

# US Watch

Group Economics  
Financial Markets Research

15 July 2019

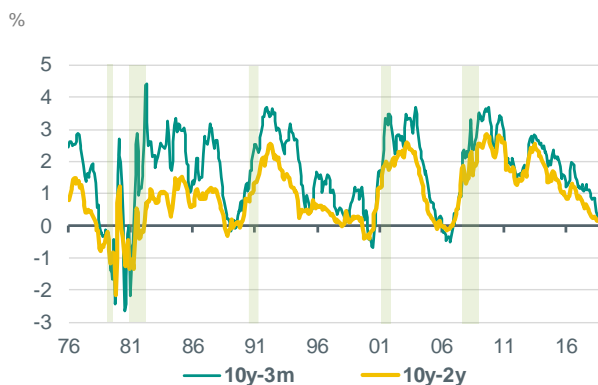
## Pathways to a recession

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- The yield curve inversion – driven by the trade war escalation – has reignited recession fears
- The yield curve has a strong predictive track record, and is likely signalling the heightened, late cycle vulnerability to a recession
- However, recessions are typically caused by a combination of capacity constraints, and a financial market or policy shock
- While the US economy is approaching full capacity, it is not quite there yet. Productivity is dampening cost pressures
- We identify key potential sources of shocks in the coming years
- In the absence of risks crystalising, and with the Fed easing policy, the expansion likely has further to run – albeit at a slower pace

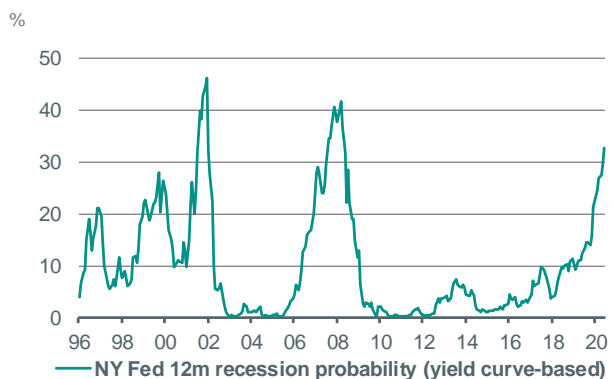
The inversion of the 10y minus 3m segment of the US Treasury yield curve has caused a stir among market participants and economists. Coming at a time of weak global manufacturing and an ongoing trade war, the inversion has reignited concerns over a possible looming US recession. Yield curve inversions have an impressive track record in predicting recessions (see box on page 2); as such, while a recession does not look likely at present, history suggests US economy watchers would be unwise to ignore the signal coming from the yield curve. In this note, we explore the likelihood of a US recession over the coming years – making an assessment of where we currently are in the economic cycle, and what the potential triggers of the next downturn might be.

### Yield curves have flattened and even inverted...



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

### ...suggesting a recession might be on the cards



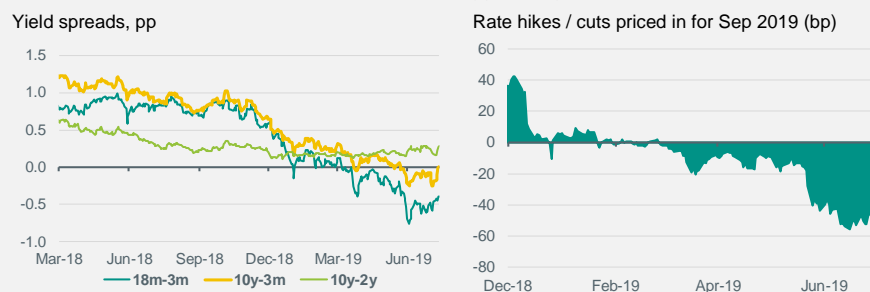
Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**Box: The yield curve and recessions 101**

An inversion of the yield curve – that is, long term rates falling below short-term rates – happens only rarely, and in the past has been a highly reliable warning sign of a looming recession. Indeed, over the past 50 years, it has predicted *all* recessions. We define the yield curve as either the 10-year yield minus the 2-year yield (the measure favoured by market participants), or the 10-year minus the 3-month yield (favoured by the academic literature). Both possess similar predictive value, and while the 10y-2y curve has remained positive, the 10y-3m has been persistently inverted since 22 May. Historically, a brief inversion is not enough; the inversion has to be sustained over at least one month to send a reliable signal, while the lead time to a recession can be as little as two quarters but as much as three years.

One reason to be cautious in interpreting recent yield curve dynamics is **term premium** – the compensation investors demand for the risk involved in holding securities over a long period. A notable trend of recent years has been a structural downshift in term premium, according to New York Fed estimates. Bizarrely, term premium for the 10y Treasury yield has been *negative* in recent years, i.e. investors are *paying* rather than being compensated for holding Treasury securities for longer periods. A common explanation for this phenomenon is that it reflects the distorting effect of the Fed and other central banks' asset purchases, as well as the emerging markets savings glut. This could be artificially holding down long-term yields, and therefore, leading to a flatter yield curve than would otherwise be the case. While seductive, it should be noted that similar 'this time is different' arguments prevailed the last time the yield curve inverted back in 2006.

At the same time, there are other market signals not subject to potential term premium distortions that – if not pointing to a recession – at least suggest expectations of a significant slowdown. For instance, Engstrom & Sharpe (2018) find that inversions of the near-term forward spread (18m forward minus 3m yield) are a better signal of a recession than the longer term yield curve, and moreover, that this has a more intuitive logic as it reflects market expectations for near-term easier monetary policy. This measure has been consistently inverted since early March. Furthermore, market pricing (OIS forwards) also suggests the market sees a high probability of rate cuts over the coming months. We think looming Fed rate cuts represent insurance against downside risks rather than the start of a prolonged easing cycle in response to recession fears. However, market expectations for easier policy arguably reflect an elevated risk of recession. In other words, while 'this time is different' might well apply to the longer term yield curve, the fact that other market signals are also flashing red suggests broadly held concerns of a potential recession.

**Both near-term spread and rate cut expectations suggest heightened recession concerns**

Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**“Expansions don’t die of old age,” but capacity constraints and shocks**

One of the reasons some investors worry about a recession is simply the passage of time – at 120 months, the current economic expansion is tied with the 1990s expansion in being the longest on record. Following this line of reasoning, a recession is ‘overdue’, and could strike at any moment.

**Recessions typically happen when a shock occurs late into the cycle**

Peak	Trough	Length (months)	Expansion length	Backdrop / Trigger
Nov-73	Mar-75	16	36	OPEC formation and oil price shock, high inflation, high interest rates
Jan-80	Jul-80	6	58	Double dip recession following second oil price shock. High interest rates under Volcker to fight inflation.
Jul-81	Nov-82	16	12	
Jul-90	Mar-91	8	92	1990 oil price spike on Gulf War, high interest rates, 1980s debt overhang
Mar-01	Nov-01	8	120	Burst of dot-com bubble, restrictive monetary policy
Dec-07	Jun-09	18	73	Burst of subprime mortgage bubble, restrictive monetary policy
Future recession?	???	???	120	Possible triggers: Trade war, Corp deleveraging

Source: NBER (recession dates), ABN AMRO Group Economics

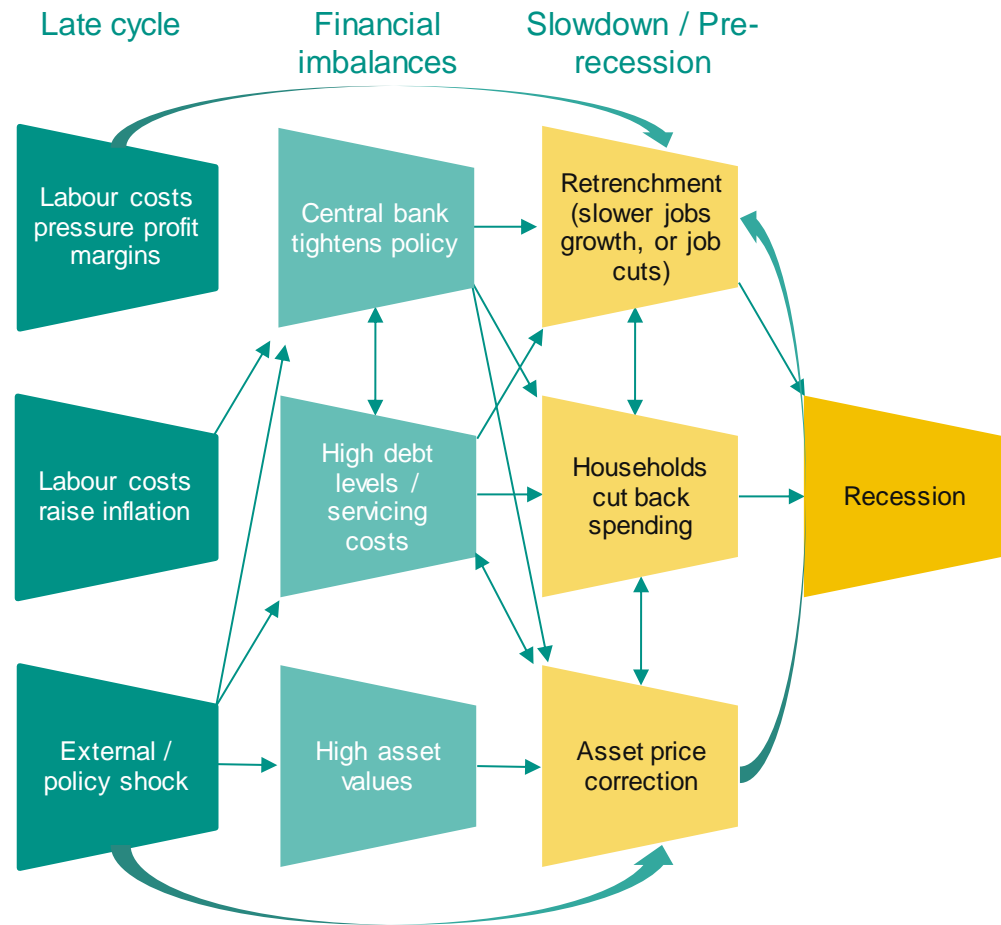
However, history suggests it is not the *length* of an expansion that causes a recession, but the pushing against capacity constraints, in combination with some kind of shock. This can take the form of supply shocks (eg. oil price spikes), but more recently, the buildup of financial excesses have been the primary triggers. However, it cannot be a coincidence that recessions almost always occur when capacity constraints are elevated. This likely reflects the increased *vulnerability* of the economy to shocks, with growth more narrowly based, and the room for growth more limited than earlier in the expansion. At this stage, corporates are in the early stages of retrenchment, a process which shocks tend to amplify.

**Conceptualising a recession**

The pattern we typically see prior to a recession is that as the labour market tightens, unit labour cost growth accelerates, and this ultimately leads to corporate retrenchment. This happens either because margins become compressed, or because businesses pass on higher costs in the form of inflation, which leads to more restrictive monetary policy. Alternatively, or in addition, financial imbalances tend to grow in the late cycle period. These developments leave the economy vulnerable to shocks, which ultimately triggers a recession.

How does the current macro environment compare with history? The US is by some measures approaching capacity constraints, but not yet to the extent that there is inflationary pressure. As a result, although the Fed has tightened policy, rates remain at or below neutral rate estimates, and we expect rates to be cut a cumulative 75bp over the coming 6-9 months, thus taking policy back well into accommodative territory. Meanwhile, although there are some looming financial vulnerabilities (notably in corporate debt, and leveraged loans in particular), there are few signs of corporate retrenchment, nor are there signs that it is on the horizon. On the household side, consumption is solid and debt levels are stable at levels well below pre-crisis peaks. We will now explore each of the key conditions for a recession in turn.

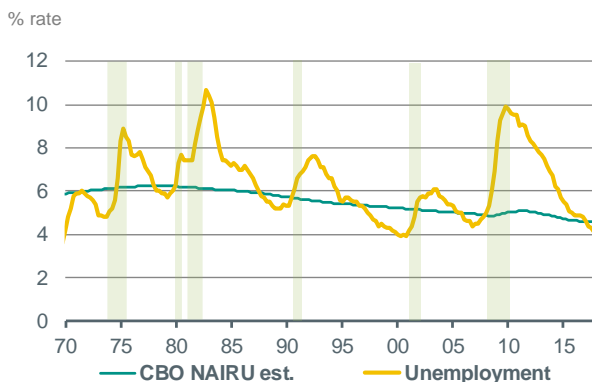
### A stylised look at the anatomy of recessions



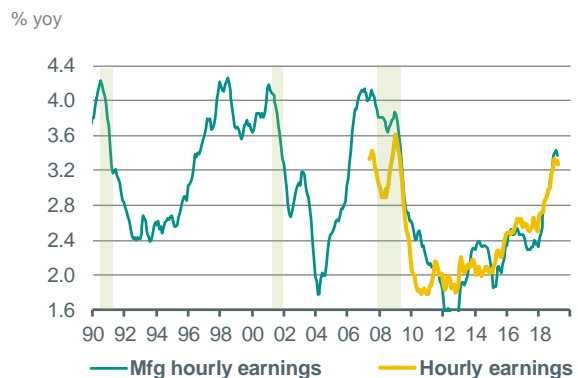
#### Capacity constraints: Not there yet

In nearly all historical pre-recession periods, the unemployment rate is low and wage growth is at cycle peaks. How does the current period stack up? Certainly, the labour market *looks* tight. The unemployment rate is at a multi-decade low of 3.6%, and wage growth has accelerated (albeit cooling again more recently). However, the low unemployment rate likely understates the degree of slack still in the labour market, for two key reasons. First, prime-age labour force participation

#### Unemployment is historically low...



#### ...but wage growth still below pre-crisis peaks



(25-54 years) continues to recover, but remains below its pre-crisis peak, suggesting that there is some as-yet untapped labour supply. Second, while the unemployment rate is well below current 'natural' rate of unemployment, or NAIRU estimates (CBO: 4.6%), the true natural rate could be lower – perhaps by a significant margin – than estimates suggest (this is a topic we explore in detail in our [Where is the wage growth?](#) publication).

As a result of this likely residual slack, wage growth – while having accelerated – is still below previous peaks, and has cooled again in recent months. While overall hourly earnings growth is not far below its pre-crisis peak at 3.1% yoy as of June (2008 peak: 3.6%), earnings for the manufacturing sector – a much more established data set – is still some way below at 3.4% (2006 peak: 4.2%). Should the NAIRU indeed be considerably lower than estimated, wage growth may take longer to recover to these prior peak levels.

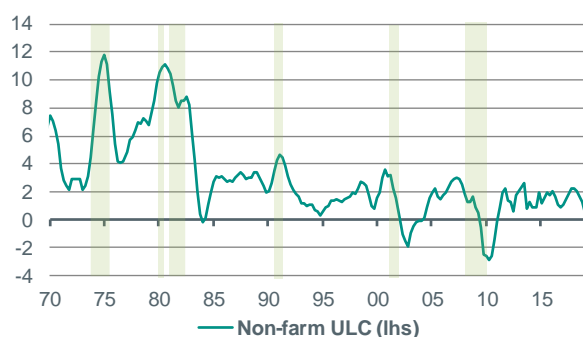
### Inflationary pressure: Still muted

History also shows that there is typically a build up of inflationary pressure prior to a recession, as capacity constraints lead to a cycle of higher wage demands – with costs ultimately passed on to consumers – and higher inflation expectations. However, accelerating wage growth in itself is not necessarily inflationary; it can be that a simultaneous pickup in productivity growth 'funds' or offsets an increase in wage growth. If that happens, growth in unit labour costs that businesses face fails to rise, keeping inflation stable.

In this regard, the current environment differs markedly from prior pre-recession periods. Productivity growth has picked up over the past year, and this has meant a deceleration in unit labour cost growth; in Q1 19, productivity growth surged 3.5% qoq annualised, while unit labour costs fell -1.6%. Quarterly data tends to be volatile, but even smoothing through this volatility, unit labour costs grew just 0.5% over the past year, below the post-crisis average of 1.3%, and far below the c.3% growth rates in the run up to prior recessions.

### Labour cost growth well below pre-recession levels

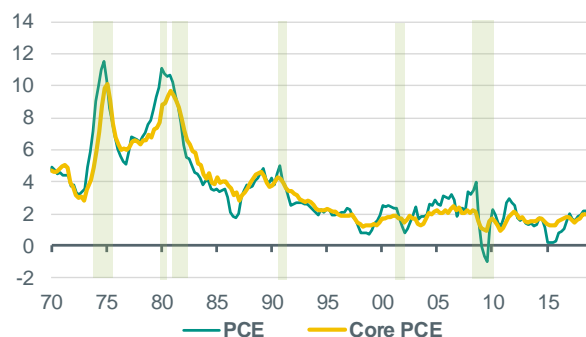
% yoy, 4qma



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

### Inflation remains muted

% yoy



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

Consistent with weak unit labour cost growth, inflation is also remarkably muted given the low unemployment rate. If anything, inflation has decelerated in recent

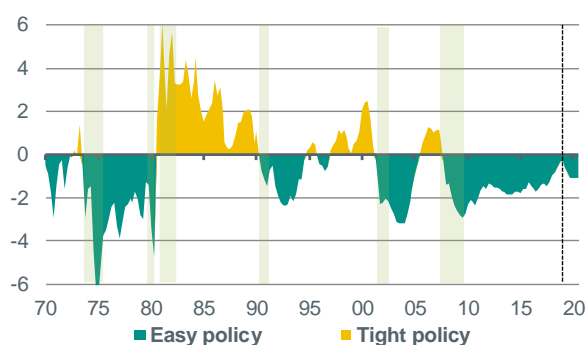
months, albeit on the back of some temporary restraining factors; core CPI inflation has fallen from a recent peak of 2.4% last August to 2.1% in June, while core PCE inflation (the Fed's preferred measure) has fallen from 2.0% in December to 1.8% in May.

### Monetary policy and financial conditions: Becoming more accommodative

As the economy approaches capacity constraints, monetary policy is often tightened pre-emptively to overcome lags in transmission. Prior to a recession, inflation has typically risen to such a degree that it prompts rate rises into restrictive territory. Determining whether interest rates are 'accommodative' or 'restrictive' makes it necessary to know where the 'neutral' rate of interest is, i.e. the rate at which monetary policy neither stimulates nor restrains economic growth (for more on this topic, see [The neutral rate: What it means for Fed policy and bond markets](#)). As the neutral rate is not observed, it cannot be pinpointed with precision, but only estimated. However, based on the widely cited New York Fed estimates, we see that in virtually all pre-recession periods, interest rates were estimated to have been restrictive.

#### Rates are usually restrictive prior to a recession

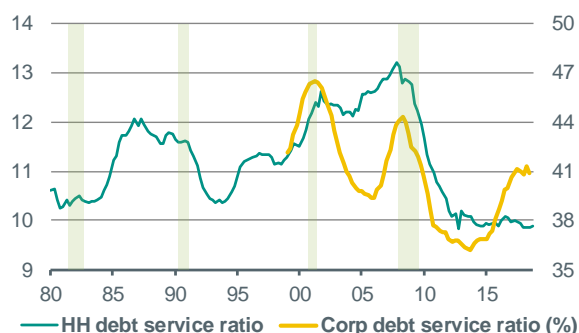
Fed funds rate, pp above or below NY Fed neutral rate estimate



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

#### Debt servicing costs remain relatively low

Debt service payments as % of disposable income

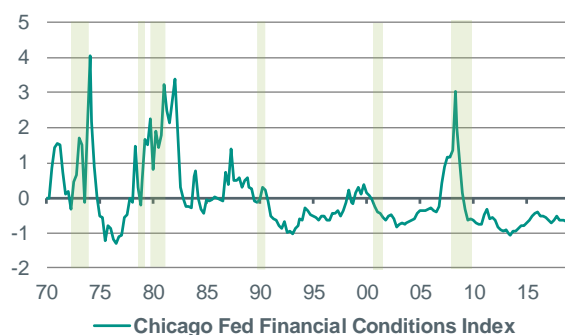


Source: Thomson Reuters Datastream, ABN AMRO Group Economics

What about now? The target range for the fed funds rate is currently 2.25-2.50%, while the FOMC's neutral rate estimates range from 2.5-3.0%. This suggests monetary policy is if anything slightly accommodative still, and is set to become more accommodative (we expect three 25bp cuts over the next 6-9 months). Given there is uncertainty over neutral rate estimates, one cross-check is to look at debt servicing ratios, which are partly a function of debt levels but also the interest rate cycle. While corporate debt servicing ratios are below their prior historic highs, they have risen considerably off their lows, albeit flatlining at c.41% over the past two years (prior cycle peaks: 46% in 2001 and 44% in 2008). Household debt ratios, in contrast, are historically low at under 10%, and have been stable since 2012 following the post-crisis deleveraging period. Overall, then, debt service ratios would suggest interest rates have not yet risen to the extent that they are imposing a significant burden on either households or, to a lesser extent, corporates. This corroborates the idea that rates are not yet restrictive. And with rates set to fall again, monetary policy will become *more* accommodative over the coming year, not less.

**Financial conditions remain accommodative**

Index (negative values are accommodative, positive are tight)



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**Consumer confidence and equities highly correlated**

Conference Board Consumer Confidence and S&amp;P 500 correlation (8q)



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

Interest rates are of course just one measure of financial conditions that affect the economy. Growth can also be impacted by exchange rate and equity market moves. Being a less export-dependent economy, the US is less sensitive to exchange rate moves, but the high degree of equity ownership means that equity markets can have sizeable confidence effects; indeed, US consumer confidence correlates highly with equity market performance. At present, broader measures of financial conditions (such as the Chicago Fed's measure) suggest conditions remain accommodative overall. However, there is a risk that the escalating trade war (see p9-10) leads to a sudden tightening of financial conditions, which then hits confidence and growth in the economy.

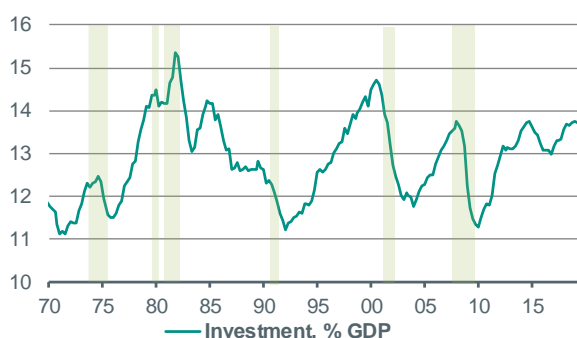
**Corporate retrenchment: Some early signs**

All recessions we have looked at were preceded by some indications of corporate retrenchment, be it in the form of slower (or falling) investment and/or employment. This then intensifies once a downturn becomes firmly established, feeding a vicious circle as lower growth expectations in turn leads to further corporate retrenchment.

In the present cycle, there are some early signs of retrenchment, and this could indeed intensify as the impact of the escalating trade war becomes more pronounced. For instance, the investment cycle has clearly turned, and the

**Investment likely to fall in the coming quarters**

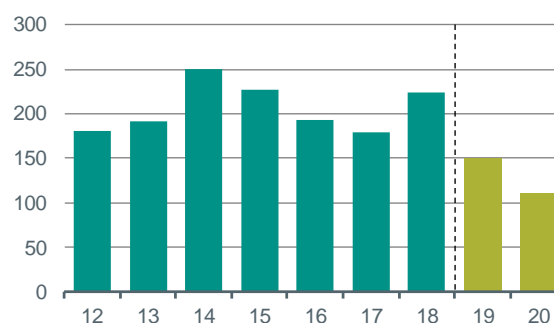
% share of GDP



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**Payrolls growth to slow, but unlikely to turn negative**

Monthly average net jobs growth, thousands



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

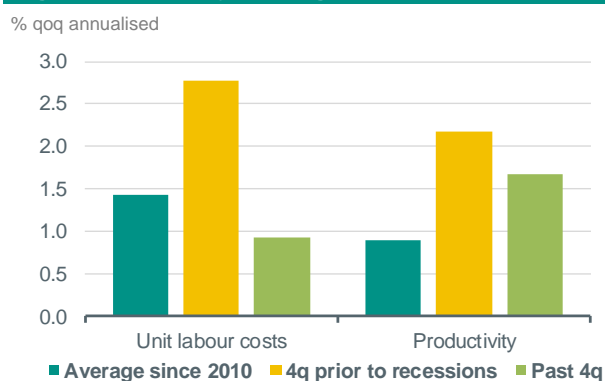
weakness in global manufacturing is likely to mean a further downturn in investment – including a period of mildly negative investment growth. However, investment has already been through a ‘mini cycle’ since the last recession, and the economy came out of that unscathed; a similar pattern could repeat this time. Meanwhile, employment growth has cooled from very elevated levels, but although we do expect a further slowing as the year progresses, we see little reason to expect *falling* payrolls in the near term.

### Are there warning signs that significant retrenchment is on the horizon?

Typically, profit margins compress before retrenchment takes place. This can be because growth in corporate profits slows or turns negative, and/or because costs rise and corporates are unable to sufficiently pass on these costs to consumers. At present, profit margins remain relatively elevated, likely helped by higher productivity growth. With investment turning negative, this productivity spurt could well peter out, but even after productivity growth slows and unit labour cost growth begins to pick up, margins would not necessarily compress. First, companies have to decide how they respond to higher ULC growth, i.e. price rises vs retrenchment. This will likely depend on current and future projected consumption growth. Should corporates feel confident enough to raise prices to compensate for higher costs, margins would be maintained.

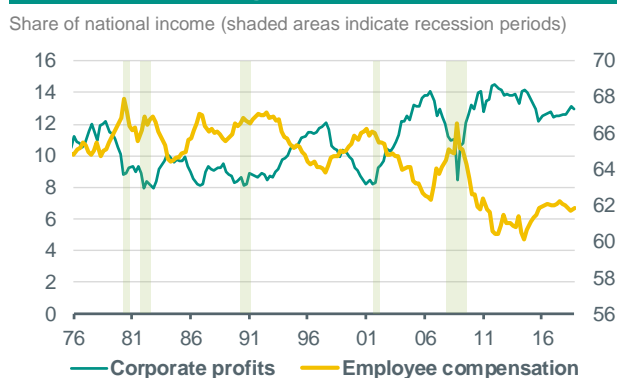
However, the flip side of this is that it would lead to higher inflation, in turn forcing the Fed to adopt a more restrictive policy stance, which would ultimately force a retrenchment. This process can play out over a number of quarters, even years, however. Indeed, should the Fed adopt an average inflation target following the review of its policy framework (the outcome of which is due in H1 2020), a response to higher inflation is unlikely to be immediate, with the Fed likely allowing the economy to run hot for a time to make up for prior inflation shortfalls. This can further delay any significant corporate retrenchment.

### Higher productivity keeping a lid on labour costs



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

### Corporate profit margins remain elevated



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

### What possible shocks could hit the economy?

As previously discussed, the pushing against capacity constraints *alone* is usually insufficient to cause a recession; a shock is usually necessary to trigger it. In the 1970s-80s, these shocks involved excessive inflation (oil price shocks) and



excessive monetary tightening to bring inflation back down (particularly under Volcker's leadership of the Fed). However, more recently, these shocks have been financial in nature – the early 2000s recession being triggered by the bursting of the dot-com bubble, and the 2008-09 recession triggered by the subprime mortgage crisis.

While the US economy is probably not yet as vulnerable as in previous pre-recession periods, it is likely to become increasingly so in the coming quarters, making it important to identify looming potential shocks to the economy. By definition, shocks are unpredictable, but hindsight from previous recessions suggests it is possible to identify excesses and imbalances, even if predicting if/when such an imbalance might become a systemic problem is much harder.

### Corporate debt a potential risk

A significant risk comes from excess corporate debt. As we discussed in our [US Outlook 2019](#), corporate debt has reached new highs as a share of GDP.

Leveraged loans – loans made to corporations with high leverage (defined as a debt-to-EBITDA ratio above 6) – are a particular concern. This segment grew more than 20% in 2018 to reach over USD1trn (around 10% of corporate debt), and has continued to grow robustly in 2019. At the same time, lending standards continue to weaken, raising the risk of significant losses to the institutional holders of this debt. While default rates remain low for the time being, growth in the broader economy has been very strong, supporting profit growth. As growth slows, profits will be pressured and default rates are likely to creep up.

The question is, to what extent would a wave of defaults be a systemic risk to the economy? A rise in defaults would cause stress in the market, pushing up borrowing costs which would in turn hit investment and hiring. This could spread beyond leveraged loans to the broader corporate bond market, leading to further retrenchment. This could then become a drag on confidence, sparking a negative feedback loop of falling growth and confidence which ultimately leads to a contraction.

While there is a risk that a period of deleveraging could get out of control, the financial system looks more resilient to this type of stress than it did in the pre-

#### Corporate debt is elevated



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

#### Slower profit growth could drive higher default rates



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

financial crisis era. First, bank balance sheets are far healthier with significant capital buffers, meaning that banks could step in to lend to corporates struggling to raise finance on the market. Second, the Fed is likely to be far more pro-active in dealing with stress in the market and in preventing contagion than it was during the subprime crisis. As a base case, we think the combination of moves to limit interest deductibility in last year's tax reform, combined with overall tighter Fed policy (notwithstanding the expected upcoming easing of policy), should in any case cool growth in corporate debt in a more gradual manner over the coming quarters.

Meanwhile, we see little cause for concern from prior significant recession triggers – inflation/tight monetary policy, and household debt. Inflation remains remarkably subdued, and we now expect the Fed to ease policy over the next three quarters. As we discuss later, household debt – the source of the most recent recession – also looks remarkably healthy, with debt as a percentage of GDP broadly unchanged following the post-crisis deleveraging period.

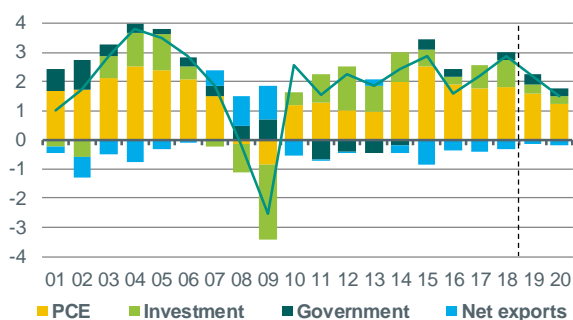
### Trade war to drive growth slowdown...

The most significant risk to the outlook comes from US trade policy. The recent escalation in the US-China trade war, and President Trump's weaponisation of trade policy in a dispute over immigration with Mexico, has significantly raised uncertainty for business. A precedent has been set whereby, with very little lead-time, the US can impose trade tariffs to extract concessions on a non-trade matter. Such a policy environment makes it extremely challenging for businesses to plan and to make investment decisions that depend on stable trading arrangements. While there has been a deal to avoid tariffs with Mexico, and there will be no further US-China tariffs for as long as trade negotiations continue, we think the threat of tariffs will persist, and that this will weigh on confidence and investment.

Indeed, we are already seeing a significant slowdown in the manufacturing sector, with the forward-looking ISM new orders index falling to the lowest since end-2015 in June, and production contracting by 3.3% annualised in the three months to May. This is feeding through to weaker jobs growth, with manufacturing payrolls gains falling from an average +55k in 2018 to just +19.7k in the three months to June. Weaker jobs growth is unlikely to have a meaningful impact on consumption in the near-term, but we expect the impact to be visible by Q4 and into 2020.

### Growth to slow significantly over 2019-20...

GDP growth, % yoy, pp contributions

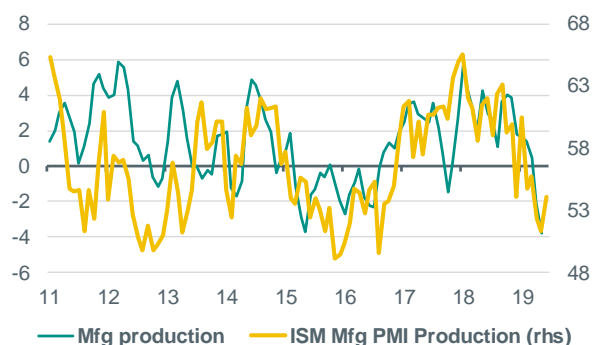


Source: Thomson Reuters Datastream, ABN AMRO Group Economics

### ...driven by weakness in manufacturing

% 3m/3m saar

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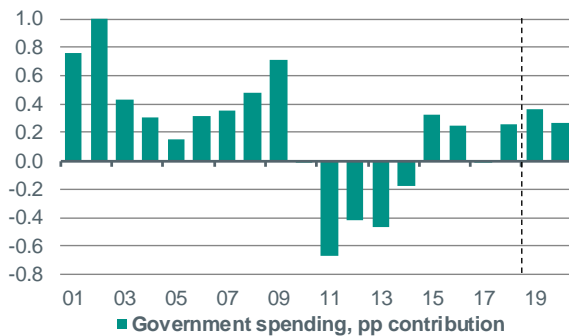
Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**...but not a recession**

With that said, private consumption should remain a key growth support in the US, given higher productivity and wage growth, combined with the substantial buffers from a high household savings rate and low household debt. Government spending is also continuing to pick up, and we estimate it will add 0.5pp to GDP growth this year. Although business fixed investment is declining, housing investment is recovering after a prolonged malaise. This is likely being helped by strong demand for housing, which is now being stimulated by significantly lower mortgage rates (which are around 1pp lower than measured last December, when the Fed pivoted towards a more dovish policy stance). Taken together, these factors should keep growth comfortably in positive territory on our forecast horizon (to end-2020), despite the headwinds from manufacturing. We expect growth to slow to 2.2% in 2019 (down from 2.9% in 2018), and to 1.5% in 2020.

**Government spending to support growth**

pp contribution to GDP growth



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**Mortgage rates have fallen sharply**

Rate



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

**What if the trade war escalates further?**

Our base case, then, is that the trade war will drive a slowdown in growth rather than a recession. However, there is the risk of a more aggressive escalation in the trade war that leads to an even sharper pullback in manufacturing than in our base case scenario. This could lead to job layoffs and falling consumption – i.e. the kind of policy shock that *would* cause a recession. It is possible to imagine any number of negative scenarios where the US raises tariff rates to levels that seriously impede trade flows, with counter-tariffs against US goods leading to a pullback in exports. So far, the trade war has dampened growth *indirectly* by dampening business confidence; a more aggressive escalation could lead to much bigger direct effects than we have seen so far. Given how unpredictable the US administration's approach has been, this type of scenario is impossible to forecast.

**In the absence of a shock, the expansion has further to run**

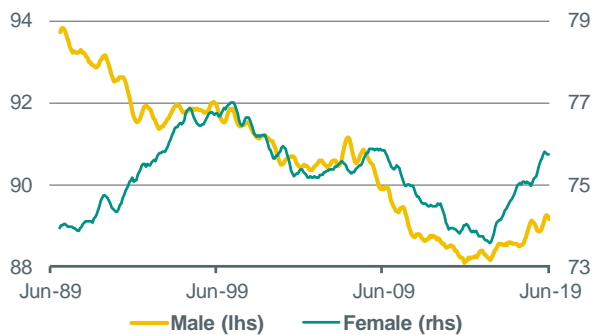
While investors are understandably nervous as the US expansion becomes the longest on record, we see a number of reasons why the current expansion could run for some years yet. First, subdued inflation points to capacity constraints being nowhere near as elevated as the low unemployment rate suggests. Relatively high profit margins means that, even if productivity growth slows, there is scope for

businesses to raise wages without significant near-term inflationary pressure. This enables the Fed to cut interest rates to guard against downside risks to the outlook. Second, with private consumption the backbone of the US economy, we draw significant comfort from the strength of household balance sheets in the US. Household debt remains low, and the savings rate relatively elevated. This means ample buffer for the US consumer to cope with future slowdowns, as consumers can either dip into savings or increase their borrowing to maintain consumption growth.

Third, the pickup in productivity growth we are now seeing might be sustained for longer than we currently expect. Productivity growth is notoriously difficult to predict; few expected the late 1990s productivity spurt, for instance. Given the advances we are seeing in AI and robotics – think of the potential disruption that could come from autonomous cars – it is possible that a prolonged period of high productivity growth could also sustain the expansion.

#### Likely residual slack in the labour market

Prime age (25-54) labour force participation rate, %



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

#### Room for consumers to dip into savings

%



Source: Bureau of Labor Statistics, ABN AMRO Group Economics

Find out more about Group Economics at: <https://insights.abnamro.nl/en/>

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