed estimated the impact of purchases to have lowered the 10–year Treasury yield by 100 basis points. Our own estimate by Azad Zangana, our Senior European Economist, suggests that the impact is larger – currently 200 basis points. This would suggest that the yield curve should be steeper, although still on a flattening trend, and we should be cautious on drawing conclusions from the current shape of the curve.

Chart 14: The US yield curve and past recessions

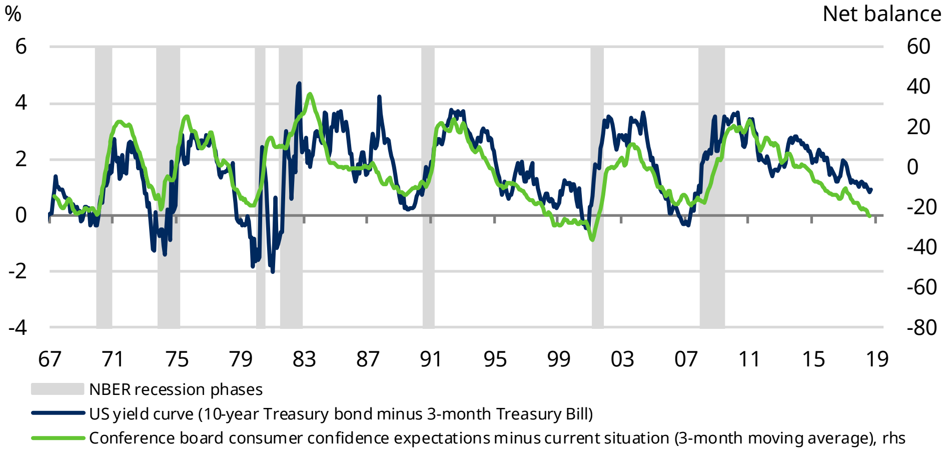


Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

...but recessions have followed nearly every yield curve inversion

The historical evidence, however, remains rather compelling as recessions have followed every yield curve inversion since the 1950s (chart 14). The exception was in the mid-1960s when the term spread was negative but the US experienced an economic slowdown rather than a recession. While this cycle's term premiums have been compressed by the expansion of the central bank's balance sheets, the tightening at the short-end by the Fed is increasing the cost of capital for corporates and households. This will have an impact on future demand in the economy. Chart 15 shows the close link between the term spread and the current compared to future conditions from the Conference Board's survey of consumer confidence.

Chart 15: The US yield curve and consumer confidence



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

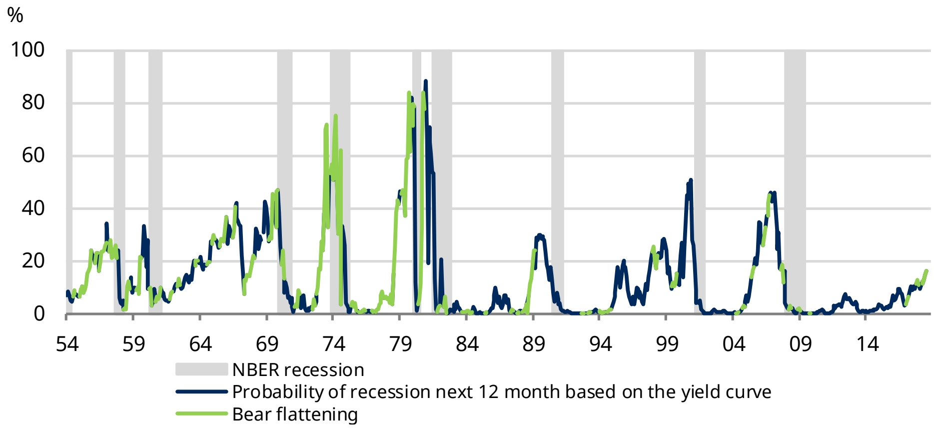
At the same time, the flattening in the yield curve hurts the profitability of banks by squeezing margins and reducing the incentive to lend, as they receive income on loans based on long-terms rates but pay deposits using short-term rates. A flattening curve may therefore reduce bank lending, which in turn can bring about an economic slowdown.

Predicting recessions using the yield curve

Recession risks have risen with the bear flattening of the curve this year

To quantify the probability of a future recession based on the yield curve, we use a commonly documented technique – probit model. This is a type of regression where the output (or dependent variable) has only two binary outcomes (a recession or no recession). Based on the term spread between the US 10-year bond yield and 3-month treasury bill, the likelihood of a recession in the next 12 months is currently around 15% (chart 16). This has increased since the start of the year driven by a bear flattening in the curve which we define as rates at the shorter-end moving higher than the long-end over the month. Nonetheless, the latest recession probability remains below the 25% critical threshold, which has flagged a significant chance of a recession in the past.

Chart 16: Recession probability in the next 12 months based on the yield curve



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

Whilst chart 16 shows the recession probabilities based solely on the yield curve, a recent paper by the San Francisco Fed also included other factors in its recession model besides the yield curve such as the natural rate of interest rates (r*) and separating the term premium from the spread level.[3] The overall conclusion of the paper was that these alternative measures did not materially change the recession probabilities.

Recent Fed research highlights the 'near-term spread' as a more reliable recession indicator …

Chart 17: Long-term yield spread and near-term forward spread

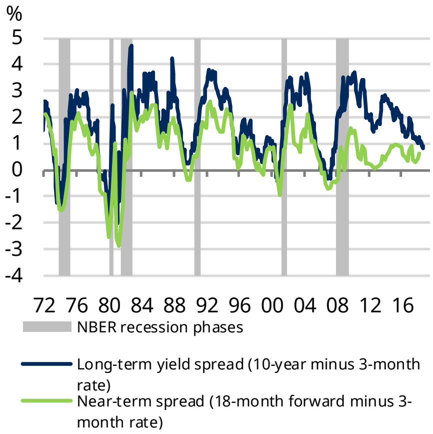
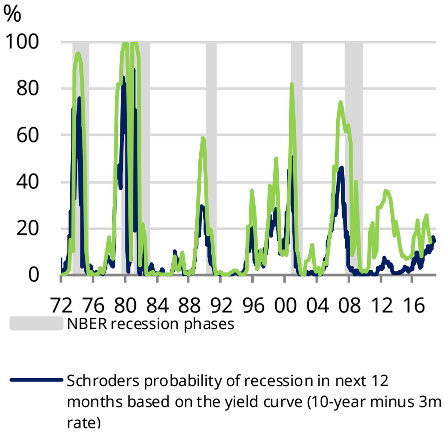


Chart 18: Recession probability based on near-term spreads



Source: Thomson Reuters Datastream, Schroders Economics Group. 28 September 2018.

…but we should not ignore the recession signals from the more traditional yield curve

Meanwhile, the latest research by Fed economists highlighted that a more reliable recession predictor was the 'near-term spread' which is the difference between the current implied forward rate in 18 months from now and the 3-month Treasury bill (chart 17).[4] They commented that the near-term spreads has a stronger correlation with investors' expectations on future Fed funds rates and have not been trending down in recent years unlike the traditional long-term yield spread. Based on their estimates using the near-term spread, the recession probability is currently 14% which is similar to the figure derived from our traditional yield curve model.

As shown in chart 18, the near-term spread model provides steeper spikes in estimating recession odds but there was also a false signal towards the end of 2012. This was driven by market expectations at the time expecting Fed rates to be pinned to the floor against a backdrop of sovereign debt rating downgrades by the credit agencies, a fiscal cliff in the US and a European sovereign debt crisis. While there is merit is monitoring the near-term spread, we should not ignore the recession signals from the more traditional yield curve.

Looking ahead, the Fed is expected to increase interest rates another three times (75bps) which takes the policy rate to 3% by the middle of 2019. Assuming 10-year Treasury yields do not move materially higher, the curve would invert in the summer of next year, which points to a recession in 2020 i.e. in 2 years time. This ties in with our fundamental assessment of the outlook for the US where the combination of tighter monetary policy and an end to fiscal stimulus are likely to slow the economy.

[3] Source: Federal Reserve Bank of San Francisco, https://www.frbsf.org/economic-research/publications/economic-letter/2018/march/economic-forecasts-with-yield-curve/.
[4] Source: Federal Reserve, https://www.federalreserve.gov/econres/notes/feds-notes/dont-fear-the-yield-curve-20180628.htm.

Navigating markets at the late-stage of the cycle

Yield curve typically inverts towards the late stage of the cycle

The US economy has been in this expansionary period since the last recession, which ended in June 2009. Unsurprisingly, market participants often cite that we are at the latter part of the current expansion. Since the 1970s, the yield curve has tended to flatten and invert towards the late stage of the cycle. Table 1 shows that the curve inversion occurred when the economic cycle was around 80% (based on the 10-year versus 3-month curve) complete based on the National Bureau of Economic Research (NBER) definition of the cycle length from one recession to another. We also did the same analysis for the 10-year versus 2-year curve and found similar results.

Table 3: Historical US yield curve inversions (10-year versus 3-month rate) and recessions

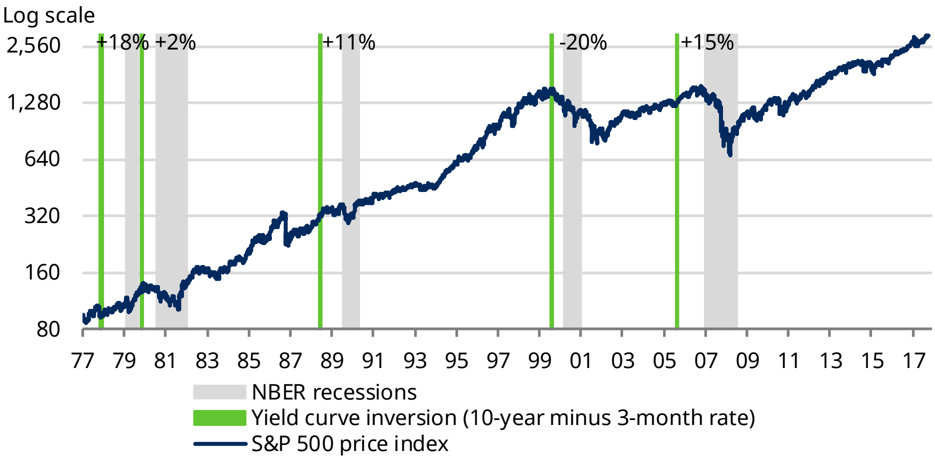
NBER recession periods	Recession start date	Yield curve inversion date	Yield curve inversion and recession start date – lead time (months)	% of cycle completed when curve inverts
1969–1970	**December 1969**	December 1968	12m	90%
1973–1975	**November 1973**	May 1973	6m	86%
1980	**January 1980**	November 1978	15m	76%
1981–82	**July 1981**	October 1980	9m	33%
1990–1991	**July 1990**	May 1989	14m	86%
2001	**March 2001**	July 2000	8m	94%
2007–2009	**December 2007**	August 2006	16m	80%
Average			**11m**	**78%**

Source: Thomson Reuters Datastream, Schroders Economics Group, 28 September 2018.

On average, equity markets peaked several months after curve inversion

In defining late cycle as the period from yield curve inversion to recession, we found that the US equity market tended to peak five months after the term spread turned negative (table 4). In other words, the S&P 500 continued to rally despite the curve inversion signalling a recession further down the road. Meanwhile, the overall performance of the US market was generally more positive over the period from curve inversion to recession particularly since the 1980s (chart 19).

Chart 19: Performance of the S&P 500 from yield curve inversion to start of recession



Source: Thomson Reuters Datastream, Schroders Economics Group, 28 September 2018.

The caveat to this analysis is the small sample size and there have been some significant drawdowns in some periods. Nevertheless, the continued rally in the equity market could be due to investors ignoring the recession signal from the curve inversion or the economic data has yet to exhibit significant slowdown to worry the market. Moreover, the market could be hoping that the slowdown in the economy is short-lived and leads back into a period of expansion.

Table 4: Timing in the peak in the S&P 500 and performance of the S&P from curve inversion to start of recession

Recession start date	Peak in the S&P	Yield curve inversion date	No. of months between curve inversion and peak in S&P	Performance of S&P (from curve inversion to start of recession)
December 1969	December 1968	December 1968	0m	-14%
November 1973	October 1973	May 1973	5m	-8%
January 1980	February 1980	November 1978	15m	18%
July 1981	November 1980	October 1980	1m	2%
July 1990	July 1990	May 1989	14m	11%
March 2001	September 2000	July 2000	2m	-20%
December 2007	October 2007	August 2006	14m	15%
Average			**5m**	

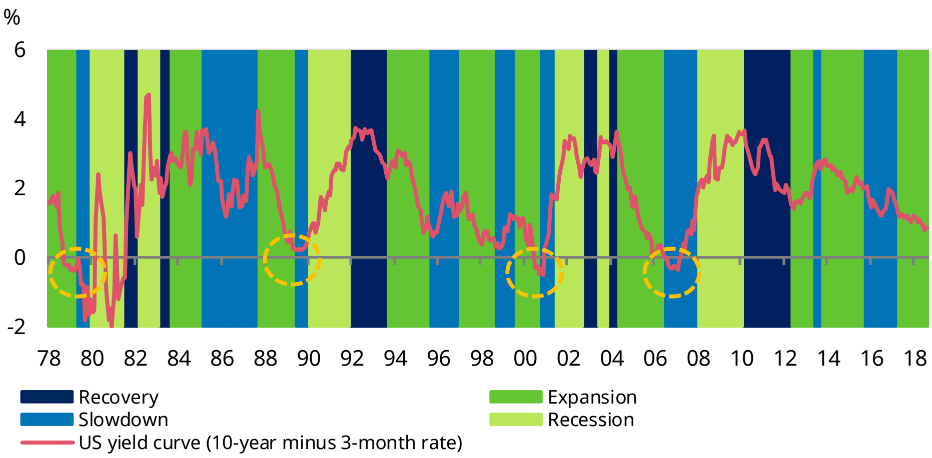
Source: Thomson Reuters Datastream, Schroders Economics Group, 28 September 2018.

Late cycle based on our US business cyclical indicator

Yield curve flattening and inversion periods typically occurred in the slowdown phase

Interestingly, we find that the end of yield curve flattening and inversion periods typically occurred in the slowdown phase based on our US business cyclical indicator (BCI). Our BCI is based on a combination of macro measures where the data is standardised and equally-weighted to create the indicator. A set of rules are then applied to determine the stage of the cycle. The slowdown phase is characterised by rising inflation but easing economic growth with the peak in the Fed's hiking interest rate cycle.

Chart 20: The US business cyclical indicator and yield curve



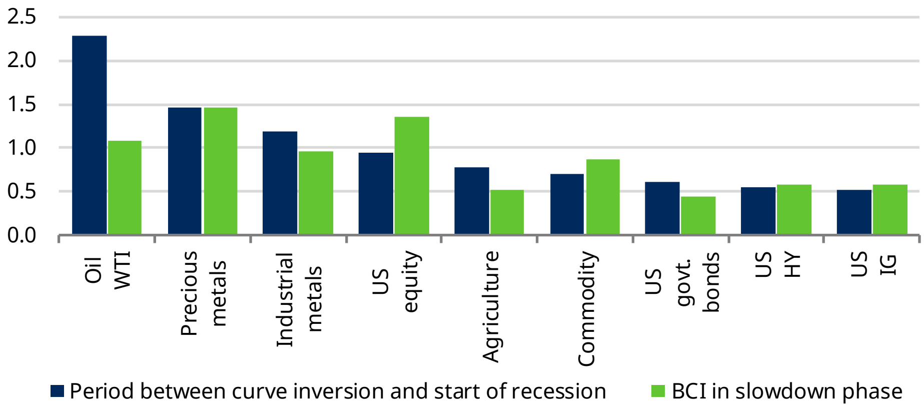
Source: Thomson Reuters Datastream, Schroders cross-asset cyclical group, 28 September 2018.

Commodity, particularly energy delivered strong returns towards the end of the cycle

Chart 21 illustrates the performance of different assets at the late-stage of the cycle where we examine average monthly returns based on the slowdown phase defined by the BCI and the period between curve inversion and recession. Over the last 40 years, there are strong similarities in the asset return profile based on these two definitions of late cycle.

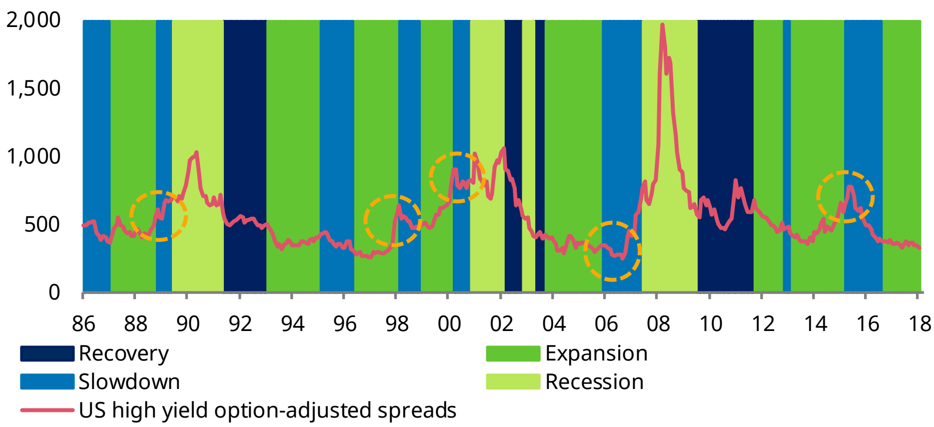
On average, certain commodity segments particularly energy delivered strong returns which is not surprising given that inflation tended to increase towards the end of the cycle. Equities also generally made positive gains as shown in chart 19, the US market typically peaked prior to the start of the recession based on our BCI definition. Moreover, equities appear to have better returns compared to government and credit bonds. On the latter, credit spreads generally widened or peaked during the slowdown phase (chart 22).

Chart 21: Asset performance at the late-stage of the cycle over the last 40 years



Source: Thomson Reuters Datastream, Schroders cross-asset cyclical group, 28 September 2018.
Note: US equity (MSCI USA), US govt. bonds (10-year Treasury bond), US IG (Merrill Lynch US Corp.), US HY (Barclays US high yield bond), commodity and sub-sectors (S&P/GSCI).

Chart 22: The BCI and high yield spreads



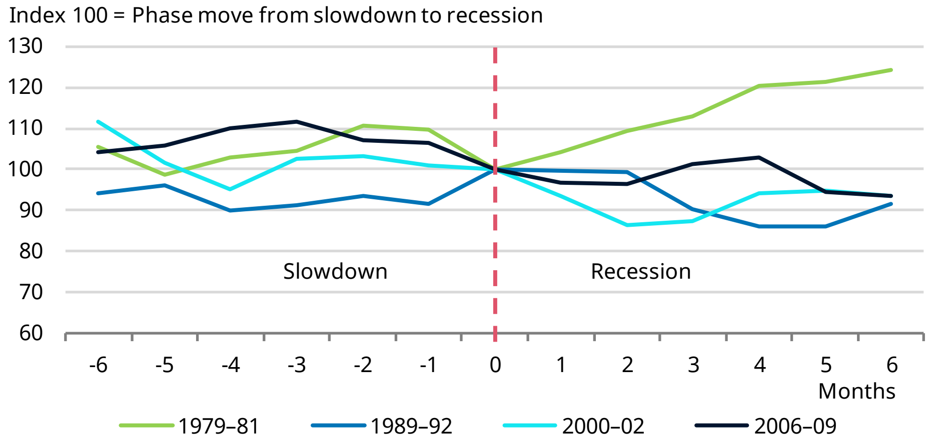
Source: Thomson Reuters Datastream, Schroders cross-asset cyclical group, 28 September 2018.

Equity returns have typically deteriorated towards the end of the slowdown and the beginning of recession

Meanwhile, looking at periods when the cycle has moved from the slowdown to recession phase based on our BCI, performance of equities have typically deteriorated towards the end of the slowdown period and the beginning of recession (chart 23). The caveat that there have been only four episodes when the slowdown phase has been followed by a recession since the late 1970s.

For the most part, however, chart 23 shows that the late cycle or slowdown phase is a tale of two worlds where equities could continue to rally or even reach highs at the start of the phase, but there is also a risk of a serious sell-off towards the end of the period.

Chart 23: Performance of the S&P 500 from the slowdown to recession phase



Source: Thomson Reuters Datastream, Schroders cross-asset cyclical group, 28 September 2018.

Conclusions

Judging by history, the US yield curve has been a good predictor of future recessions. Clearly, the compression of term premiums from QE suggests that the curve should be steeper this time around. However, we should not ignore the yield curve as there is still important signalling information on the economy with the tightening of the short-end increasing the cost of capital for corporates and households. Moreover, the flattening of the curve could reduce bank lending and lead to an economic slowdown. Meanwhile, recent research highlights that a more reliable recession predictor is using the near-term spread. This is currently suggesting a similar recession probability as the traditional yield curve. Overall, we believe there is merit in monitoring both measures.

In terms of market implications from a curve inversion, we used this as a starting point in defining the late cycle period. We found that the US equity market tended to peak and deliver positive performance during the period from curve inversion to recession. The caveat to this analysis is the small sample size and there have been some significant drawdowns in some periods, which highlights the volatile nature of markets over the late stage of the cycle.

Interestingly, we find that the end of yield curve flattening and inversion periods typically occurred in the slowdown phase based on our US BCI. At the same time, there are strong similarities in the asset return profile in the slowdown phase and the period from curve inversion to recession. Over this period, certain commodity segments such as energy also performed strongly. Importantly, the slowdown period is where equities do well at the start of the phase but falter towards the end of the period. Hence, investors should be wary of complacency as we approach the end of this cycle.

Market returns

	Total returns	Currency	September	Q3	YTD
Equity	US S&P 500	USD	0.6	7.7	10.6
	UK FTSE 100	GBP	1.2	-0.7	1.0
	EURO STOXX 50	EUR	0.3	0.4	0.2
	German DAX	EUR	-0.9	-0.5	-5.2
	Spain IBEX	EUR	-0.1	-1.8	-3.8
	Italy FTSE MIB	EUR	2.5	-3.6	-2.1
	Japan TOPIX	JPY	5.5	5.9	2.0
	Australia S&P/ASX 200	AUD	-1.3	1.5	5.9
	HK HANG SENG	HKD	0.0	-2.5	-4.1
EM equity	MSCI EM	LOCAL	-1.1	0.1	-2.6
	MSCI China	CNY	-1.6	-7.6	-8.8
	MSCI Russia	RUB	7.3	10.7	22.8
	MSCI India	INR	-7.1	3.4	2.7
	MSCI Brazil	BRL	3.7	10.2	5.9
Governments (10-year)	US Treasuries	USD	-1.8	-1.5	-4.4
	UK Gilts	GBP	-1.1	-0.9	-1.2
	German Bunds	EUR	-1.3	-0.9	1.0
	Japan JGBs	JPY	-0.2	-0.8	-0.5
	Australia bonds	AUD	-1.0	0.5	2.2
	Canada bonds	CAD	-1.5	-1.7	-1.5
Commodity	GSCI Commodity	USD	3.9	1.3	11.8
	GSCI Precious metals	USD	-0.5	-5.4	-9.9
	GSCI Industrial metals	USD	1.4	-6.5	-11.8
	GSCI Agriculture	USD	-3.6	-5.4	-8.5
	GSCI Energy	USD	5.9	4.3	24.8
	Oil (Brent)	USD	5.1	2.7	22.5
	Gold	USD	-0.9	-4.8	-8.6
Credit	Bank of America/Merrill Lynch US high yield master	USD	0.5	2.4	2.5
	Bank of America/Merrill Lynch US corporate master	USD	-0.3	0.9	-2.2
EMD	JP Morgan Global EMBI	USD	1.8	1.9	-3.5
	JP Morgan EMBI+	USD	2.8	1.5	-4.7
	JP Morgan ELMI+	LOCAL	0.4	1.2	3.1
Currencies	EUR/USD		-0.2	-1.4	-5.2
	EUR/JPY		2.4	1.9	-2.7
	JPY/USD		-2.5	-3.2	-2.6
	GBP/USD		0.4	-1.7	-4.7
	AUD/USD		0.5	-2.5	-7.6
	CAD/USD		1.0	1.6	-3.0

Source: Thomson Reuters Datastream, Bloomberg, 28 September 2018.
Note: Blue to red shading represents highest to lowest performance in each time period.

EST. 1804

Schroder Investment Management Limited
1 London Wall Place, London EC2Y 5AU, United Kingdom
Tel: + 44(0) 20 7658 6000

schroders.com
@schroders