BLACKROCK INVESTMENT INSTITUTE

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Waking up to reflation

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Our *BlackRock Macro GPS*, a proprietary indicator that incorporates big data signals to provide a handle on the economic growth outlook, suggests that consensus views are still too cautious. We are seeing signs of the global expansion becoming more synchronised and thereby self-reinforcing. This is consistent with our view that the US-led reflationary phase has further to run. Highlights in our special, expanded Macro Outlook to start the new year include:

- Reflation has arrived. US wage gains are feeding higher inflation and solid consumer spending, supporting profits in the face of rising labour costs. Our analysis shows that profits can improve even with rising wages – indeed, this is a hallmark of reflationary economic phases.
- This has been far from a typical recovery: Healing the post-crisis economic wounds has meant US businesses and consumers took longer to regain confidence and animal spirits. These now seem to be revving up.
- Tightly integrated financial markets and global structural forces, including high world debt levels, should anchor US yields.
- We see risks. US president-elect Donald Trump has raised hopes on looser fiscal stimulus, but the make-up of any changes is key. His approach to trade and foreign policy could present risks. Unexpectedly rapid US dollar appreciation could cause emerging-market (EM) instability with global spillovers.

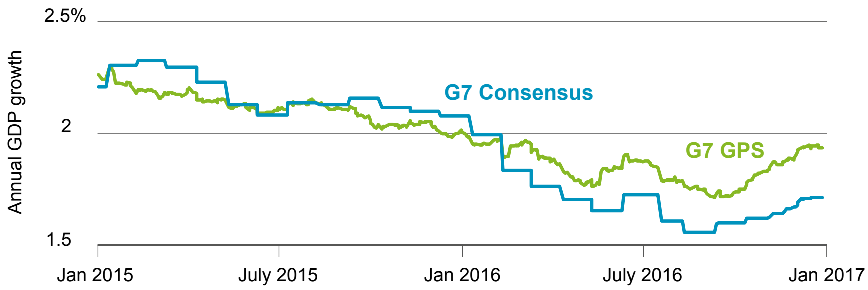
GPS: Optimism spreads

Our Macro GPS signals more upside to consensus growth forecasts, suggesting that economists are still playing catch-up to the reflationary outlook. Over the past month, the G7 GPS improved further thanks to conventional economic data. Traditional data releases are starting to reflect the upbeat big data signals that had led the initial Macro GPS rise. Robust business surveys in the US, Europe, and China are all now showing a broad global recovery. Yet GDP forecasts have been slow to respond. The gap between our Macro GPS and consensus growth views remains at the widest since 2013, just before a series of forecast upgrades.

Economic snapshot

View GPS website

BlackRock Macro GPS vs. G7 consensus, 2015-2017



Sources: BlackRock Investment Institute and Consensus Economics, January 2017.
Notes: The GPS shows where the 12-month consensus GDP forecast may stand in three months' time for G7 economies. The blue line shows the current 12-month economic consensus forecast as measured by Consensus Economics.

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Psychological shift

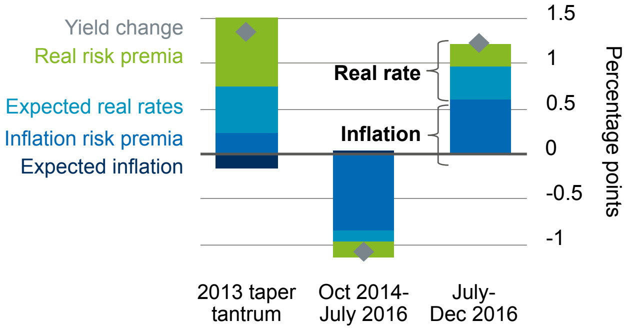
The jump in global bond yields represents a reflationary reawakening just a year after deflation and recession fears were dominant. Is this another false dawn? We don't think so. This is an important psychological shift for investors previously obsessing over downside risks to growth and inflation, typified then by the talk of "secular stagnation" and "liquidity traps". The trend started in July when bond yields bottomed at record lows. Signs of a global growth pick-up stoked the more confident mood, as did Donald Trump's surprise US presidential victory. We believe this reflationary phase, which central banks have been trying to achieve with years of ultra-easy monetary policy, has further to run. Reflation is a natural part of any economic recovery: both a self-reinforcing dynamic of higher wages feeding mildly higher inflation and stronger incomes supporting demand and nominal growth. That it took six to seven years after the Great Recession to take root shows how households and companies needed to repair balance sheets, how animal spirits can stay subdued after a financial crisis and how mini-shocks can reinforce cautiousness. Optimism still eludes economists. Only one of 57 Bloomberg forecasts has eurozone GDP topping 1.6% in 2017. Only two of 78 put US GDP above 3.0%.

The chart below shows about half of the recent sharp rise in 10-year Treasury yields was driven by a repricing of inflation, in contrast with the 2013 "taper tantrum". Once oil and commodity prices bounced from their 2014-16 sell-offs and US wage growth became clearer, investors demanded more normal compensation for upside risks to inflation.

This reflationary phase shouldn't be a source of sharply higher prices or erode corporate profit margins to the point of driving the US economy into recession. But global forces should limit these reflation dynamics and any US yield rise. That is due to the influence of global yields on US yields and the US dollar's role in global financial conditions. Record world debt levels mean central banks can raise rates more slowly compared with previous tightening cycles to achieve the same cooling effect.

Deflation fears fade

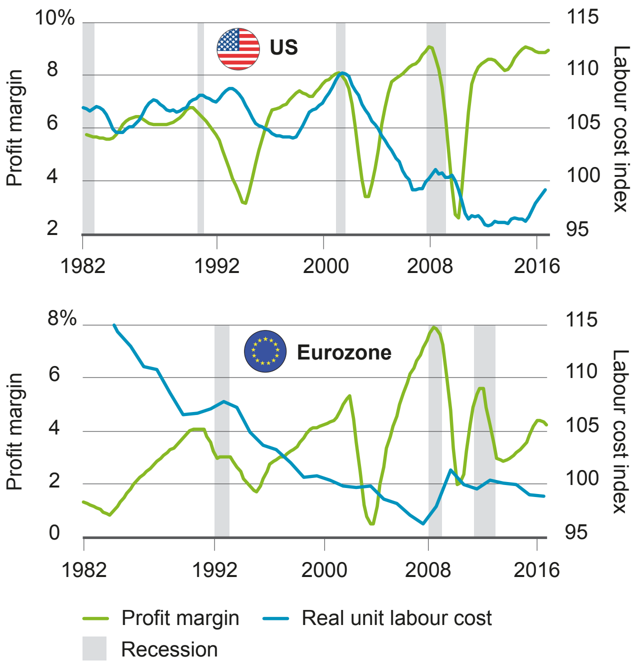
Factors behind US Treasury yield moves, 2013 and 2016



Sources: Federal Reserve and BlackRock Investment Institute, January 2017. Notes: This chart shows the estimated contribution to moves in US Treasury yields across three periods. The first period covers the seven months after then Fed Chairman Ben Bernanke first mentioned curbing bond purchases, precipitating the "taper tantrum". The second period shown saw a plunge in oil prices that reduced rates of inflation compensation. The third period was marked by a rise in yields. Estimates draw on the methodology of a recent San Francisco Fed research paper by Andreasen, Christensen, Cook, Riddell (2016).

Labour vs. capital: a shift

Corporate profit margins and labour costs, 1982-2016



Sources: Thomson Reuters Datastream, US Bureau of Labor Statistics, European Commission and BlackRock Investment Institute, January 2017. Notes: The charts show measures of US and eurozone employee wages and corporate profit margins. Wages are represented by the one-year moving average of real unit labour costs (blue line), excluding the government sector, and rebased to 100 for 2009. Profit margins are the one-year moving average of company net profits relative to revenue excluding the resources sector.

At last, wage growth

Wage growth, long missing in the post-crisis expansion, is a crucial part of the reflationary dynamic. The US economy saw the first green shoots in late 2015 when average hourly earnings started to turn higher after having been stuck around a paltry 2% year-over-year pace for months. That is reflected in rising real unit labour costs in the chart above – and at a time when US corporate profit margins remain historically high. The wage gains became clearer in the December data showing US average hourly earnings jumping to a 2.9% annual rate, the fastest since 2009.

We believe companies have scope to tolerate even higher wage inflation in a stronger growth environment, either by hiking product prices or through a modest decrease in profit margins. In the eurozone, real labour costs remain tepid even as profit margins have improved. Both the US and the eurozone therefore should have room to generate higher wages and prices in a positive reflationary fashion. The perhaps intuitive view that rising wages squeeze margins is not borne out in the data. Wages and profits can and typically do rise together during the reflationary phase of economic expansions. In the US, this was the case in the late 1980s, late 1990s and the mid-2000s. The key ingredient? Solid and rising aggregate demand.

This is reinforced by an almost total lack of correlation between annual changes in the S&P 500 and US average hourly earnings. If wage growth were to systematically undermine corporate profitability, we would expect to see a correlation.

Virtuous cycle

Rising wages tend to spook equity investors worried about corporate profit squeezes and recession risks. Yet our analysis suggests that in a reflationary cycle, companies tend to have enough leeway on prices to increase wages and even improve profit margins.

The chart below shows the link between annual changes in the profits of US companies (gross operating surplus in economics jargon) relative to the change in unit labour costs. We break industry sectors down into two groups where behaviour differs: 1) a competitive one, where more firms fight over market share and which makes up about three-quarters of business revenue; 2) a concentrated one, where a few large businesses tend to dominate.

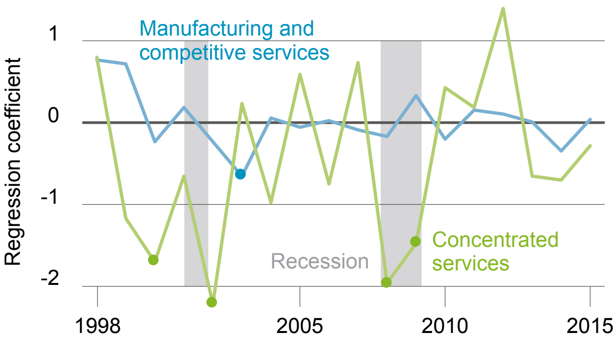
In a competitive environment, companies should have thinner profit margins and find it harder to absorb higher labour costs, making them unprofitable and potentially forcing them out of business. Higher costs get passed on via prices because these firms cannot absorb the profit erosion. Companies operating in more concentrated sectors, such as supermarkets and airlines, can sustain some profit erosion and adjust prices more slowly for fear of sparking a price war and losing market share.

But in a reflationary environment, where most companies in concentrated sectors see that big-picture forces are pushing prices and costs higher, these fears subside and price hikes happen more naturally. When a downturn hits, these companies may be more aggressive in cutting margins to maintain or increase market share. And the chart below helps show this: little link exists between wages and profits for the vast majority of competitive sectors, which include trucking haulers and restaurants among others.

Indeed, only the margins in concentrated companies show significant evidence of a margin squeeze. Importantly, this happens in recessions – likely reflecting a pressure to preserve market share as demand falters.

Where's the squeeze?

US profit-wages relationship across industries, 1998-2015



Sources: Bureau of Economic Analysis, BlackRock Investment Institute, January 2017.
Notes: The chart shows the relationship between changes in nominal unit labour costs relative to profits per unit across US business industries.
A negative number shows labour costs pushing down profits per unit. The dots denote statistically significant negative levels at a 95% confidence level.
All industry sectors are weighted equally, with resource sectors excluded.

Letting reflation run

Accelerating US wage growth is a natural element of reflationary dynamics in its early stage. We see it as having plenty of room to run for longer. As the economic expansion matures, the labour market tightens to a point where companies have to lift wages more aggressively to attract the new hires they need. But higher wages also support more consumer spending, thereby boosting corporate revenues.

Any marginal dent to company profit margins is not necessarily negative for the economy – it's the crux of the virtuous cycle that fosters enduring economic expansions. The rise in US wages so far is very limited relative to what remain historically high profit margins. This redistribution of income to labour from capital is a natural part of a maturing cycle: companies are keeping less of their profits to pay workers more.

The lack of stronger wage growth was a root cause behind the fears of the US economy's fragility and the downside risks to inflation. Thus, it would be misleading to think that rising wages have a direct link with subsequent economic downturns.

Economic cycles do not die of old age, as the Fed has repeatedly noted. In this case, we see no reason to believe that the seeds of reflation will sow the expansion's demise just now. Most recessions can be explained by a sudden hit to aggregate demand, either due to some external, financial or policy-related shock.

The Fed has been so cautious about raising rates precisely to arrive at this reflationary moment: absorbing the substantial labour market slack that was created by the crisis to put upward pressure on wages and inflation.

This US profit-wages dynamic has the potential to broaden and go more global. Any uptick in US capital investment or productivity kick would give companies even more flexibility to lift wages. Elsewhere, this dynamic is starting to take shape. In Europe, the slack created by the 2007-08 and 2011-12 crises is slowly being taken out. The eurozone unemployment rate is at a seven-year low but still near double-digits at 9.8%, versus its 2008 low of 7.2%. Labour market reforms have expanded the workforce in Japan, which helps explain why wage growth remains limited even with its unemployment rate at three-decade lows. A better synchronised global recovery would make this bout of reflation more powerful.

We see risks. Trump's stance on trade and foreign policy may have economic repercussions. The giddy confidence among CEOs may not spark stronger capital spending. Sharp US dollar appreciation may cause EM instability with global spillovers – including reigniting worries about China's vulnerabilities.

Our bottom line: Rising wages do not typically cause margin squeezes or herald recessions. These squeezes tend to be the result of falling demand and recessions, rather than the cause.

Global limitations

The world has changed. Ageing societies and tepid productivity mean economies cannot grow as strongly as before, lowering the neutral policy rate for central banks. See our *2017 Global Investment Outlook* for details. Greater fiscal stimulus, especially infrastructure investment, can prop up productivity and also boost short-term nominal growth. Yet we don't see that as enough to offset the global forces at play. These forces imply that any given increase in policy interest rates is likely to have a bigger economic impact than was the case pre-crisis.

What some investors may not realise is just how much more tightly connected global bond markets have become. A global economy means globally integrated financial markets – money can move freely to chase yield and returns. As a result, the correlation between major bond markets has risen sharply, as seen in the chart below. To put it simply: whatever is driving yields in the US, Europe and Japan, they move much more closely together than ever before in the post-Bretton Woods era.

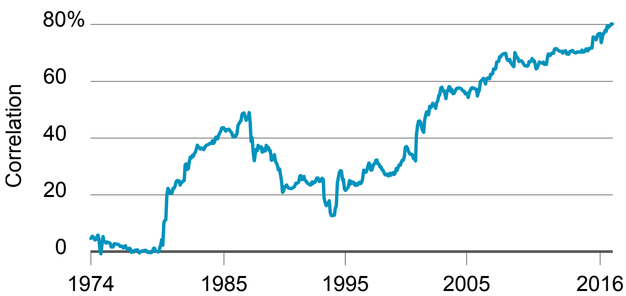
A global drop in inflation in the early 1980s initially drove up the correlation. Global financial integration pushed it even higher from the mid-1990s on. The reason: capital can move more easily between bond markets and yield curves.

Carry trades have become a fundamental part of the market landscape, with rising yields in one country sucking in capital from abroad and causing currency appreciation. In the current environment, US yields are driving up yields around the world. Yet with the difference between 10-year US Treasury yields and German counterparts reaching the widest levels in nearly three decades, we are reaching historical extremes.

Structural factors in Europe and Japan are likely to keep holding down long-term bond yields in these regions: persistently low growth and inflation, ageing populations and high debt levels. Given these global effects, we believe the solid correlation between major bond yields signals that US yields have limits to how high they can go.

Global rates: a closer connection

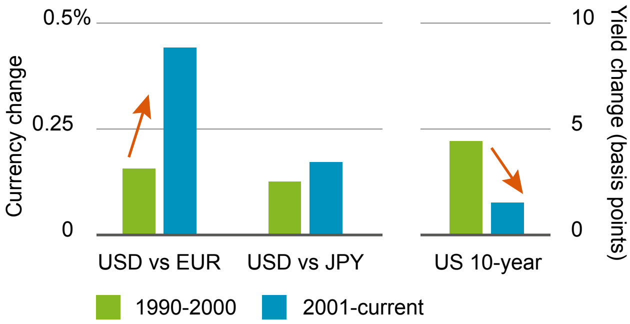
Co-movement of major bond yields, 1974-2016



Source: BlackRock Investment Institute, January 2017.
Notes: This chart shows a seven-year rolling regression (R-squared, or coefficient of determination) of monthly changes in US 10-year yields on a factor that captures the monthly change in German, Japanese and UK 10-year yields. The regression shows what proportion of US yield changes may be explained by a common global factor extracted from all the yield moves.

When the Fed surprises, currencies move

Same-day market impact of unexpected Fed rate rise



Sources: Federal Reserve, BlackRock Investment Institute, December 2016.
Notes: This chart shows the estimated one-off response of assets on the day of a surprise Fed 25-basis point increase in the federal funds rate, with no assumption of any further surprise. The estimate draws on the methodology used in a *2004 Fed paper*.

Changing Fed impact

This financial market interconnectedness means that central banks do not operate in a vacuum when setting policy, even while trying to achieve domestic mandates tied to inflation or employment.

This applies to the Fed in unique ways and has changed how markets react to the US central bank's policy moves. We adopt the methodology of a 2004 Fed study and find the same-day market impacts of a one-off "surprise" increase in the federal funds rate are now felt more through the US dollar (USD) and exchange rates than bond yields, as seen in the chart above.

These estimates imply a much larger single-day impact on the dollar than was the case before 2001, showing the USD rising more than twice as much versus the euro. Conversely, the impact on benchmark 10-year Treasury yields has been halved. This is how the so-called global savings glut has reinforced the impact of this yield-seeking carry trade behaviour since the early 2000s.

It shows to what extent the Fed's impact on financial conditions is global and beyond its prime target: US economic and financial conditions. Such is the picture of greater financial integration at play: globally mobile capital taking advantage of higher rates to chase the USD higher while also helping to hold down yields.

Recent history bears this out. One of the reasons cited by Fed officials for pausing so long after its first rate increase since the crisis was the US dollar's impact on global financial conditions and the domestic economy.

Since 2015, Fed officials have slowly acknowledged that expected changes in US policy rates were having a big impact on the US dollar and thus global financial conditions, whether due to the domestic blowback in EM from depreciating currencies or the rate impact on USD-issued debt abroad.

In essence, the Fed has recognised that its policy changes have global contours. Hence the global limitation on the Fed and policy rates extends to US Treasury yields.

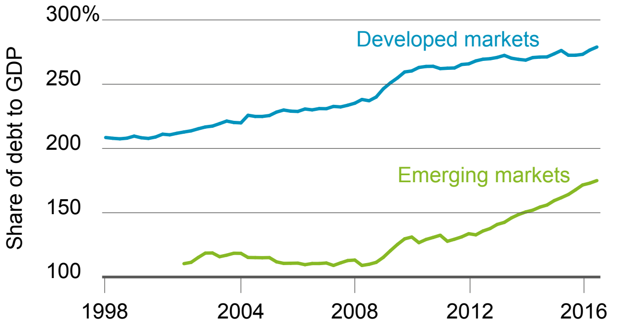
The debt drag

High global debt levels are also a crucial factor holding down bond yields. Total global debt – government, household, corporate debt across both developed economies and EM ones – has swelled to record levels relative to GDP, as the chart below shows. Even in countries where consumers have cut back on their borrowing since the crisis, governments have picked up the slack. We see each interest rate increase having a greater tightening impact compared with previous tightening cycles due to these elevated debt levels. For governments, higher debt servicing costs can constrain their ability to spend and result in eventual credit rating downgrades. For households, it leads to a redistribution to savers from borrowers who tend to consume a larger share of their income. Given the linkages between bond markets that we have laid out, high debt levels are like a global elephant compressing interest rates everywhere.

It's not just about the *levels* of debt. US households have cut debts relative to income since the crisis, but we see higher interest rates affecting households in a surprising way. Higher rates impact household incomes and consumption more than any rise in mortgage payments. Why? Many households are credit constrained: they have trouble borrowing as much as they would like for spending. These households live 'hand-to-mouth', spending most of their income as it comes in. While lower-income households tend to fall into this category, wealthy households can also share cashflow constraints. These wealthy but leveraged households have assets tied up in illiquid ways – housing or retirement savings – with liquid savings amounting to half or less of income, according to a 2014 Brookings Institution study. Before the financial crisis, about 40% of US homeowners lived hand-to-mouth – now the number is near 60%. As the chart at top right shows, every 25-basis point increase in US rates now has a bigger estimated impact on consumption because these wealthy 'hand-to-mouth' households will likely curb current or future spending. Based on these assumptions, we can also estimate the Fed's tightening impact on consumption via policy rates. Relative to the Fed's 425 basis points of rate rises in 2004-2007, 350 basis points now would achieve the same consumption tightening impact.

Global debt hangover

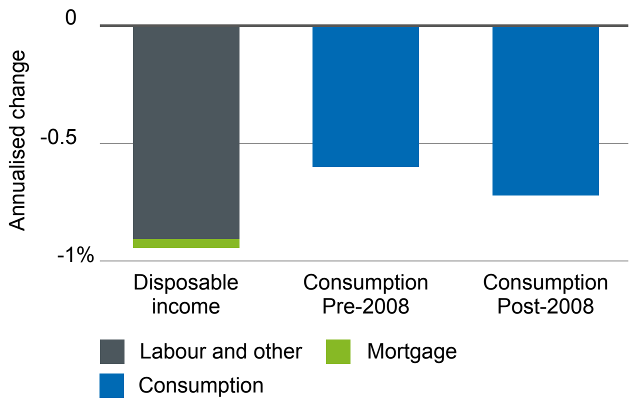
Total world non-financial debt relative to GDP, 1998-2016



Sources: Bank for International Settlements and BlackRock Investment Institute, January 2017.
Note: The chart shows total general government, household and non-financial corporate debt in percentage terms relative to GDP.

Hobbled by higher rates

Estimated rate rise impact on US households



Sources: Bank of England, Brookings Institution, US Census Bureau and BlackRock Investment Institute, January 2017.
Notes: This chart shows the estimated annualised impact on US real disposable income and consumption from a 25 basis point rate hike over a hypothetical four-year period. The pre-crisis baseline comes from the 2016 *Bank of England paper* "Monetary policy when households have debt: new evidence on the transmission mechanism". The post-crisis estimate is based on the changing proportion of homeowners with a mortgage and the change in the proportion of wealthy hand-to-mouth, based on the 2014 *Brookings paper* "The Wealthy Hand-to-Mouth".

Investment implications

The support for profit margins from better wages, spending and nominal growth supports our broadly positive view on risk assets and equities in particular. The revival of animal spirits may start to drive more investors out the risk spectrum. That reinforces the view outlined in our November 2016 Global Macro Outlook *Climbing the wall of money*: Risk appetite has more room to improve.

We see a risk of occasional yield spikes within what is still a structurally lower interest rate environment. Hopes for fiscal stimulus have lifted yields, but there are many unknowns about what the new Trump administration will mean for the economy.

We see rises in government bond yields being anchored. Record world debt levels amplify the impact from any interest rate increases. Global yields and the adverse impact of further US dollar strength should act as a drag on US yields. Yields remain low relative to historical averages even with the quick run-up in US 10-year yields to as high as 2.6%.

This reflationary phase also comes in the context of a modest recovery and growth outlook, with other risks lurking and stronger capital spending still something of a missing ingredient. We therefore believe the Fed is unlikely to raise rates aggressively. Other major central banks will be extra careful about removing policy accommodation.

Modestly higher yields support our view that the rotation into value and momentum shares away from low-volatility equities likely has more room to play out.

Certain sectors may feel more pressure on margins from higher wages than others, in our view, such as those in the consumer discretionary and transport sectors.

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