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## Profit margins under pressure



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The deceleration in economic growth - and the entry of the US into the late stage of its expansion - casts a shadow on corporate profit margins. This year we could see a US-led earnings recession - typically defined as two straight quarters of annual declines in earnings. Some of the decline is explained by the unfavourable base effects from last year's US corporate tax cuts. Yet other macro factors also suggest that US profit margins are likely to contract over the course of 2019. Highlights:

- US profit margins don't look as strong as commonly thought once secular uptrends and favourable tax treatments are taken into account. And even the secular rise in profit margins does not have an entirely favourable interpretation - a lack of competition and concentration of market power appear to play an important role.
- We focus on profit margins derived from US national economic accounts (NIPA) for a few reasons. First, they have led the margin trends of S&P 500 companies. Second, they capture the rising role of private enterprises. Lastly, the composition of the S&P 500 is not stable. We believe margins have likely peaked and expect a material contraction in 2019 - a typical late-cycle pattern.
- Potential margin compression and slower GDP growth could compound into an outright earnings recession this year, in our view. Equity markets do not appear to be pricing in an earnings recession, and debt issued by highly leveraged companies could be particularly exposed. Given the unusual and extended pattern of the recovery from the 2007-2008 financial crisis, it is also important to pay attention to bottom-up research.
- Earnings recessions are not necessarily bad news for US equity returns. We find that returns only really suffer during full-blown economic recessions. So late-cycle concerns and an outright earnings recession may not be reason enough to cut equity allocations. Yet it is why we believe investors should better balance risk and reward in portfolios and be selective with equity exposure, favouring quality style factor.

### Economic snapshot

BlackRock Growth GPS vs. G7 consensus, 2015-2019



Sources: BlackRock Investment Institute, with data from Bloomberg and Consensus Economics, March 2019. Notes: The GPS in green shows where the 12-month consensus 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. Forward-looking estimates may not come to pass.

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## An unusual expansion

Our [2019 macro outlook](#) laid out why we expect global economic activity to slow this year closer to potential growth rates. We explore what that means for corporate profits and margins, especially as the US enters the late-cycle phase of its expansion. We could see a global earnings recession this year – an overall contraction in corporate earnings – led by the US due to the unfavourable base effects following last year’s tax cuts. As the fourth quarter 2018 earnings season closes, top-down earnings forecasts for 2019 have been revised to stall-speed, especially in the US relative to Europe, even as bottom-up estimates and consensus forecasts remain upbeat.

We take a closer look at the current dynamics of corporate earnings and their two main drivers – margins and revenue growth – in the late stage of the cycle. We introduced our four stages of US business cycles in our outlook: recession, early, mid and late. Margin behaviour and the build-up of financial imbalances will determine how much longer the current expansion can run as it enters the late-cycle stage – the final phase before a downturn.

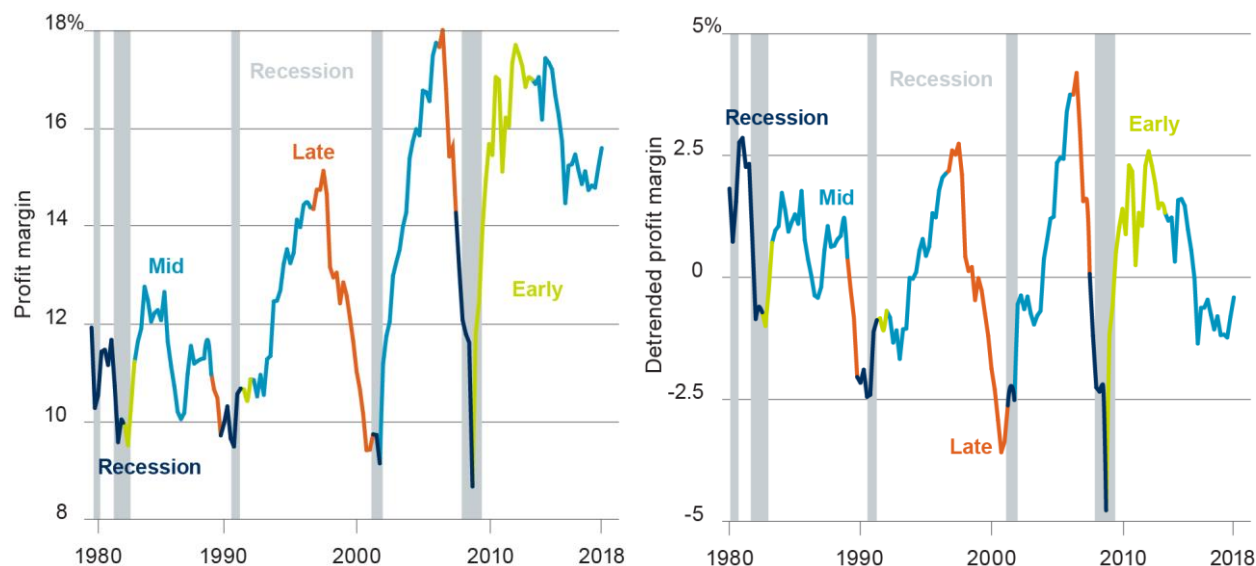
The late-cycle compression in margins limits inflationary pressures and allows central banks to be patient in their policy normalisation. But falling profitability also reduces incentives to invest and to hire. The feedback loop between the cycle and margins argues for a material margin compression this year and potentially an outright earnings recession. Current consensus estimates appear too high, potentially leaving both equity valuations and credit markets exposed.

Analysing the cyclical behaviour of US profit margins is complicated by the secular rise in margins since the 1980s. We need to disentangle this broader rise from the cyclical swings. The chart on the left shows our estimate of US corporate pre-tax profit margins based on national accounts data (NIPA). The cyclical pattern is clear – and also applies to earnings. Since the late 1980s, profit margins have contracted sharply in the late-cycle phase highlighted in orange below, snapping the mid-cycle expansions. Margins typically trough in a recession and hover sideways early cycle.

The current extended expansion does not appear to be following the same template. Margins expanded in the early phase, followed by a mid-cycle drop in margins – driven by the China, energy and US dollar shocks of 2015-2016. Margins picked up again at the start of 2018. This underscores how the recovery from the global financial crisis (GFC) has been unusual in many respects – and it should be true for margins, too. Profit margins have been boosted over time due to secular trends that we discuss in coming pages. Detrending profit margins adjusts for these long-term shifts and allows us to see more clearly their cyclical swings. The chart on the right shows the spread of margins in percentage points relative to their long-term trend. Viewed this way, profit margins look soft in this phase of the cycle.

## Margins under pressure

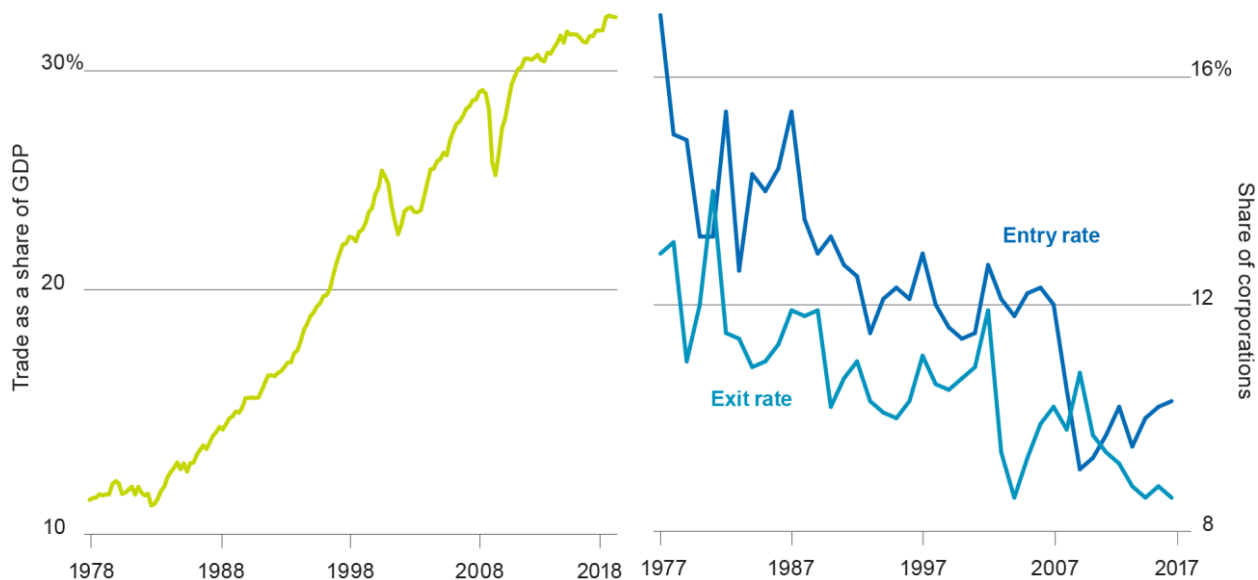
US corporate profit margins and detrended margins by cycle stages with recession bands, 1980-2018



Sources: BlackRock Investment Institute, US Bureau of Economic Analysis (BEA), US National Bureau of Economic Research (NBER), with data from Thomson Reuters, March 2019. Notes: We replicate our analysis from our January 2019 publication and look at profit margins during different stages of the business cycle. The classification of the stage is done via a “cluster analysis” that groups together time periods where economic series have behaved in similar ways. The detrended pre-tax profit margin of US corporations, in percentage points, as derived from national accounts data (NIPA) from the BEA. We detrend the series by taking into account the secular shift in the profit margin driven by increasing trade intensity and higher market concentration as explained on the next page.

## More global but less dynamic

US trade as a share of GDP 1978-2018 and firm entries and exits 1977-2017



Sources: BlackRock Investment Institute, US BEA and Census Bureau, with data from Thomson Reuters, March 2019. Notes: The chart on the left shows the sum of US exports as a percentage of GDP. The chart on the right shows the entry and exit rate of US businesses each year as a percentage of the overall total.

## Not so super anymore

What explains the secular uptrend in profit margins? The literature suggests several possibilities. One line of thinking credits increasing globalisation, capital deepening and the resulting productivity spurts. Globalisation could increase the revenue base of productive corporations. Globalisation is also understood to raise productivity of firms as greater openness spurs more efficient specialisation. Furthermore, greater trade openness encourages more rapid innovation through more intense cross-border competition, helping knowledge and technology spread from the most advanced economies to other regions. A [March 2016 IMF working paper](#) shows a 1 percentage point cut in input tariffs lifts productivity by 2 percentage points. Rising US trade intensity, seen in the chart on the left, closely maps the decades-long rise in profit margins shown on the previous page.

There's another line of thinking that suggests less positive forces are behind the long-term rise in margins. Increased industry concentration could boost the pricing power of dominant corporations, notably in the technology sector. This could be related to declining competition and tighter regulation. Rising capital intensity - now more concentrated in R&D spending than more traditional forms of spending such as equipment - could also increase barriers to entry and raise fixed costs. The chart on the right shows a long-term decline in US corporate start-ups, reflected in reduced entries. There is some evidence that declining competition could be important drivers of the upward trend in profit margins. [Autor et al 2017](#) show that the aggregate rise in margins has been driven by high-margin companies taking greater market share rather than a broader improvement in business productivity. And [Gutierrez and Philippon \(2019\)](#) show that these rising superstars are not necessarily becoming more productive - and so-called frontier firms in US manufacturing only average around \$50 million in revenue and 74 employees. Indeed, in their view, today's new economy stars are no match for the stars of the post-World War Two period.

Our estimates suggest that the combination of higher trade intensity (globalisation and higher capital intensity in integrated supply chains) and lower market dynamism (higher market concentration) can explain a large portion of the secular rise in profit margins. In that case, both "good" factors (higher productivity) and "bad" factors (lower market dynamism) are driving up the long-term average of profit margins. So the long-term rise in profit margins does not have an entirely favourable interpretation: a lack of competition and the concentration of market power appear to play an important role. This may be good for some individual companies, but any reduction in overall productivity can lead to lower potential aggregate returns over time.

There is an important but perhaps less obvious market implication of higher profit margins and concentration. Faced with less intense competition, successful companies have less incentive to invest and to innovate. The investment rate of large and profitable firms is surprisingly low. Elevated corporate profits and subdued investment are key drivers of the global savings glut that has structurally depressed interest rates through the term premia in perceived safe-haven government bonds (see our previous work [here](#) and a related paper [here](#)).

## Leading the way

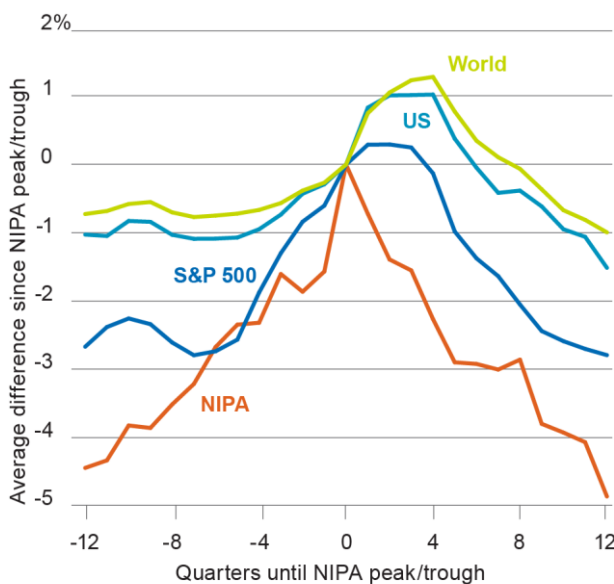
Earnings are a key driver of equity returns, especially over the long term. That's why we care about profit margins - and pre-tax profit margins to strip out the effects of tax policy changes. Here we focus on profits margins in the US NIPA data for a few reasons. First, margins derived from the NIPA data lead the S&P 500-based profit margins. Turning points in NIPA margins have preceded those for the S&P by an average of three quarters over the past 30 years - and in turn the S&P has led global stocks. See the chart on the left below. NIPA data features a larger and more comprehensive sample of companies - including private, unlisted companies that play a greater role in the economy. Second, NIPA data has a longer history than S&P 500 data. Third, NIPA separates domestic and repatriated foreign profits, while the S&P 500 data only separates revenues. Given the rising role of China in global growth, S&P 500 companies are increasingly sensitive to foreign earnings. Fourth, NIPA's accounting methods ensure uniform depreciation schedules are being applied while excluding one-off debt write-downs and land depreciation. Fifth, the NIPA data are based on a broader set of data sources than just regulatory filings. NIPA data can be revised regularly and materially. But we find that unrevised NIPA profit margins still lead S&P 500 margins similar to the chart below, so we don't view this as a major drawback.

The rise of private markets in the US has likely magnified the discrepancy between reported profits in the overall domestic economy and publicly listed companies, as seen in the chart on the right. The share of listed companies has plunged in the past few decades, whereas funding via private markets has sharply expanded.

The drop in US listings since the mid-1990s has occurred across industries and major stock exchanges, according to a study by [Doidge et al 2015](#). This caused a widening "listing gap" relative to other countries with similar regulatory set-ups, economic growth and overall wealth. The decline in start-ups alone cannot explain the drop in listed firms: instead, it reflects the reduced attraction to list for firms of all sizes. The study finds that since the mid-1990s, the new listing rate in the US has been low and the delisting rate high by historical and international standards. Fewer initial public offerings only explain a bit more than half of the listing gap, and the large number of delistings explains the rest. The latter is partly due to an unusually high number of merger-related delistings. Hence the low number of US listings is not just due to too few initial public offerings alone. Firms can delist for three reasons: they are acquired (merger delistings), forced to delist (delistings for cause) or choose to delist (voluntary delistings). No matter which reason, changing economic conditions do not explain the high delisting rate since the mid-1990s. The study also finds that delistings for cause are not higher among younger firms after the listing peak. And firm characteristics cannot explain the increase in delistings after the peak.

### NIPA margins in the lead

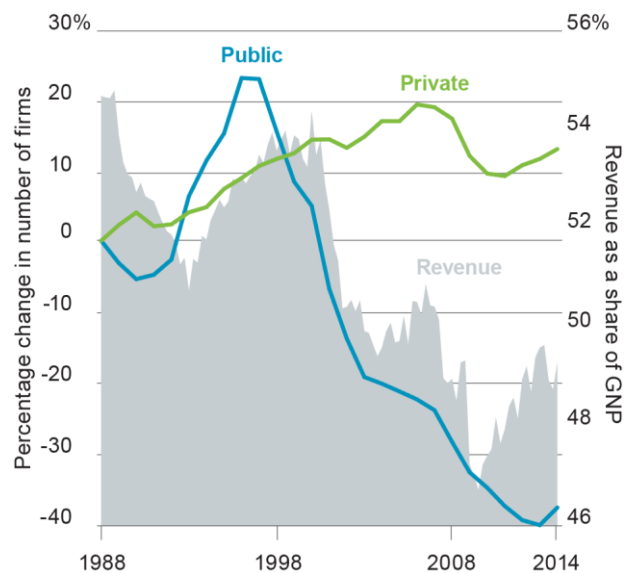
Profit margins across different measures, 1988-2018



Sources: BlackRock Investment Institute, BEA, Standard & Poor's and MSCI, with data from Thomson Reuters, March 2019. Notes: The chart shows the average path of S&P 500, MSCI USA and MSCI World (representing broader developed market listed companies) profit margins benchmarked against NIPA turning points in percentage points. Point zero is when NIPA margins have peaked. Paths around troughs have comparable but inverted shapes.

### The rise of private markets

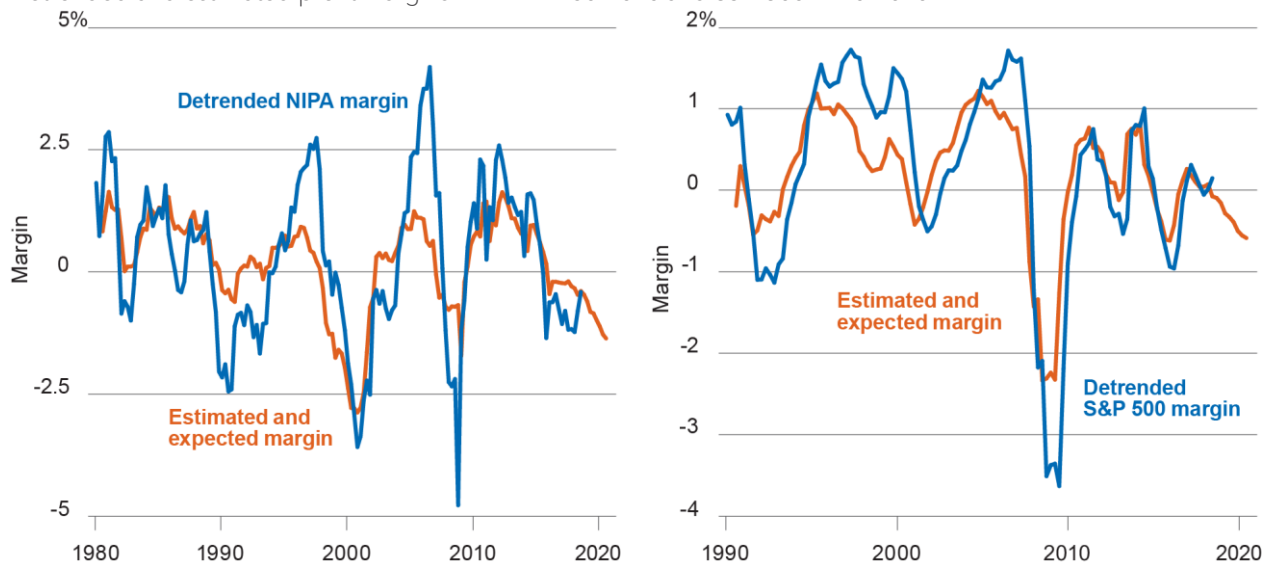
US business growth and revenue to GNP, 1988-2014



Sources: BlackRock Investment Institute, US Census Bureau and BEA, with data from Thomson Reuters, March 2019. Notes: The chart shows the percentage change in the number of private and public firms. The grey area shows the share of corporate business revenue as a share of gross national product (GNP).

## Margins heading south

Detrended and estimated profit margins in NIPA 1980-2020 and S&P 500 1990-2020



**This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise – or even an estimate - of future performance.**

Sources: BlackRock Investment Institute and US BEA, with data from Thomson Reuters, March 2019. Notes: These charts show the detrended NIPA and S&P 500 profit margins (as defined above) and our estimated and expected detrended margins using a statistical model that includes measures of economic overheating (the output gap), real unit labour cost growth, output price inflation and output growth. The future values of the inputs into this model are derived from a large-scale macro projection model based on the work of [Boivin and Giannoni \(2007\)](#). This model was created with the benefit of hindsight, has inherent limitations and should not be relied upon for investment advice. Forward-looking estimates may not come to pass.

## The myth of late-cycle pricing power

Historically, profit margins have dropped from their peaks in the late phase of the economic cycle. This may sound counterintuitive: textbook economics would suggest that companies have more pricing power when the economy operates at or above full capacity and inflation picks up. But under imperfect competition (the norm in most markets), companies tend to give up pricing power to gain or defend market share. The willingness to give up pricing power will likely reflect adjustment costs in both capital and labour. Theory shows that the more monopolistic markets become, the more companies eat into margins to defend market share late in the cycle. The more margins fall, the less inflationary pressure there is – possibly extending the economic expansion. [Rotemberg and Woodford \(1999\)](#) argue that it is not the profit squeeze that ends the expansion through curbs in investment spending and hiring. In fact, a moderation in price mark-ups during the late-cycle phase can prolong the upswing.

To understand the drivers of profit margins at a macro level and get a handle on the statistical relevance of different factors, we estimated a simple model of margin behaviour. We start by looking at the cyclical behaviour of the detrended macroeconomic profit margins (pre-tax) and how it relates to unit labour costs, the stage of the cycle (proxied by the output gap), corporate pricing power and revenue growth. What boosts margins? Higher top-line growth of output and the price at which corporates can sell that output. On the flipside, higher unit labour costs (real wages adjusted for productivity growth) reduce margins.

The stage of the cycle also matters: for most of the business cycle, margins move with the output gap. Profit margins expand in the mid-cycle phase as the output gap converges to zero and full capacity is reached. But in the late-cycle stage, margins move in the opposite direction of the output gap. The more the economy overheats, the lower the margins. During the late cycle, costs tend to rise most quickly just as revenue growth heads lower, overwhelming the increased output price inflation. This is consistent with the stage-of-cycle and counter-cyclical mark-up arguments above. We use our model to derive estimates of the detrended NIPA and S&P margins. See the charts above. These estimates show that margins are likely to decline this year, falling further below their secular uptrend. Much of this is down to rising overall capacity utilisation – the stage of the business cycle – which we expect to rise further during 2019. Together with a rise in unit labour costs, this will outweigh the expected increase in the GDP deflator.

## Earnings gloom goes global

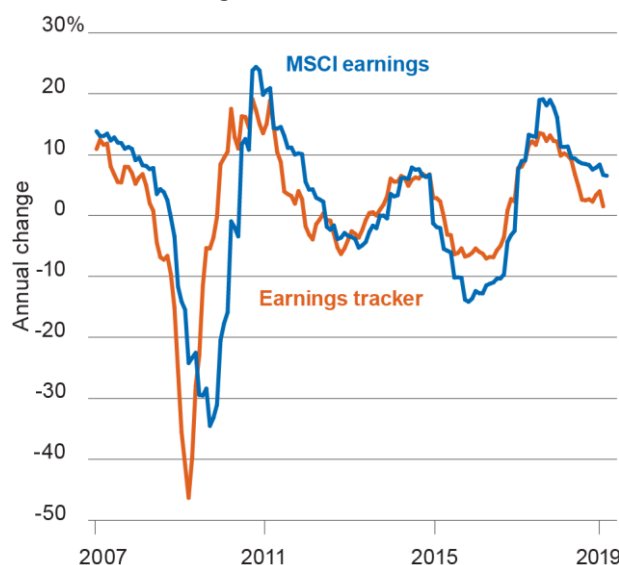
We have created a new earnings tracker that leverages our existing suite of macro indicators to track DM earnings, based on our Growth and Inflation GPS, trade nowcast and other inputs explained below. We see the profit margin decline being compounded by a slowdown in revenue via nominal GDP growth. Our estimates for US profit margins and nominal growth, implied by our [Growth GPS](#), points to a 1% drop in NIPA profits in 2019 and just below zero for S&P 500 pre-tax earnings as seen in the charts on the previous page. But these figures mask a serious slowdown in profit growth. The calendar effects of 2018's earnings acceleration mean that earnings growth near zero this year would require a few quarters of quarterly *declines*. This view is gloomier than the market's. The consensus S&P earnings growth forecast for 2019 is 4.4%: based on current price-to-earnings ratios and our estimate of the equity risk premium, we see the market is pricing in real earnings growth just below 3% (according to March 2018 Thomson Reuters data).

We focus on the US because it has led the current business cycle. There is evidence that US data have led developed market (DM) in past cycles, too. And other countries don't have the same detailed national accounts data. Earnings estimates for MSCI World companies have been revised down at the fastest pace in several years. The chart on the left shows trailing 12-month earnings growth (based on EBITDA - earnings before interest tax, depreciation and amortisation) for the MSCI World and our new earnings tracker. This suggests earnings growth should drop to zero year-on-year by the middle of the year - and points to some stagnation in DM earnings this year. Most of the inputs are pointing down: our Growth GPS is ticking lower, while the proxy for unit labour costs has been rising as nominal wage growth has outstripped productivity. Yet the biggest driver of the G3 earnings retrenchment is our global trade tracker - DM earnings are sensitive to the global manufacturing and trade cycle. What would it take for our earnings tracker to rise? We would need to see a rebound in annualised global trade growth to about 3.5% from current levels near -5%. We believe this is possible. A very real upside risk to our outlook is that stimulus in China and Europe could spark an upturn in the global economy in the second half of the year. Any such rebound in global growth could more than offset the late-cycle drop in margins.

Companies face other challenges beyond the late-cycle risks - namely de-globalisation and trade protectionism. The fallout on profits from the protectionist tit-for-tats is unclear. Such actions may weigh on global growth and boost input prices. Yet they also reduce international competition. Any future increase in corporate taxes or change in the treatment of share buybacks could serve as a drag on profits.

### Turning negative

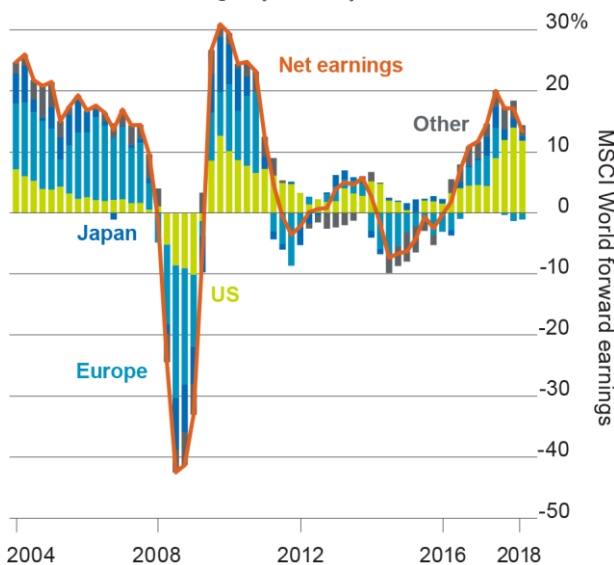
MSCI World earnings and BlackRock tracker, 2007-2019



Sources: BlackRock Investment Institute and MSCI, with data from Thomson Reuters, March 2019. Notes: The chart shows the annual change in 12-month trailing EBITDA for the MSCI World and our EBITDA tracker. Our tracker regresses MSCI World EBITDA on our G3 Growth GPS, Inflation GPS, our trade nowcast, a measure of global unit labour costs and global input prices. The tracker shows where MSCI EBITDA may stand in three months' time. This model was created with the benefit of hindsight, has inherent limitations and should not be relied upon for investment advice. Forward-looking estimates may not come to pass. Past performance is not a reliable indicator of future results. It is not possible to invest in an index.

### Past peak earnings

MSCI World earnings by country, 2004-2018



Sources: BlackRock Investment Institute and MSCI, with data from Thomson Reuters, March 2019. Notes: The chart shows the annual change in 12-month forward earnings expectations for the MSCI World index and its regional components. Other represents DM economies not mentioned above: Australia and Canada, Hong Kong, New Zealand and Singapore. Past performance is not a reliable indicator of future results. It is not possible to invest in an index.

## Adding it up

At face value, entering the late-cycle phase and an outright earnings recession appears a difficult backdrop for risk assets. Yet late-cycle stages and earnings recessions have historically been bullish for equities – as long as they don’t coincide with a full-blown recession. Since 1965, the S&P 500’s average annual return has been 13% during the late cycle and 18% during earnings recessions. This compares with a 13% annual return over the full period excluding recessions. Only during economic recessions do US equity returns – and earnings – really suffer. So late-cycle concerns and an outright earnings recession may not be good enough reasons to cut equity allocations.

We see several reasons why periods with earnings recessions on their own have higher average total returns than other periods. Earnings recessions tend to coincide with periods when significant multiple expansion drives returns: the early-cycle optimism of the recovery (even when earnings are still negative), the mid-cycle relief when a slowdown doesn’t morph into a feared recession and the last bit of late-cycle exuberance. With the late cycle approaching, this is one reason why we are selective in taking equity exposure and favour the quality style factor.

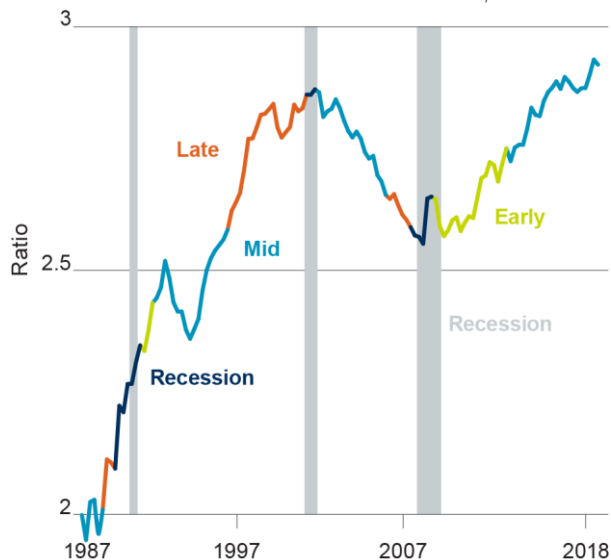
Investors should be mindful of a few caveats, though. First, the rising risk of an economic recession – real or perceived – could rattle equity markets, as we saw in late 2018. Second, earnings recessions tend to weigh on growth, even if they are not themselves reliable red flags of imminent recession. Third, the current expansion has differed from the historical pattern in many respects – notably a sharp outperformance of equities vs government bonds in the mid-cycle phase. See the chart on the right. We see reasons this divergence could also happen in the late-cycle phase. Fourth, this bull market has seen US companies buying back an unusual amount of their own stock, making the US corporate sector a net buyer of equities and investors net sellers.

We expect earnings to contract for a few quarters in 2019 but then have some scope to recover in 2020. This view is based on our projection that the risk of recession will still be below 50-50 next year, even if it gradually rises over time. Our view assumes a slow build-up of inflationary pressures and financial vulnerabilities. A full-blown economic recession in 2020 would materially change the picture: since 1965 the S&P 500’s annual returns during recessions have been -10%. Recessions are the only phase when US Treasuries have outperformed equities.

What are some of the other implications? US equities seem to have decoupled from global equities thanks to their lower beta (i.e. their sensitivity to short-term cyclical swings in the economy) and higher profit margins. Higher potential growth in the US versus other developed markets and lower risk premia in the US versus EMs should keep supporting the outperformance of the US against the rest of the world, in our view. But US credit markets look particularly vulnerable to any earnings recession. High profitability and low interest rates have spurred US corporates to leverage up – yet interest costs as a share of earnings have hardly risen in this cycle. A sustained margin drop could change that picture and push a swathe of BBB-rated companies into high yield.

### US stands out

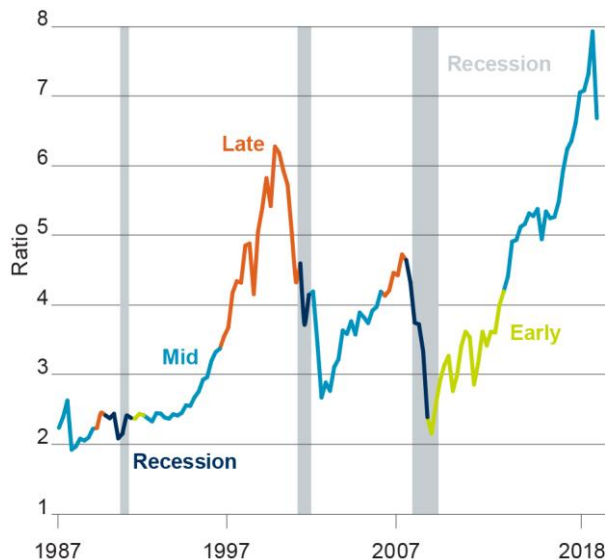
Ratio of S&P 500 total return vs MSCI ACWI, 1987-2018



Sources: BlackRock Investment Institute, S&P, MSCI and NBER, with data from Thomson Reuters, March 2019. Notes: The chart shows a log ratio of the S&P 500’s total return to the MSCI ACWI’s total return, with business cycle stages highlighted using the same analysis as on page 2. Past performance is not a reliable indicator of future results. It is not possible to invest in an index.

### S&P beats Treasuries

Ratio of S&P 500 total return vs US Treasuries 1987-2018



Sources: BlackRock Investment Institute, S&P, MSCI, Bloomberg and NBER, with data from Thomson Reuters, March 2019. Notes: The chart shows the log ratio of the S&P 500’s total returns as a ratio to the total returns of the Bloomberg Barclays US Treasuries index, with business cycle stages highlighted using the same analysis as on page 2. Past performance is not a reliable indicator of future results. It is not possible to invest in an index.

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