



After The Great De-rating

US Equities Outlook

2018 will mark the year of the great de-rating

- The strongest earnings growth (25%) in this cycle, even adjusted for the cut in the corporate tax rate (15%), with the S&P 500 rising only modestly, saw equity multiples de-rate severely (-17%).
- The market multiple is near 5-year lows seen at the time of the last two major growth scares, with broad-based multiple compression across sectors that was concentrated in the cyclical sectors.
- A lot is now priced in, with a variety of measures ranging from indicating a sharp slowing in macro growth to a high probability of recession.

Are the late cycle concerns that drove the de-rating justified?

- Peak margins? Rising wage inflation has historically seen higher not lower margins, as has been happening year to date. How late is the cycle? The long duration and measures of slack such as a tight labor market suggest the cycle is late. But all other fundamental indicators, ranging from inflation or cost pressures generated by the limited slack, the cyclical components of demand (housing; durables; and investment spending), confidence, corporate and household leverage, delinquencies and default rates, bank lending standards and earnings, all suggest mid- or in some cases even early cycle. Trade policy has exacerbated cost and top line growth concerns, but corporates see the costs as manageable. Will the Fed hike aggressively? Unlikely any time soon as inflation expectations remain too low. Will a rising dollar stifle the recovery? Widening rate differentials imply only a modest uptrend that has arguably been in place for the last 7 years.
- The Leading Economic Indicators index (LEI), arguably the most reliable indicator of oncoming recession, is at a cycle high relative to its trend channel and far from signaling one.

Setting S&P 500 target for year-end 2019 of 3250 (18.5 x \$175)

- We see back-loaded earnings growth in the mid-to-high single digits: decelerating sharply in Q1 as tax cut, lower dollar and higher oil lap, steadying in Q2-Q3, rising in Q4 to 9% yoy; annual growth of 7%.

Binky Chadha

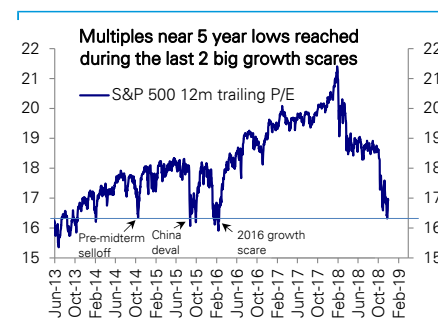
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Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

S&P 500 EPS forecast and target

2018 EPS	\$175
2018 target	3250



- From near 5-year lows, we see scope for the multiple to rerate as growth concerns ease, back up to 18.5x where it was flat from March to September this year following the initial de-rating.
- Our demand-supply framework points to similar upside for the S&P 500, driven by an increase in buybacks from \$650bn to \$700bn.
- It will take a while for the market to regain its prior peak: once vol gets elevated market recovers only slowly (6-7 months); concerns about peak earnings are unlikely to dissipate until there are clear signs growth is steady, which we don't expect until Q2 earnings.

Strategy and Trades

- When to get out if timing of next recession is uncertain? Wait for the LEIs to turn down.
- Across sectors the defensive rotation has upended historical relationships between relative valuations and their drivers. We remain underweight Staples which trade at near the highest valuations in the S&P 500 despite having near the slowest growth; remain underweight the defensive bond proxies Utilities and Real Estate which are already pricing in a significant decline in 10y yields to 2.5%; remain underweight Energy where earnings expectations and valuations are stretched again; raise Materials from underweight to neutral as valuation is now cheap but sustained outperformance is likely only with the next dollar down cycle; raise Healthcare from neutral to overweight as valuation is cheap and earnings growth steady; raise Tech from neutral to overweight as valuation is now cheap; raise Consumer Discretionary from neutral to overweight on undervaluation; remain overweight the Financials, the cheapest sector on an absolute basis as well as relative to its drivers; remain overweight the Industrials which are already pricing in a recession; and neutral Communication Services as strong growth looks well priced in.
- Long small over large caps which are at the bottom of their historical range.
- Long our cash-flow based Value basket (DBUSVALU).
- Introducing our phase of cycle long/short baskets: look to fade end cycle basket which has rallied strongly on recession concerns; stay long late cycle basket which has held up recently but should outperform on an easing of growth concerns.

<i>Sector allocations</i>		
Sector	Previous	Now
Cons Staples	●	●
Utilities	●	●
Real Estate	●	●
Energy	●	●
Materials	●	●
Health Care	●	●
Info Tech	●	●
Cons Disc	●	●
Financials	●	●
Industrials	●	●
Comm Serv	●	●



After The Great De-rating

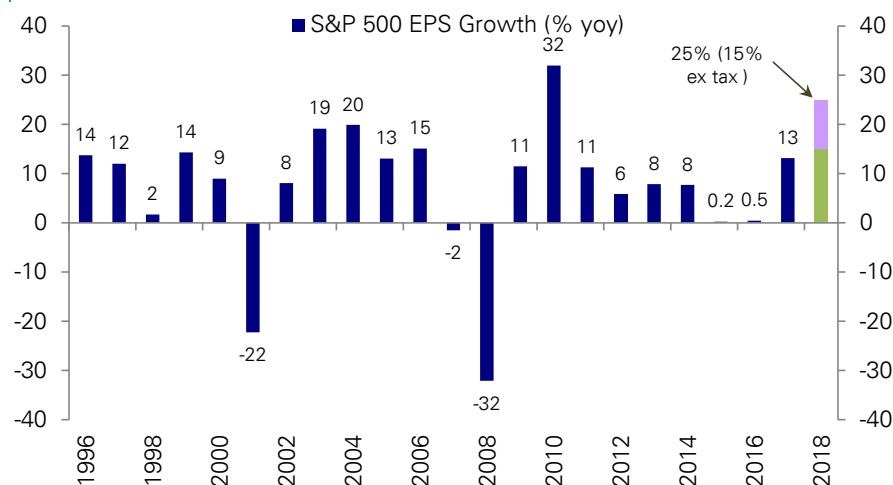
2018 will mark the year of strongest earnings growth in this cycle, excluding the early years off of a low base. S&P 500 EPS are on track to rise by 25%, boosted by the cut in the corporate tax rate (+10pp) but even adjusted for it, growth (15%) would have been the best of this cycle. Yet, with the S&P 500 up only modestly year to date, equity multiples de-rated severely (-17%). The de-rating began early in the year driven by concerns about earnings peaking with rising wage inflation compressing margins; the lateness of the cycle and approaching next recession would lower top line growth; trade policy critically exacerbated cost and top line concerns and slowed global growth; the Fed continued to hike against a backdrop of higher perceived corporate leverage; and the dollar rose. Even as these concerns grew over the course of the year, margins and sales continued to set new highs for the cycle in Q2 and again in Q3 when the S&P 500 EPS growth put in its strongest quarter (28%). Against this backdrop, we discuss the de-rating of 2018, what now looks to be priced in, concerns about the lateness of the cycle, what leading indicators suggest for growth, the outlook for equities and our strategy recommendations.

After the great de-rating of 2018 ...

- **Multiples de-rated beginning in Q1 on concerns about rising wage inflation and did not recover.** Equity markets corrected in February following stronger than expected wage inflation in the January payrolls report. While the market narrative focused on the negative impacts of wage inflation on margins, as we noted prior to the correction, there were very good reasons for a pullback following the longest rally since WWII ([Stretched Consensus Positioning, Jan 2018](#) ; [Inflation and Equities, Feb 2018](#)). Equities began to recover starting in April, but the multiple did not recover, remaining flat for the next 6 months at 18.7x, down from 20.3x at the end of 2017.
- **Multiple now near 5-year lows, reached during the last two big growth scares.** The sell off since October has taken the S&P 500 multiple (16.9x) back down to near the lows of the January 2016 growth scare and the August 2015 China devaluation. It is also comparable to the lows of the October 2014 pre mid-term election pullback, as low as it has been at any time over the last 5 years.
- **Broad-based de-rating concentrated in the cyclical sectors.** Multiples compressed across the board led by Energy (-29%), Materials (-28%), Financials (-25%) and the Industrials (-22%). At the other end of the spectrum for the defensive sectors, multiples barely fell for Health Care (-1%) and Utilities (-3%) though somewhat more so for Staples (-12%). Despite the recent acute focus on Tech, as a sector it de-rated (-9%) less than average.

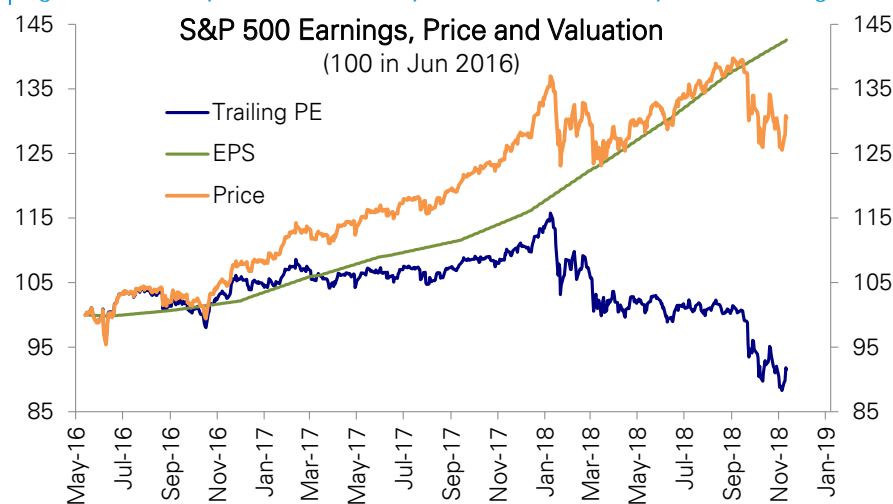


Figure 1: 2018 marked the fastest growth of this cycle since the initial spike coming out of recession



Source: Bloomberg Finance LP, Factset, Haver, Deutsche Bank

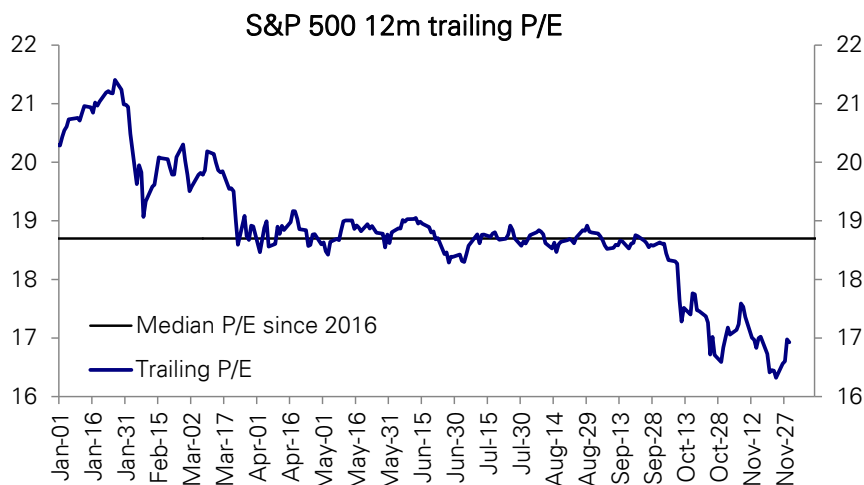
Figure 2: The rally over the last 2.5 years has been entirely about earnings



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

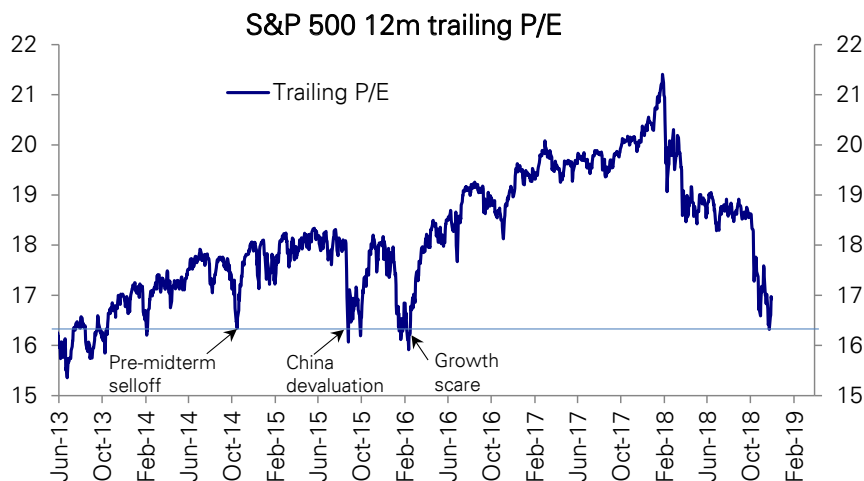


Figure 3: The multiple de-rated beginning in Q1 but remained flat for the next 6 months at 18.7x



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

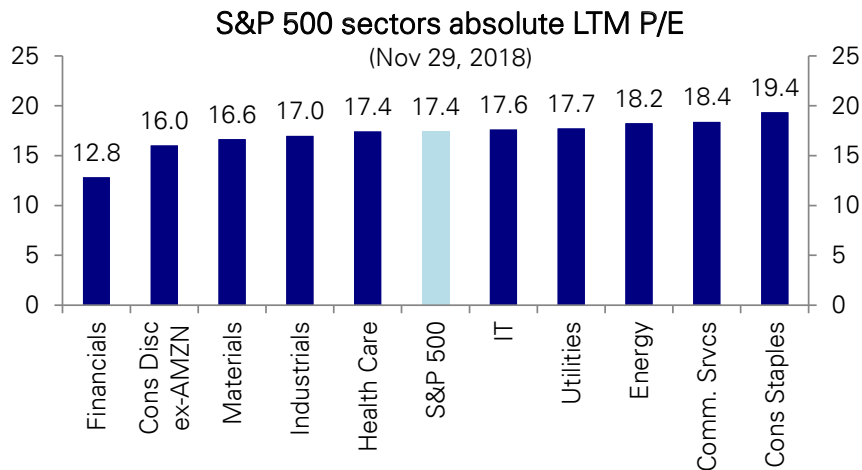
Figure 4: Multiples are now near 5 year lows, reached during the last 2 big growth scares



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

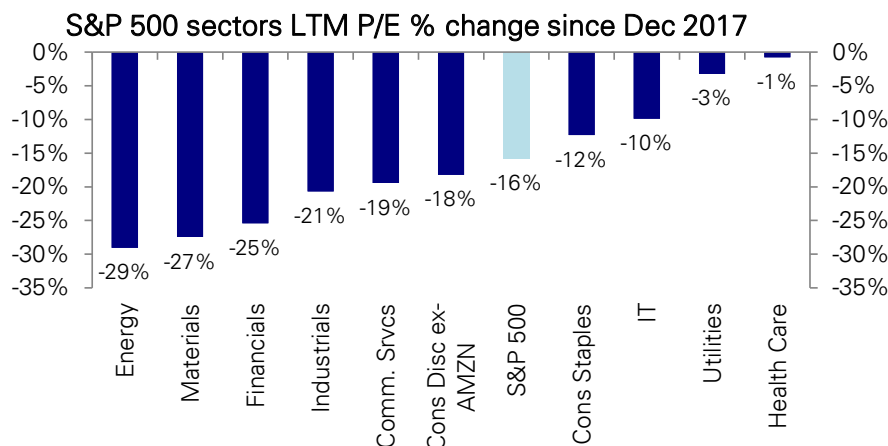


Figure 5: The low growth Consumer Staples sector is now the most expensive and trades above Technology, as does Utilities



Source: FMA, Factset, Deutsche Bank

Figure 6: Broad based de-rating but concentrated in cyclical sectors



Source: FMA, Factset, Deutsche Bank

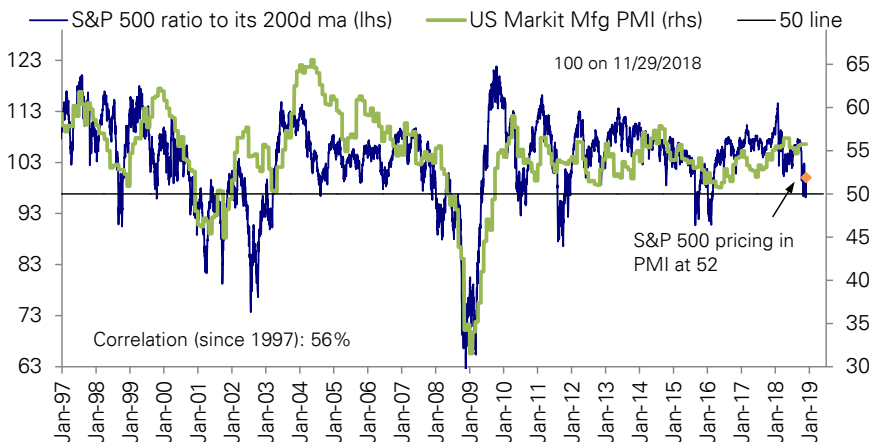
... a sharp slowing in growth and a high probability of recession is priced in

- The equity market is pricing in a significant slowing in macro growth with the US PMI falling to 52 (from 55.7 currently), i.e., to levels around those reached during the European financial crisis and following the dollar and oil shocks. The S&P 500 relative to its 200 day moving average (to adjust for the trend) has historically been well correlated (56%) with the US manufacturing PMI. It suggests the market is pricing in a decline of PMI to 52, around the levels reached during the lows of the European financial crisis and the dollar and oil shocks.



- **Negative low-single-digit earnings growth.** The S&P 500 relative to its 200 day moving average has historically also been well correlated (54%) with EPS growth. It is currently pointing to negative low-single digit earnings growth which would be comparable to the lows reached after the dollar and oil shocks in early 2016.
- **Industrials pricing in macro stagnation.** The performance of the Industrials sector relative to the S&P 500 which has tended to follow the manufacturing PMI is pointing to a fall to 50. The relative performance of the industrials disconnected from the PMI in late May as the trade war escalated.
- **Financials priced for a 2.1% yield.** The performance of the Financials relative to the S&P 500 which had closely tracked the 10y yield also disconnected in late May as the trade war escalated and despite a bounce in relative performance recently is pointing to significantly lower yields of 2.1% compared to the current 3%.
- **Size of market decline (-10%) at the recent low relative to typical recession decline (21%) suggests market pricing a significant (45%) probability of recession.** As we have noted previously, 3-5% pullbacks have historically occurred very frequently, on average every 2-3 months. 5-10% pullbacks less so, while 10% corrections are actually quite rare outside of recessions and generally associated with very clear catalysts. The decline at the recent low compared to a median decline of 21% around recessions since WWII, suggests the market was pricing in a 45% probability of recession. This has eased somewhat but remains near 30%.
- **The extent of the multiple de-rating suggests a high (68%) probability of recession priced in.** The decline in equities has occurred in the context of strong growth in earnings, with the year to date decline (17%) in the multiple compared to a median decline around recessions (25%), suggesting a high probability of recession priced in.

Figure 7: The market is pricing in a significant slowing in macro growth...

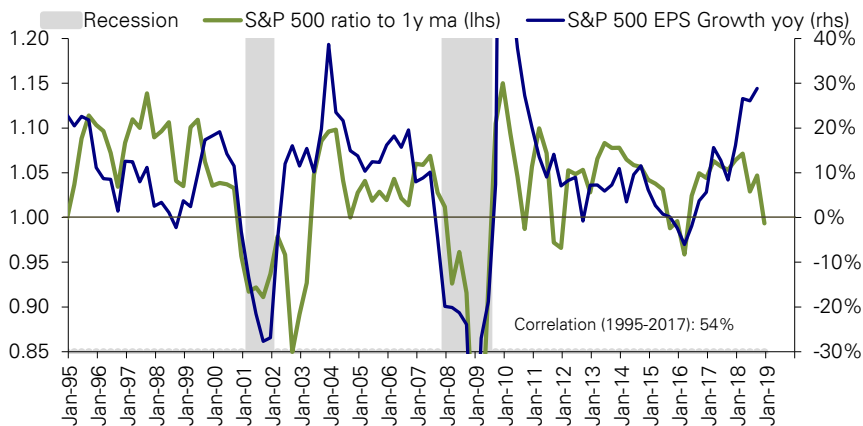


*US PMI uses changes in ISM data to go before Sep 2007 and Markit data after that

Source: Markit, ISM, Haver, Deutsche Bank

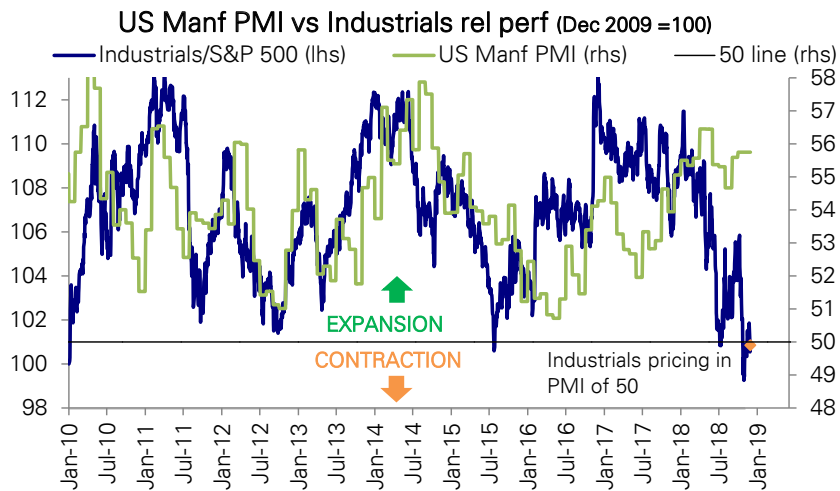


Figure 8: ... and earnings growth turning negative



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

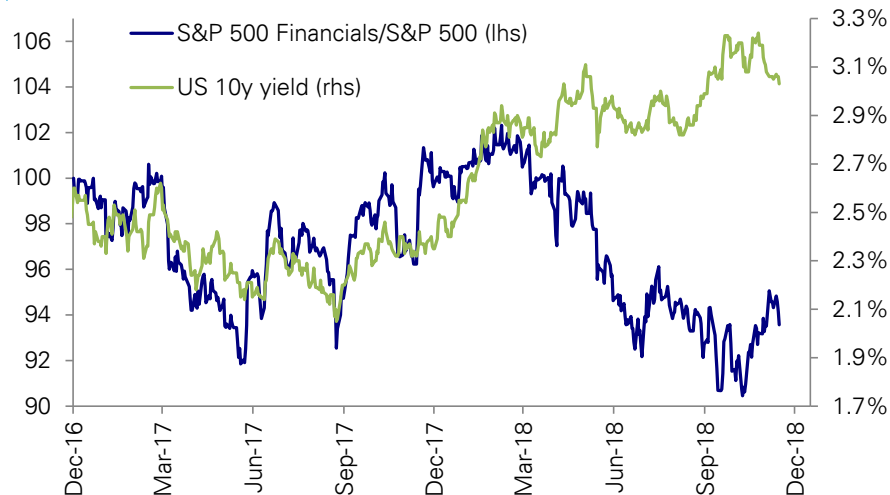
Figure 9: Cyclical sectors like Industrials are also pricing in an economic stagnation



Source: Markit, Haver, Deutsche Bank

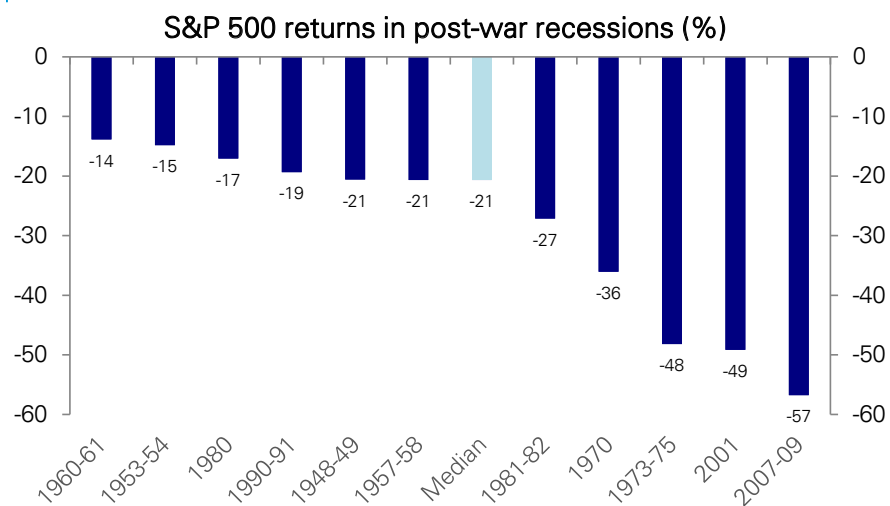


Figure 10: The Financials are priced as if the 10y yield is closer to 2% and not 3%



Source: FRB, Haver, Deutsche Bank

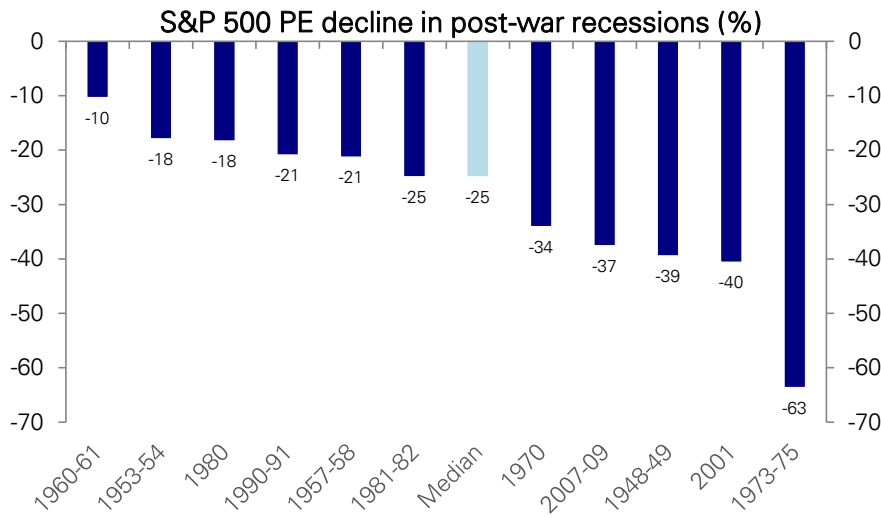
Figure 11: Size of the market decline (-10%) at the recent low relative to a typical recession decline (-21%) suggests market pricing in a significant probability (45%) of a recession



Source: Haver, Bloomberg Finance LP, Deutsche Bank



Figure 12: The decline in the P/E (-17%) suggests almost 70% probability of a recession being priced in



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

Are the late cycle concerns that drove the de-rating justified?

- **Peak margins? Rising wage inflation has historically seen higher not lower margins.** While intuitively higher costs should mean lower margins, costs do not go up in a vacuum, rather they typically go up when growth is strong which implies positive operating leverage while companies can also offset cost pressures through pricing and productivity. Historically, periods of rising wage inflation have seen higher not lower margins ([Cost Pressures and Margins: Concerns and Facts, May 2018](#)). And indeed while fears about peak margins have been widespread since Q1 this is exactly what has been happening year to date, with headline margins continuing to climb to new highs in Q3 (12%, 11.1% ex-tax cut), while EBIT and EBITDA margins have held within their range of the last few years.
- **How late is the cycle? Slack is limited but all other fundamental indicators suggest mid- or in some cases even early cycle.** The long duration of the present cycle, already the second longest on record, suggests the cycle is very late. As do measures of slack in the labor and output markets. But as we have noted, almost all other fundamental indicators of the cycle, ranging from inflation or cost pressures generated by the limited slack, the cyclical components of demand (housing; durables; and investment spending), confidence, corporate and household leverage, delinquencies and default rates, bank lending standards and earnings, all suggest mid- or in some cases even early cycle ([How Late Is The Cycle? Jul 2018](#)).
- **Trade policy exacerbated late cycle cost and top line growth concerns, arguably exactly the wrong thing at the wrong time, and slowed global growth. But corporates see the costs as manageable.** The escalation of the trade war in late May saw a defensive rotation

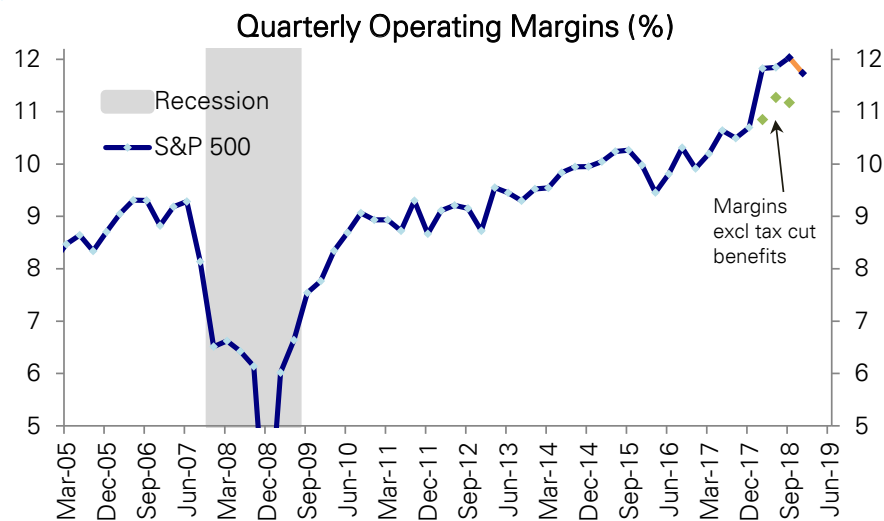


across sectors in US equities, regionally across global equities and across asset classes. But the large majority of US companies have argued they saw the costs of the tariffs as manageable and expressed confidence they could pass them on with limited impacts and that the issue for them was as much if not more about the uncertainty of the future rules of the game rather than the actual costs of the tariffs ([When Returning To Normal Is Terrible, Oct 2018](#)). But for investors already concerned about potentially peaking margins and late cycle declines in top line growth, the timing was arguably exactly the wrong thing at exactly the wrong time. While regional and idiosyncratic factors look clearly to have played a role in slowing growth outside the US, which is responsible for more than a third of S&P 500 sales and earnings, there is little doubt that trade policy uncertainty and concerns added to them.

- **Will the Fed hike aggressively? Unlikely any time soon as inflation expectations are too low.** Historically, a Fed rate-hiking cycle preceded most recessions since World War II, with recessions occurring only after the Fed moved rates into contractionary territory. Arguably the Fed did this only after it was convinced the economy was overheating and it felt compelled to continue hiking until the economy slowed sufficiently or went into recession to reverse the overheating. As we have noted previously, by reformulating its inflation target from the CPI to the PCE some years ago, the Fed effectively raised its inflation target. It did so by maintaining a target of 2% even though PCE inflation systematically runs lower than CPI inflation. Consequently, at the current juncture, the Fed finds itself with core PCE inflation having remained below its target of 2% for most of the last 10 years and inflation expectations, the main driver of inflation in the long run, as too low to hit its PCE inflation target on average. Fed officials have argued for the importance of symmetry in inflation outcomes around the target, i.e., tolerating PCE inflation above 2%, which is critical for raising inflation expectations and hitting 2% PCE inflation on average. We therefore see it as very unlikely that the Fed will become aggressive in raising rates any time soon to slow the economy as it would like to see inflation remain above 2% for a prolonged period until inflation expectations adjust upward ([Six Myths About Inflation, Oct 2017](#)).
- **Will a rising dollar stifle the recovery? Widening rate differentials imply only a modest uptrend that has arguably been in place for the last 7 years.** The 8% rise in the dollar against G10 currencies from its lows in early February to its recent highs and 11% in broad trade-weighted terms has reignited concerns that continued increases will stifle US growth and earnings. But the dollar has been in a range since early 2015 for almost 4 years now and this year's rise simply reverses last year's fall with the dollar back in the middle of its range against the G10 and at the top of it in broad trade-weighted terms. Medium term, the dollar is back in the trend channel it had been in since 2011 before the mid-2014 ECB move to negative rates saw it rise too far too fast (25% in 9 months). We expect the modest uptrend channel which implies 3.6% annual appreciation to hold in 2019. This is consistent with rate differentials moving in favor of the US by 75-100bps. Such a trend implies a little less than a 2pp drag on S&P 500 earnings which we consider manageable.

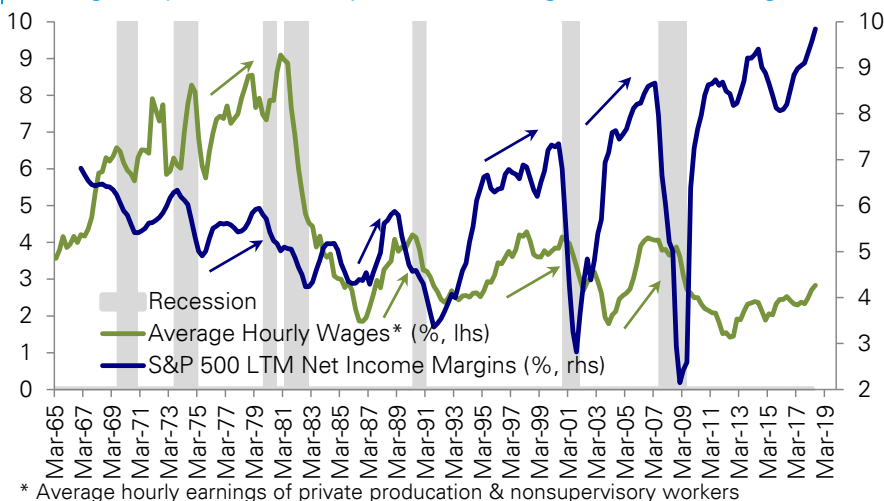


Figure 13: Despite long standing worries about cost pressures, margins have continued to rise to new records even after adjusting for the tax cut



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

Figure 14: Far from being unsustainable or a fluke, this is in line with history as rising cost pressures in the past have seen higher, not lower margins



* Average hourly earnings of private production & nonsupervisory workers

Source: BLS, Haver, Compustat, Deutsche Bank



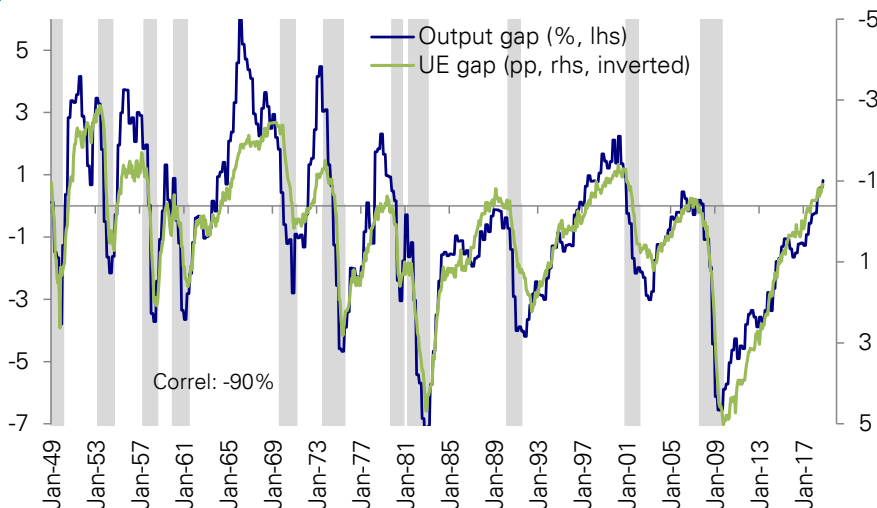
Figure 15: How late is the cycle? Slack is limited but all other fundamental indicators suggest mid- or in some cases even early cycle

Where are we in the cycle?

Duration	Length of cycle	Late
Slack	Labor market slack	Late
	Output market slack	Late
Cost pressures	Wage Growth	Mid
	Unit labor cost Growth	Mid
Cyclical demand	Resi investment/GDP	Early
	Housing starts	Mid
	Consumer durables/GDP	Early
	Capital spending	Mid
Confidence	Cyclically adj. confidence	Mid
Leverage	Household leverage	Early
	Most levered companies	Mid
Credit	Bond default rates	Mid
	Loan delinquencies	Mid
	Bank lending standards	Mid
Profits	S&P 500 margins	Late
	Earnings rel. to normalized	Mid

Source: Deutsche Bank

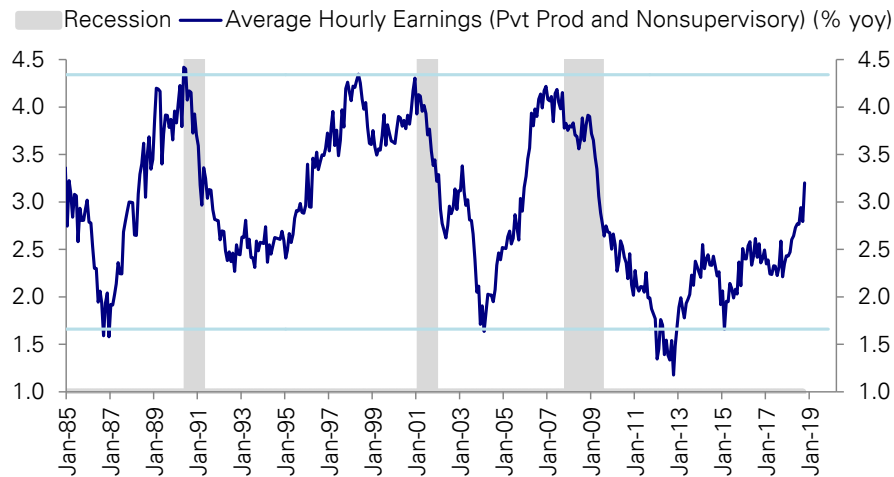
Figure 16: There is very little slack left in labor or output markets but this does not necessarily mean an end to the cycle



Source: CBO, BLS, Haver, Deutsche Bank

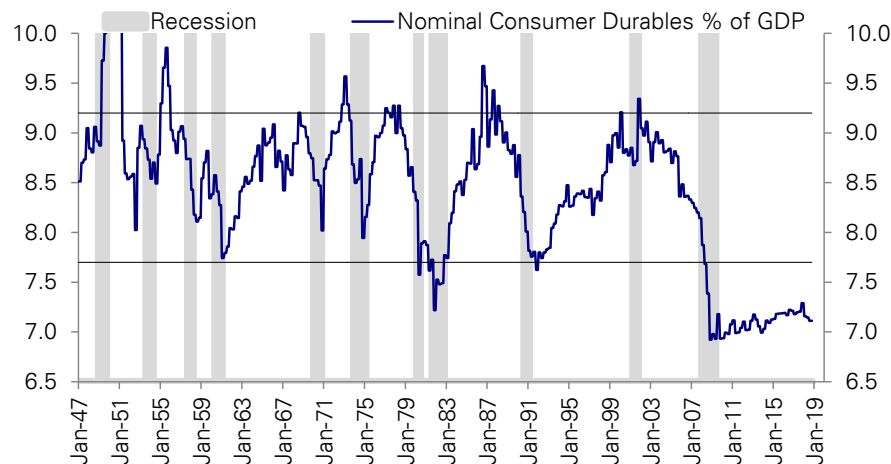


Figure 17: Cost pressures are rising but still only in the middle of the historical range



Source: BLS, Haver, Deutsche Bank

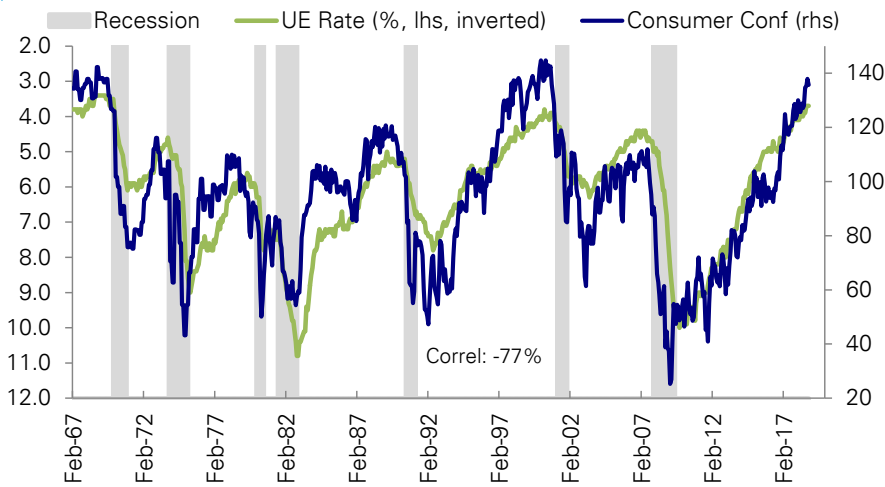
Figure 18: Cyclical components of demand such as consumer durables suggest the cycle is still early or has even barely begun



Source: BEA, Haver, Deutsche Bank

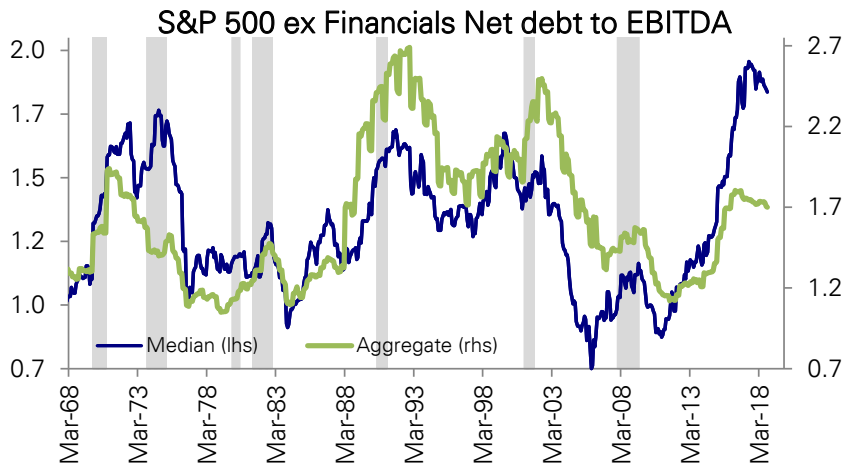


Figure 19: Consumer confidence has risen, but mostly reflects falling unemployment, not over optimism



Source: Conference Board, BLS, Haver, Deutsche Bank

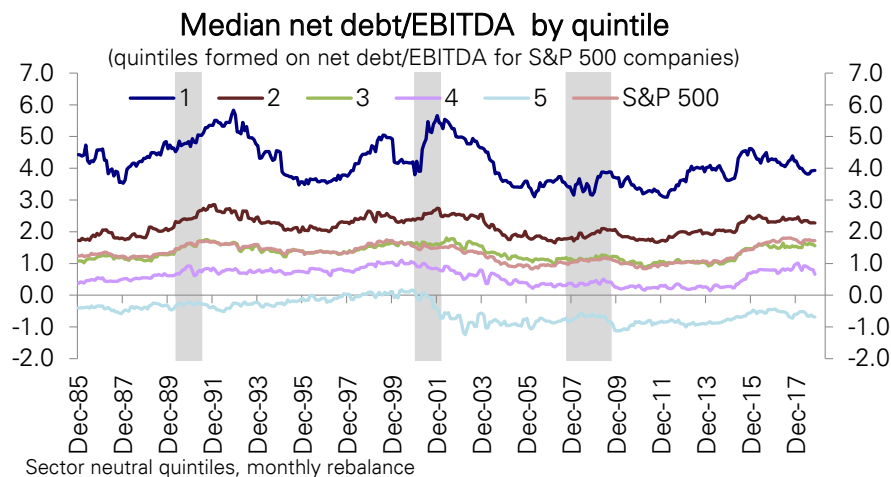
Figure 20: Corporate leverage in aggregate is still in the middle of its historical range while median company leverage is high



Source: Haver, Compustat, Deutsche Bank

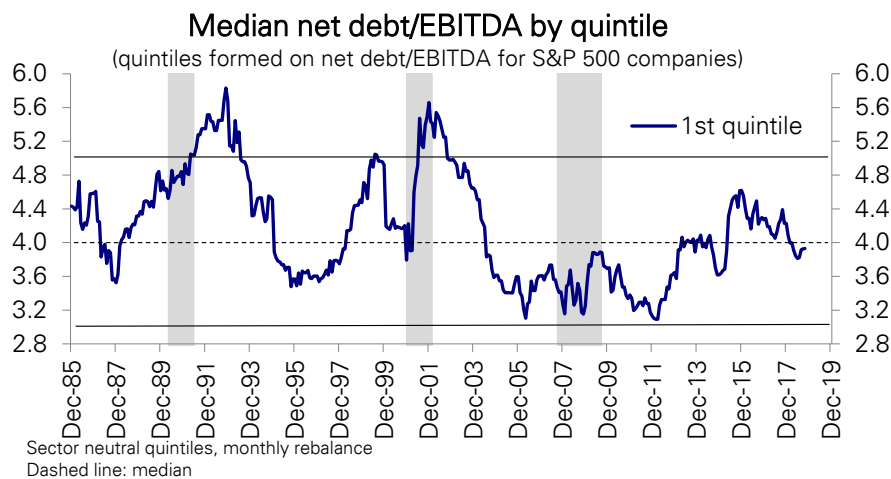


Figure 21: The rise in median leverage has been driven by the least levered companies leveraging up while those with the highest leverage and which should be the most vulnerable, have actually been de-levering for the last 2 years



Source: Haver, Compustat, Deutsche Bank

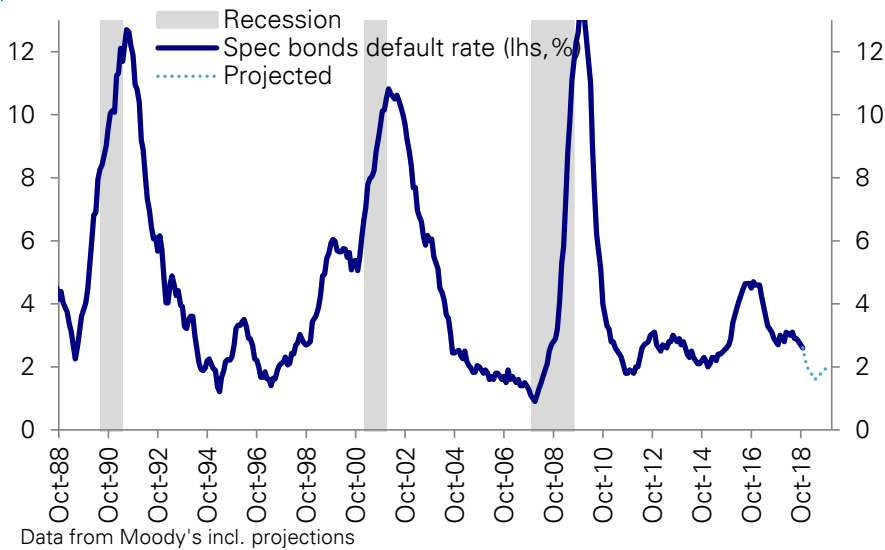
Figure 22: Leverage of the most levered companies is back to the middle of its historical range



Source: Haver, Compustat, Deutsche Bank

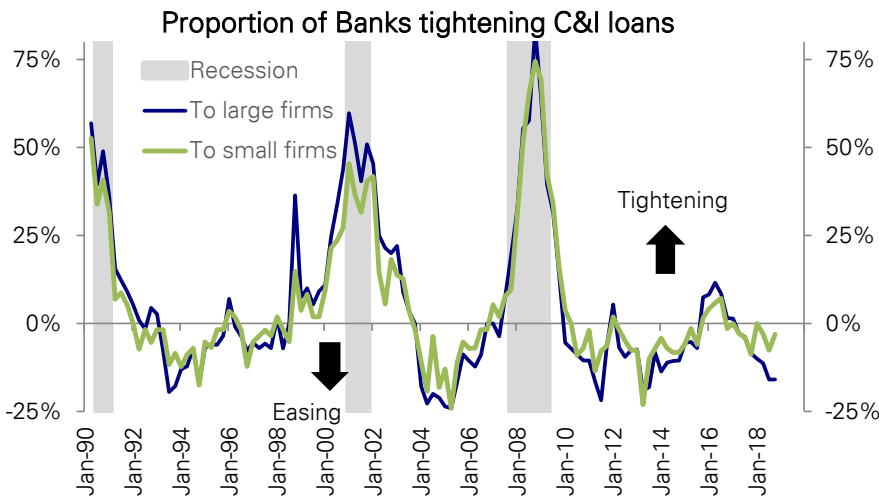


Figure 23: Speculative grade corporate default rates rose after the dollar and oil shocks but have been falling since. Moody's projects them to continue to fall through end 2019 to 2% which would still leave them above prior cycle lows



Source: Moody's, Haver, Deutsche Bank

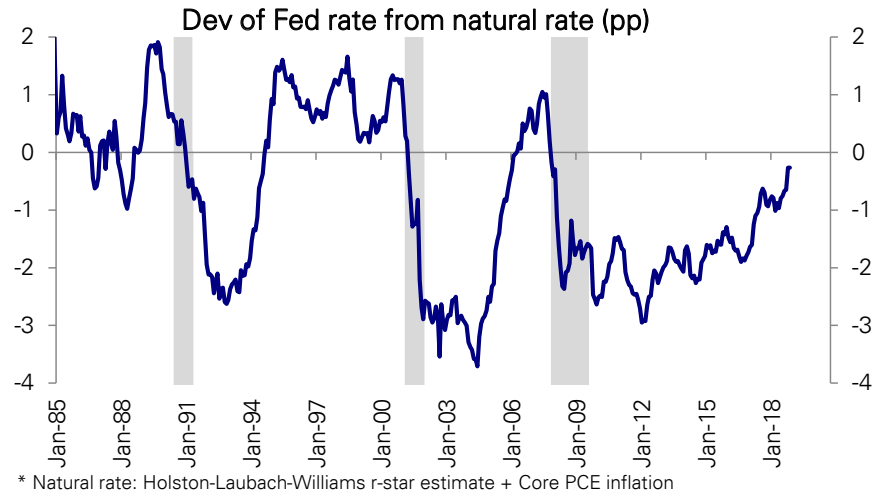
Figure 24: In contrast to prior cycles which saw tightening credit standards for several years in the lead up to recessions, banks continue to ease standards



Source: FRB, Haver, Deutsche Bank

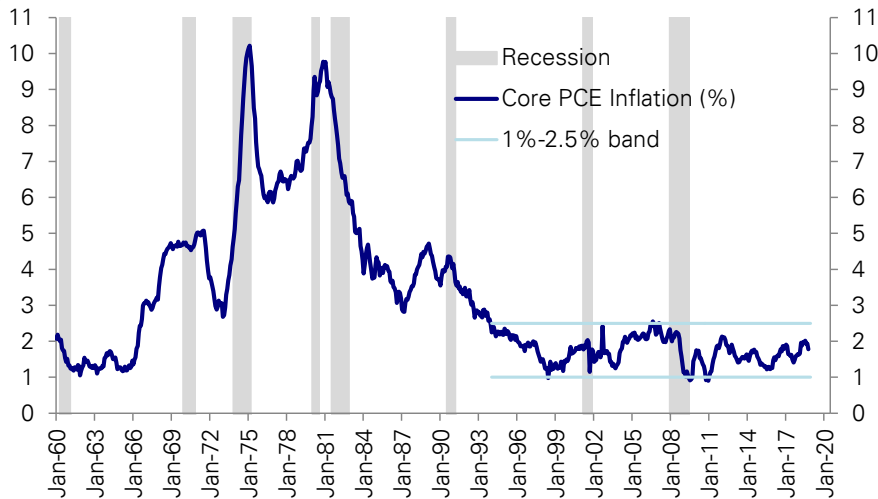


Figure 25: The Fed has typically hiked well above estimates of the natural rate before a recession ensued



Source: FRB, FRB NY, Haver, Deutsche Bank

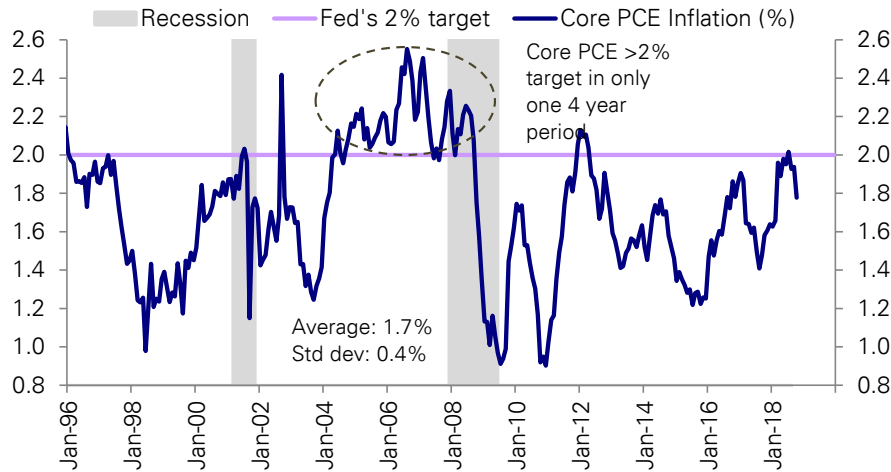
Figure 26: Inflation is well within its range of the last 25 years



Source: BEA, Haver, Deutsche Bank

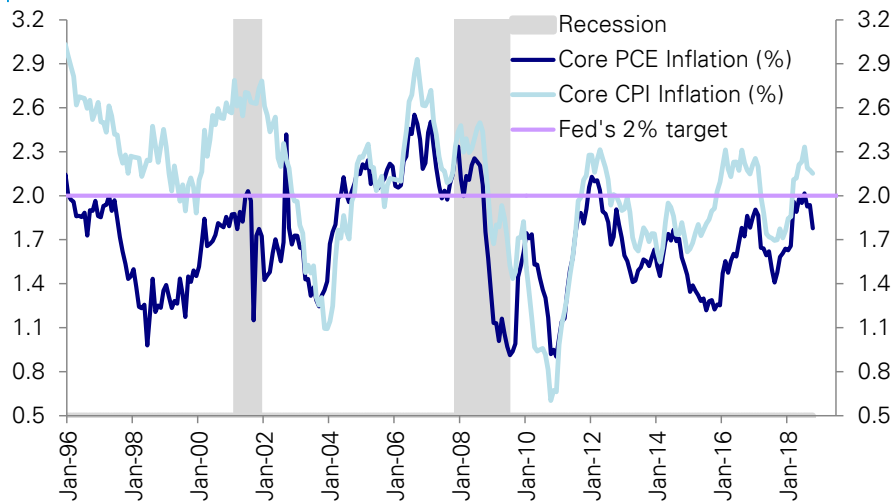


Figure 27: Having remained below its 2% inflation target for most of the last 10 years the Fed is unlikely to become aggressive in raising rates any time soon



Source: FRB, BEA, Haver, Deutsche Bank

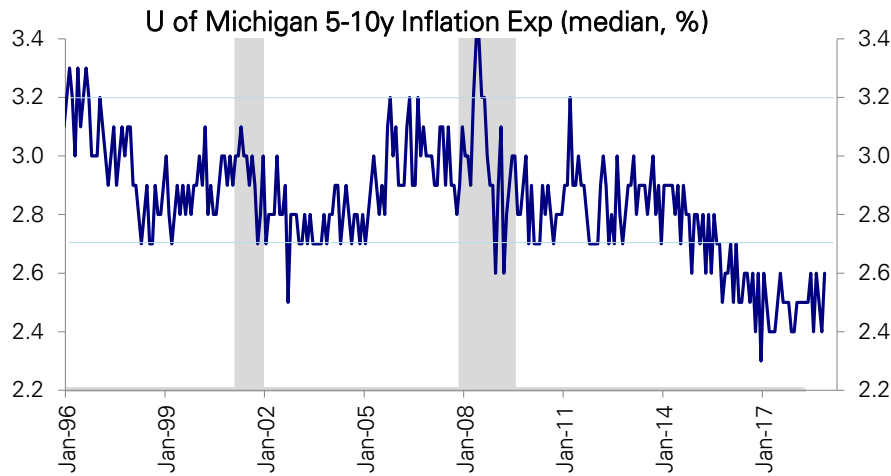
Figure 28: Core PCE inflation has run systematically lower than CPI inflation, on average by -40bps. By reformulating its inflation target from the CPI to the PCE some years ago, the Fed effectively raised its inflation target



Source: BEA, BLS, Haver, Deutsche Bank

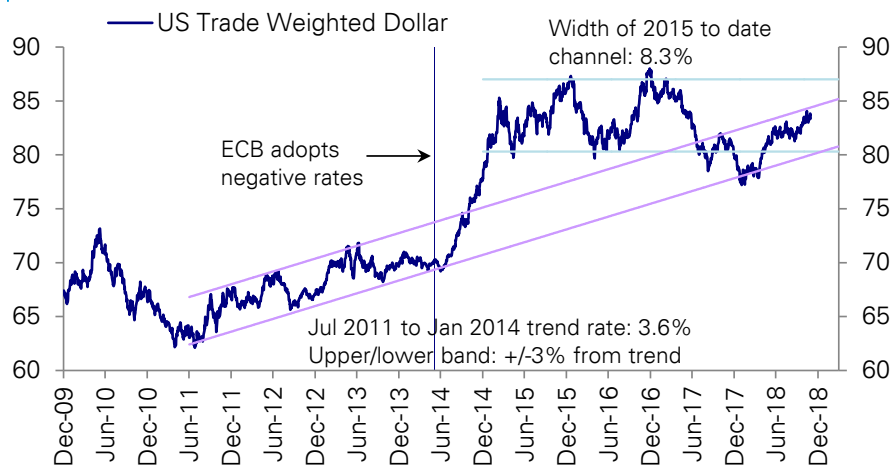


Figure 29: Inflation expectations, the most important driver of inflation, remain well below their historical range



Source: Univ of Michigan, Haver, Deutsche Bank

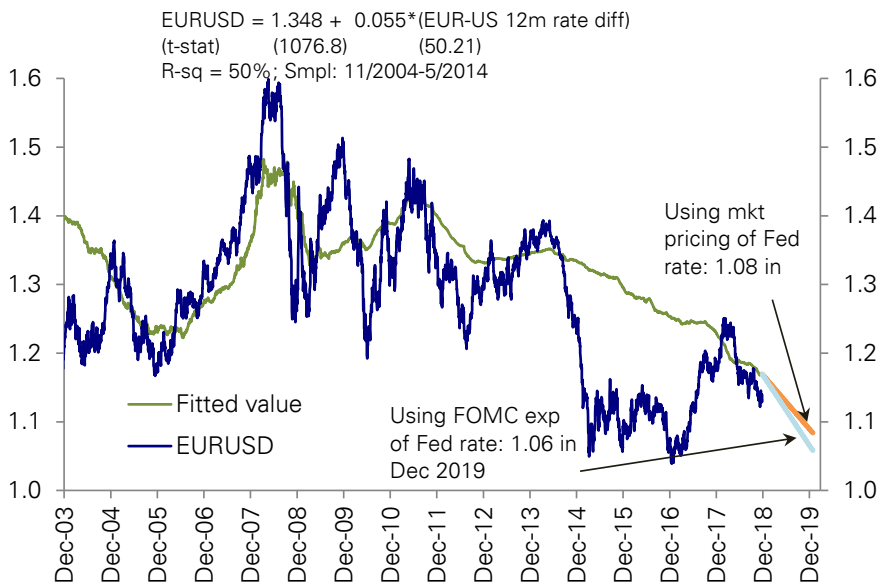
Figure 30: The dollar has risen from below the 4 year range to the middle and is within its gradual medium term trend channel



Source: FRB, Haver, Deutsche Bank



Figure 31: Rate differentials imply only a modest uptrend in the dollar



Source: FRB, Haver, Bloomberg Finance LP, Deutsche Bank

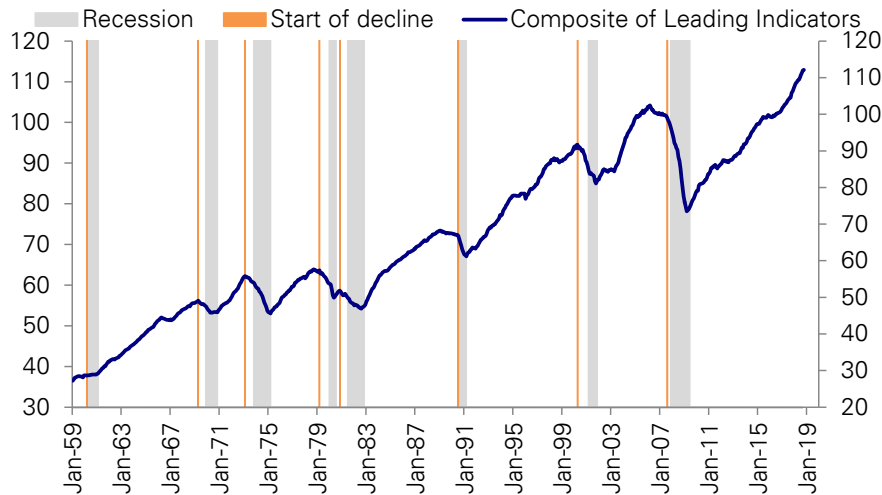
The Leading Economic Indicators index (LEI), arguably the most reliable indicator of oncoming recession, is at a cycle high relative to its trend channel and far from signaling one

- **A turn down in the LEI has historically been the most reliable indicator of an oncoming recession, peaking on average 6-8 months before.** Equally, the change in the LEI (yoy) has turned negative prior to all previous recessions.
- **The LEI is running above the trend channel of this recovery and some slowing from elevated levels therefore likely.** The LEI has been in a clear uptrend channel through the course of this recovery. Following the oil and dollar shocks, the LEI flat-lined in 2015, moving from the top to the bottom of the trend channel. As that shock faded, LEI growth picked up and in level terms it slowly moved back up to the top of the channel. For the first time in this recovery, it has moved slightly above the trend channel. This suggests that LEI growth is likely to slow, but a return to the trend channel would hardly be a sign of a peaking in the cycle.
- **The yoy change in the LEI is still near the top of its historical range.** It is far from turning negative as it has done prior to all previous recessions.
- **Most of the underlying components of the LEI also peak before the start of recession: currently the diffusion index is well up in positive territory.** Presently 4 of the 10 indicators (credit spreads, the S&P 500, ISM New Orders and Building Permits) have moved down. We note that the first two, credit spreads and the S&P 500, are market variables and as such will revert up if the underlying fundamentals do not deteriorate. The second two are notoriously noisy series, frequently giving false signals. The diffusion index of the components provides a summary of where the components stand. It tends to be very noisy so we focus on the 3-month



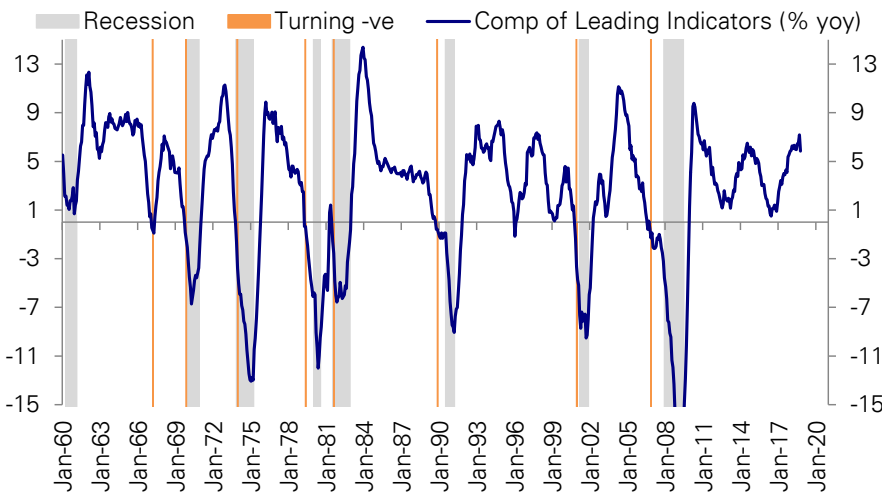
moving average which is currently running at 70% positive (historical range 15-85%), compared to a decline well below 50% before the onset of previous recessions.

Figure 32: The Leading Economic Indicators (LEI) index is arguably the most reliable indicator of an oncoming recession and is at cycle highs



Source: Conference Board, Haver, Deutsche Bank

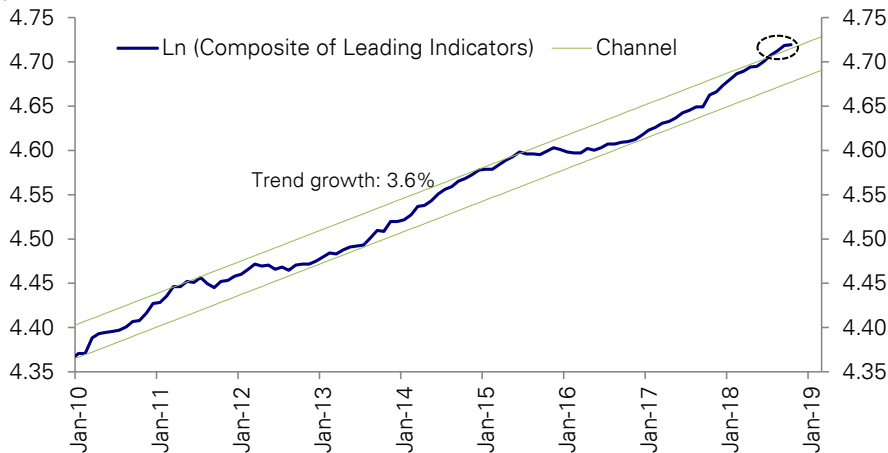
Figure 33: The change in the LEI has turned negative prior to all previous recessions



Source: Conference Board, Haver, Deutsche Bank



Figure 34: The LEI is at the top of its recovery channel for this cycle, so some slowing would be natural



Source: Conference Board, Haver, Deutsche Bank

Figure 35: Most components in the LEI individually also turned before previous recessions; currently the ones which have turned are either market variables or very noisy

months lead of components of leading indicators composite

Recession start	Credit*	Building Permits	ISM New Orders	S&P 500	10y minus 2y*	Exp for Business Conditions	Jobless Claims	Avg Weekly Hours	Composite LEI	Consumer Goods Orders	Capital Goods Orders
Average	23	14	7	6	15	12	9	8	6	5	2
Median	18	11	5	6	15	11	9	8	8	4	2
Maximum	51	30	18	13	29	24	18	21	11	14	13
Minimum	-3	2	1	-1	3	1	2	-3	0	-6	-8
Which leading indicators turn before the onset of recession											
1960-61	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
1970	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
1973-75	✓	✓	✓	✓	✓	-	✓	✓	✓	✗	✗
1980	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
1981-82	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1990-91	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
2001	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2007-09	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✗
Current status	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗

* using 10y minus 2y as proxy of yield curve and Moody's spread as proxy for Credit Index

** arranged left to right in order of those that have turned and earlier to later in the cycle



turned before the start of a recession

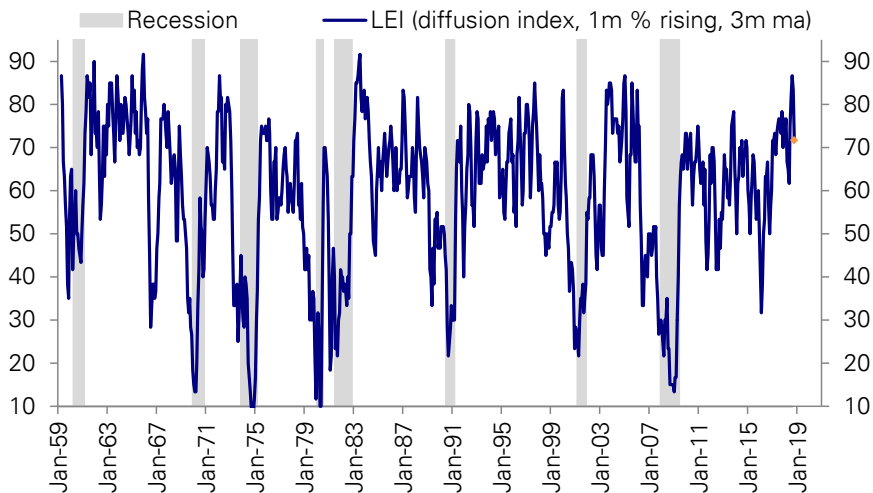


didn't turn prior to the start of a recession

Source: FRB, Moody's, Conference Board, Haver, Deutsche Bank



Figure 36: The diffusion index of the leading indicators is still quite elevated, suggesting no signs of an oncoming recession



Source: Conference Board, Haver, Deutsche Bank

Expect S&P 500 EPS of \$175 (+7%) in 2019 from a revised \$163.5 in 2018

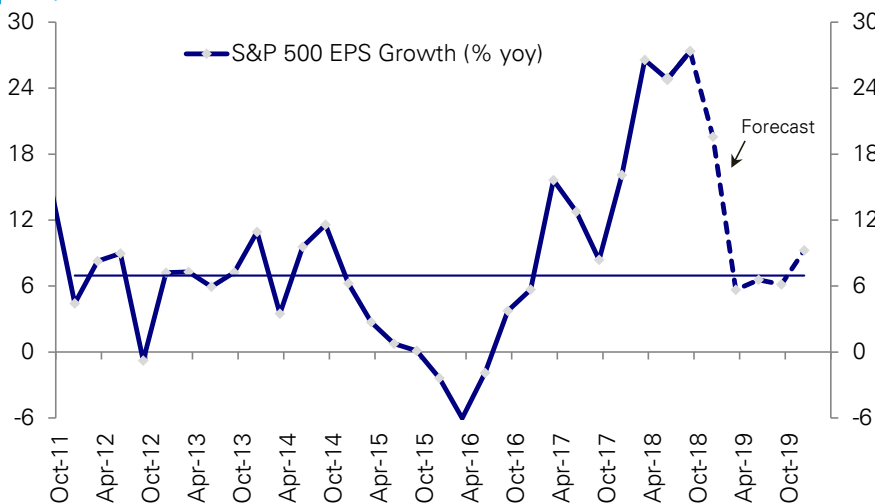
- **On track for 25% growth in 2018.** S&P 500 EPS have grown by 27%, 25% and 28% in the first three quarters of 2018. We see growth slowing to 20% in Q4 largely as oil prices have fallen faster than we expected and the dollar has risen. Marking to market for the decline in oil prices and the higher dollar implies a small downward revision to our estimate for 2018 from \$164 previously to \$163.5. For 2018 as a whole, earnings are on track to grow by 25%.
- **We see four reasons for a slowing in headline growth in 2019:**
 - A lapping of the cut in the corporate tax rate means lower headline growth by -10pp;
 - If oil prices stay at current levels (\$51 WTI; \$60 Brent), they will significantly impact Energy earnings, which will turn from having been a strong tail wind for headline S&P 500 EPS in 2018 to becoming a notable headwind in 2019 (-4pp);
 - If the trade-weighted dollar stays at current levels, it will be a modest headwind to growth (-1pp) next year, but especially so in Q1 2019 as it laps 4 year lows it hit in Q1 2018;
 - Global growth has already moderated significantly over the course this year and a continuation at the current pace would imply a modest further slowing in earnings growth (-1pp).
- **Back loaded growth over the course of the year as dollar weighs in Q1; but still strong underlying growth.** As noted, we see earnings growth slowing in Q4 to 20% and again in Q1 to 5.7% as an effective 8.8% appreciation in the dollar weighs; then steadying in Q2 and Q3 to 6.6% and 6.1% respectively before picking up in Q4 to 9.2% as the impacts of the higher dollar and lower oil prices lap. While overall 7% growth



in 2019 represents a significant slowing from this year's 25%, we note that underlying growth (ex the impact of oil price and dollar changes) would be a relatively strong 9%. Moreover, 7% growth is what prevailed on average from late 2011 to the end of 2014 before the large down and up cycle caused by the oil and dollar shocks. It is also comparable to the 6.5% trend EPS growth rate which has held for over 80 years.

- **Up and downside risks to earnings growth.** There is considerable uncertainty about some of the drivers of earnings, especially market-dependent ones like the dollar and oil prices. The dollar is right in the middle of its post 2015 range, a move to the top or bottom implies a move of about 4%, which would take off (or add) 2% from S&P 500 earnings growth. Our FX strategists view is for a weaker dollar which means upside risks to earnings. Similarly every +\$10 move in oil prices will add about 1.5pp to earnings growth. Our commodity strategists view is for somewhat higher oil prices and so also an upside risk to our 2019 estimates. Every 1 point move in the US or global PMI is worth 2pp of S&P 500 EPS growth and conditional on progress on US trade policy we see upside risks to growth outside the US as regional idiosyncratic factors fade.

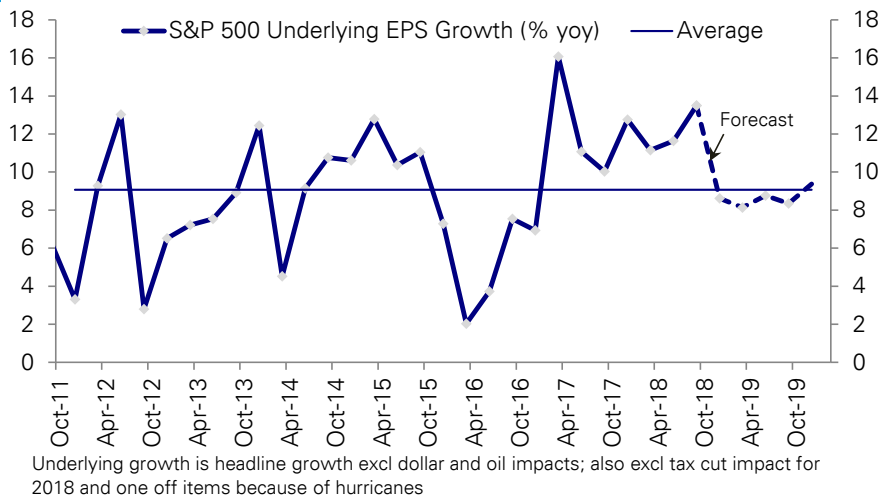
Figure 37: Earnings growth will slow in 2019 as the tax cuts lap, dollar and oil become headwinds and global growth has slowed a little; we see growth for the year at 7%



Source: Haver, Factset, Bloomberg Finance LP, Deutsche Bank

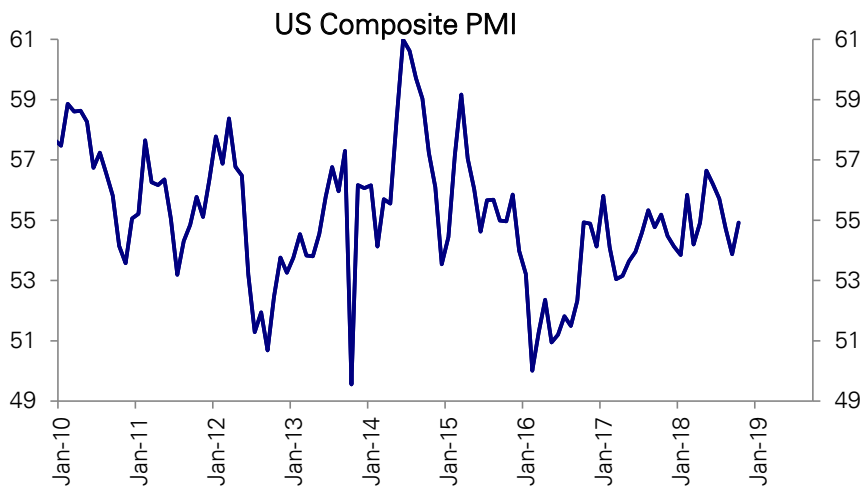


Figure 38: Underlying growth after adjusting for tax cuts, the dollar and oil prices has been quite robust and will remain at around 9% next year



Source: FRB, Markit, ISM, Haver, Factset, Bloomberg Finance LP, Deutsche Bank

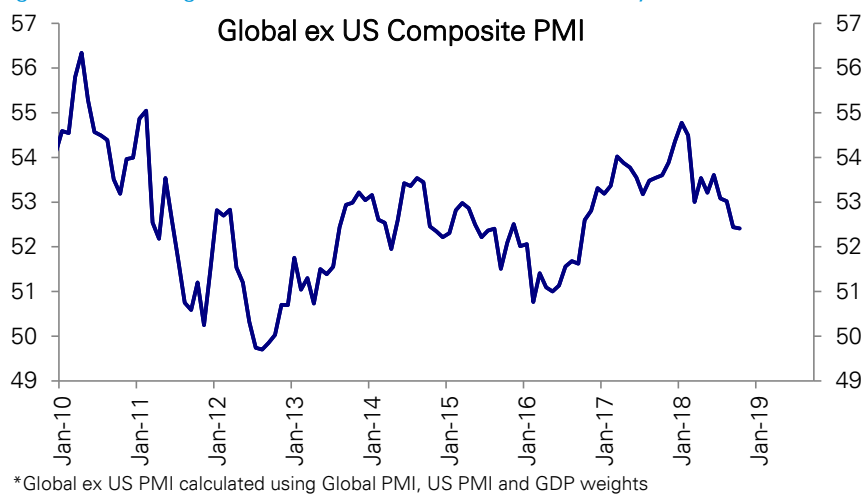
Figure 39: US growth has remained steady...



Source: Markit, Haver, Deutsche Bank

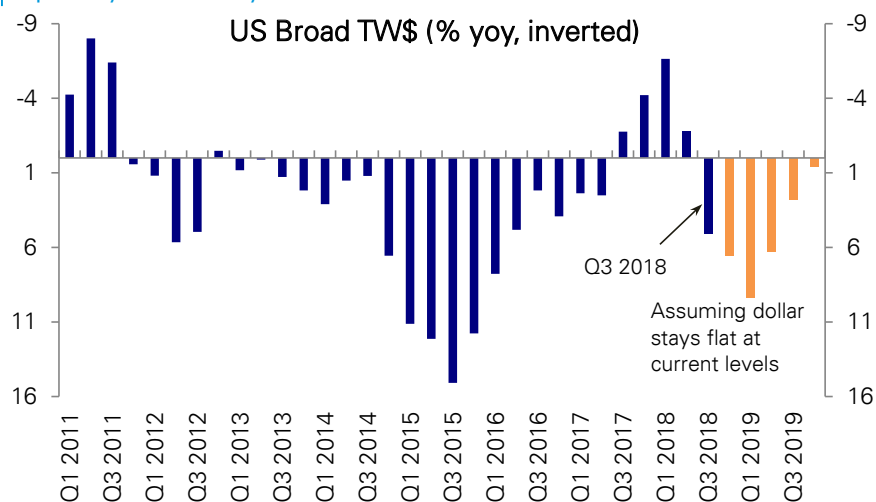


Figure 40: ...but growth in the rest of the world has clearly slowed



Source: Markit, IMF, Haver, Deutsche Bank

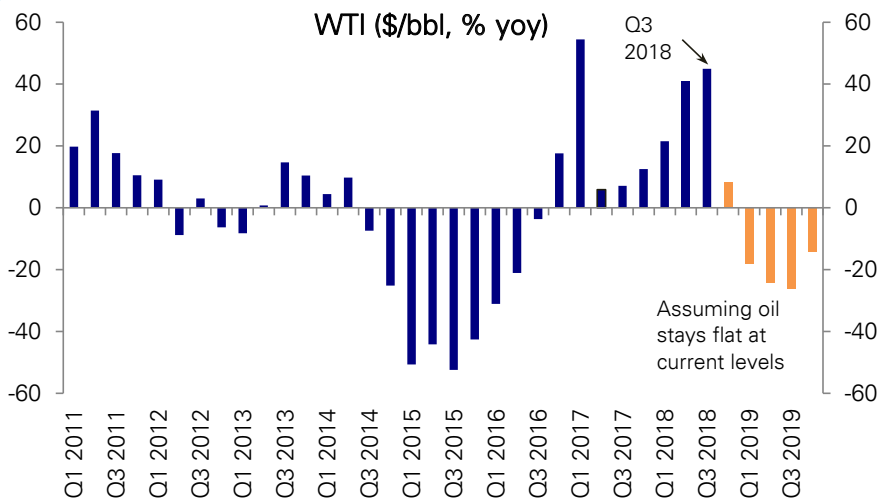
Figure 41: At current levels the dollar will be a headwind to earnings growth, especially in Q1 next year



Source: FRB, Haver, Deutsche Bank



Figure 42: At current levels oil prices will also turn from a tailwind to a headwind for earnings growth



Source: Haver, Deutsche Bank

With the S&P 500 multiple near 5-year lows, we see scope for the multiple to re-rate upwards as growth concerns ease and expect it to move back up to 18.5x.

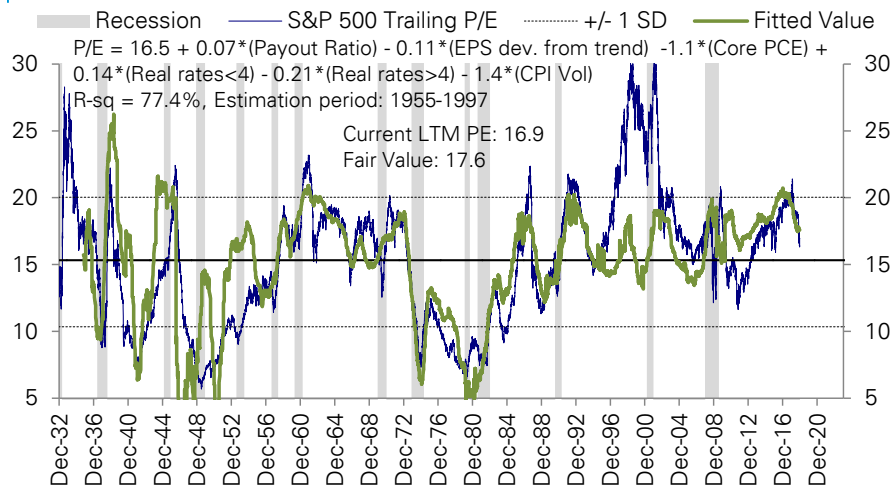
This is around the level where it was flat from March to September following the initial de-rating this year and where we expected it to average this year.

- **We expected the multiple to de-rate some this year on the rise in earnings to well above normalized levels.** S&P 500 multiples are well explained (77%) historically by their traditional drivers: the payout ratio (+); earnings/normalized levels (-); rates broken into inflation (-) and real rates (+); and macro vol measured by rates vol (-). While inflation moved up over the course of this year (15bps) as we expected this should have had only a modest equivalent impact on the market multiple. Historically the market multiple has been robustly negatively correlated (-52%) with the deviation of earnings from their normalized or trend levels, i.e., when earnings are low relative to normalized levels markets have tended to price a recovery and put a higher multiple on them and vice versa. Our estimates imply this should have been the main source of de-rating in multiples with higher inflation and the above trend rise in earnings together implying a decline of around 2 multiple points whereas the actual decline at the recent low had been notably bigger at 3.8 points.
- **After some re-rating as growth concerns diminish, we see the drivers in 2019 suggesting a steady multiple.** We expect payout ratios to remain flat. Our baseline view for earnings growth of 7% is comparable to trend rates of 6.5% and not a source of de-rating as it was this year. We expect inflation to moderate in the very near term, then pick back up, a wash over the course of the year. We expect real rates to begin to drift back up as the Fed continues to normalize rates, historically a mild positive.

Our earnings and multiples estimates imply a target for the S&P 500 for year-end 2019 of 3250 (18.5x \$175)



Figure 43: The multiple has fallen below our estimate of fair value



Source: BEA, BLS, Haver, Compustat, Factset, Bloomberg Finance LP, Deutsche Bank

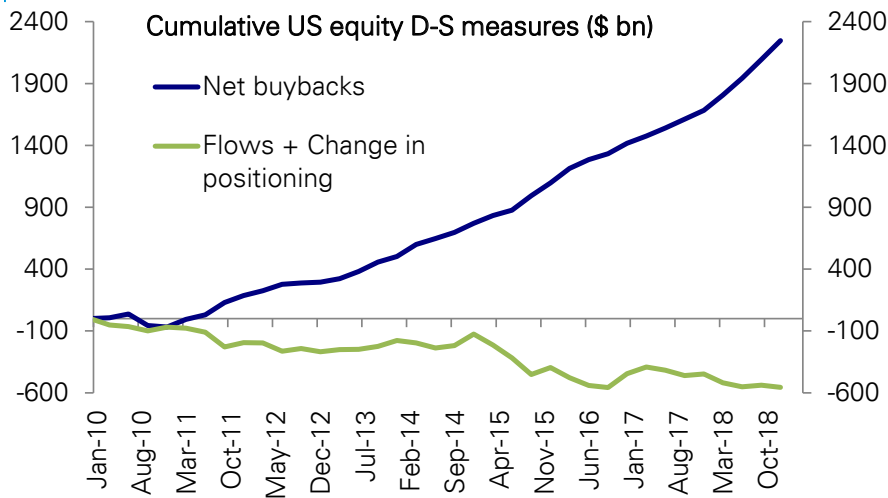
Our demand-supply framework suggests similar upside

We also look at potential returns for the market next year through the lens of our demand-supply framework for US equities ([Equity Supply and Demand, Nov 2010](#)). The framework combines on the demand side inflows into equities (mutual funds and ETFs) and changes in positioning with, on the supply side, new issuance and buybacks, to construct a demand-supply balance which has historically been well correlated (65%) with quarterly returns on the S&P 500. As to the main components for 2019, we see:

- **Buybacks rising to \$700bn.** From a demand-supply perspective, buybacks have been the most important driver of S&P 500 price increases during this cycle. They are on track to reach a net \$650bn in 2018 (from \$450bn a year during 2014-2017). The bulk of the increase in buybacks this year has been driven by rising earnings, and only a small part by repatriation. With earnings continuing to grow in 2019 in our estimate and companies still having plenty of cash holdings, we see buybacks rising to about \$700bn in 2019. While the growth in buybacks will be far lower next year compared to 2018, the amount still is a massive 3% of current S&P 500 market cap.
- **Assuming no inflows and steady positioning.** After large outflows from US equity funds following the correction in February, the recent selloff has seen flows hold up quite well. Positioning in futures and systematic strategies has fallen sharply and is quite low. Net positioning in futures for example has not been lower than it currently is outside of the previous large growth scares. While positioning can fall further and also turn short, that in our view requires incremental negative catalysts beyond the fears that have already manifested.
- **Buybacks of \$700bn alone imply price gains of 20% for the S&P 500 from current levels.** Assuming no incremental demand fluctuations in flows and positioning, 20% upside over 2700 also implies a target of 3250 by year end 2019.

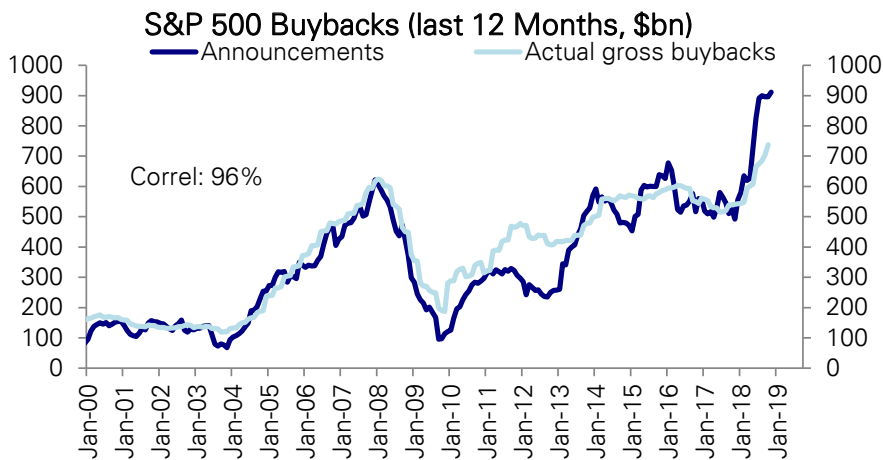


Figure 44: From a demand supply point of view, buybacks have been the main driver of equities in this cycle



Source: Compustat, ICI, EPFR, Haver, NYSE, Deutsche Bank

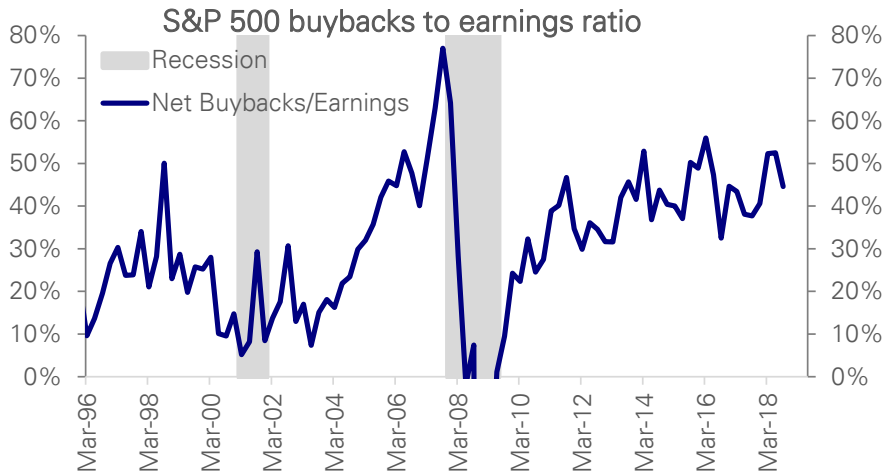
Figure 45: We expect buybacks to remain strong



Source: Bloomberg Finance LP, Compustat, Factset, Deutsche Bank

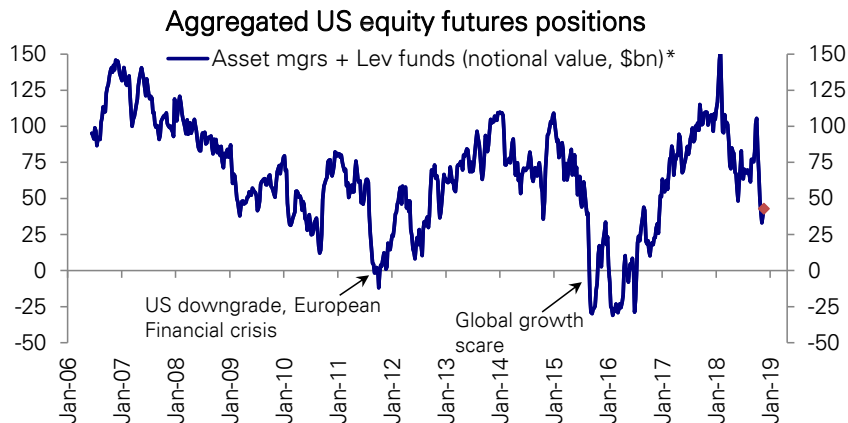


Figure 46: Most of the increase in buybacks is simply due to higher earnings



Source: Compustat, Deutsche Bank

Figure 47: Equity futures positioning has never been lower outside of large shocks

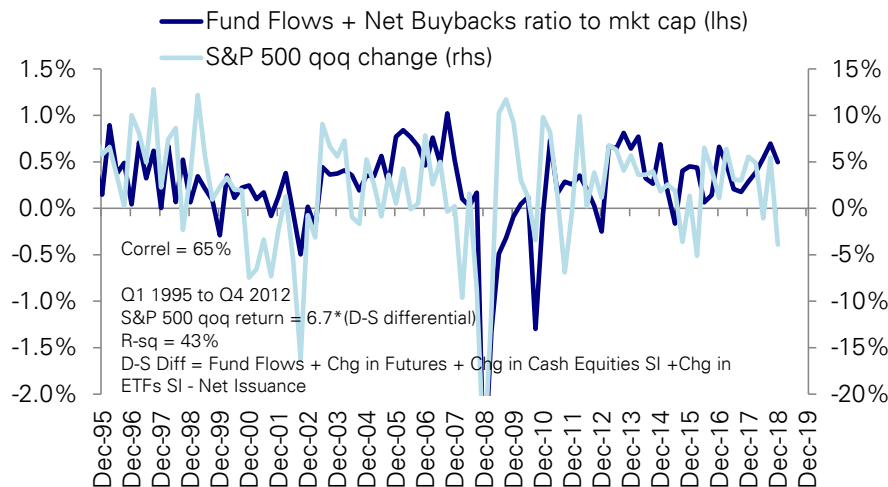


*Based on F&O positions in S&P 500, NASDAQ 100, DJIA, S&P 400 and Russell 2000

Source: CFTC, Haver, Deutsche Bank



Figure 48: A simple measure of equity demand-supply explains S&P 500 returns very well



Source: Compustat, ICI, EPFR, Haver, NYSE, Deutsche Bank

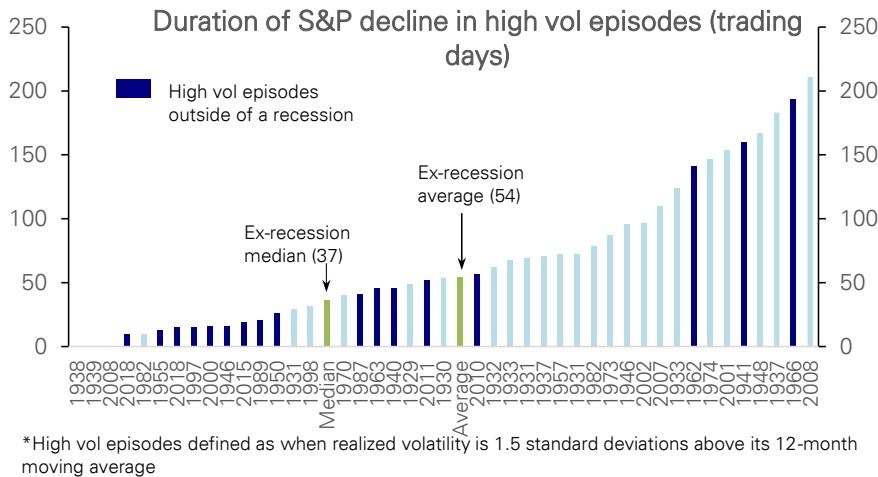
Strategy

It will take a while for the market to regain its prior peak. While we remain constructive on the cycle and the outlook for equities next year, we note that:

- **Volatility shocks last a while.** Volatility has gotten elevated again in the recent selloff and past episodes of high volatility (>1.5 sigma moves) outside of recessions suggest it takes 6-7 months for the market to regain its prior peak, pointing to April next year. One reason for the gradual recovery is that systematic strategies like vol control funds sell equity exposure quickly as vol rises but reallocate back to equities only gradually as it subsides.
- **The list of worries for the market is long and concerns about peak earnings are unlikely to dissipate until there are clear signs growth is steady.** Trade concerns have morphed well beyond an issue of tariffs and even if a deal with China were forthcoming, the cloud will linger. The innumerable twists and turns from the administration means the uncertainty premium will remain elevated as does the change in the House majority. The market is acutely focused on macro growth concerns and there won't be visibility on a steadying until well into 2019. We expect earnings growth to slow in Q4 this year and again in Q1, steadying only in Q2. Fears that the deceleration will continue (as is already priced in) are unlikely to abate until Q2 earnings convince the market of the slower but stable trajectory of earnings growth. This points to later in Q2 or even early in Q3.
- **Buybacks work gradually.** As concerns ease, positioning unwinds and outflows abate, buybacks which have been the only consistent source of demand for equities in this cycle will once again become the primary driver. But they argue for only a gradual trend higher, also suggesting it will take time for equities to recover.

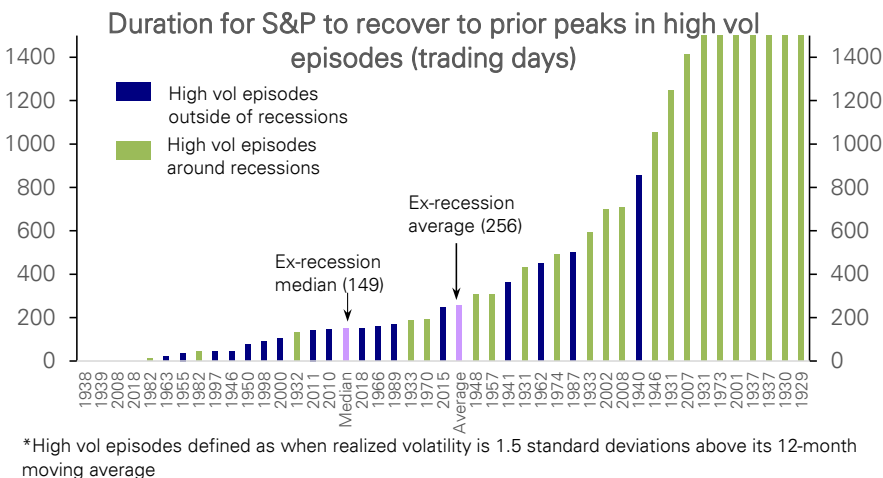


Figure 49: The S&P 500 usually takes 2-3 months to bottom after a volatility spike



Source: Haver, Bloomberg Finance LP, Deutsche Bank

Figure 50: The market usually takes 6-7 months to recover back to its original peak after a vol shock



Source: Haver, Bloomberg Finance LP, Deutsche Bank

When to get out if timing of next recession is uncertain? Wait for the LEIs to turn down

In the tenth year of the recovery, worries about the end of the cycle are widespread and equities have de-rated significantly because of them this year. Recessions are associated with equity bear markets, with a median decline of -21%, clearly a major event for equity investors. But while late cycle concerns abound, the LEI which has historically provided a good leading signal of recessions, has shown no signs of turning yet. Of course when the cycle turns, will only become clear in hindsight. So the strategy question is how to position when the timing of the turn down in the cycle is uncertain?



- **The bulk of the decline in equities around recessions has historically occurred after the LEIs turned down.** From a strategy perspective, the point to note is that recessions and the associated bear market play out over time. Over the last 7 cycles (since the LEIs became available), the S&P peaked and fell by an average 5% before the LEIs actually turned down. But the bulk (4/5) of the recession drawdown occurred after the LEIs actually turned down, even after accounting for the lags in reporting and for confirming a turn.
- **Trading off late cycle gains versus recession losses: wait for the LEIs to turn down.** When it is unclear whether or not the cycle is going to turn down, one needs to weigh:
 - **The cost of getting out too early if the cycle does not end.** The ultimate cost depends of course on how long the cycle eventually goes, with equities returning an average 12% a year historically outside of recessions. This is especially the case given the experience in this cycle which has been marked by an abnormally high number of shocks. Each of those shocks at the time was hailed as the potential end of the cycle. Indeed there have been 7 corrections of 10% or more since 2010. Bailing out of equities during any of those corrections in the last 9 years would have meant forfeiting enormous subsequent gains. While a narrative has developed that 10% corrections are normal, we would stress that they used to be highly unusual outside of recessions. Indeed, to put that number in perspective, consider that from 1950 to 2007, or for almost 6 decades, there were only 10 such corrections when the unemployment rate was declining. There were none from 2003 to 2007, only 2 in the 1990s, 2 during the 1980s, 1 in the 1960s, and 5 in the 1970s when inflation spiraled up sharply.
 - **Against the cost of getting out too late but this can be limited by getting out once the LEIs decline.** Of course the later one gets out the bigger the loss. But with the bulk of the recession decline in equities occurring after the LEIs turn down, a rule of getting out once they decline, should limit losses.
 - **In general, this pre-LEI decline loss has to be traded off against the cost of getting out too early, but in the current context of the pullback this has already happened.** So the risk-reward, unless one is certain that the cycle has already turned and we are heading directly into recession is clear and argues for staying in until and unless the LEIs decline. As discussed above, the large number of shocks in this cycle has meant that investors, corporates and households have been fairly conservative, thereby lengthening the cycle. In our reading, apart from the duration of the cycle and the tightness in labor and output markets, the vast majority of other indicators are pointing to this cycle still being in the mid or even early phase, with few imbalances, suggesting it could go on for a while.



Figure 51: The bulk of the declines associated with a recession occur after the LEI has declined

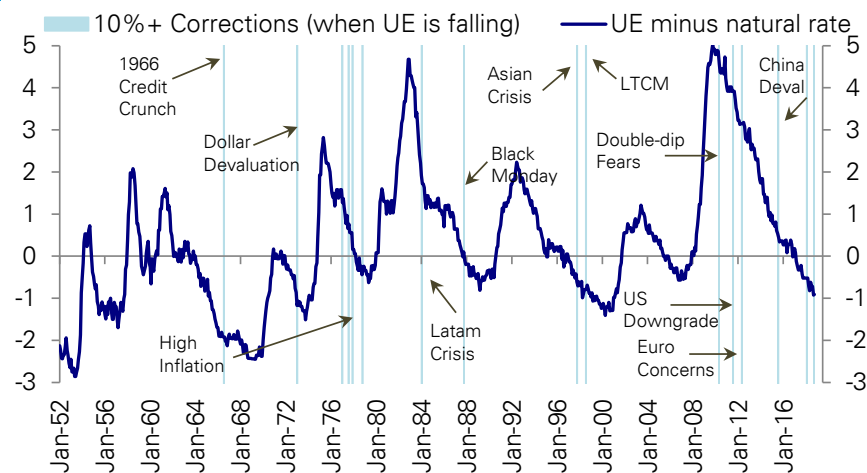
Returns around LEI turning down

S&P 500 Peak	S&P 500 Trough	LEI turns down*	12m return leading up to LEI turning down	24m return leading up to LEI turning down	S&P 500 peak to LEI down	LEI neg to S&P 500 bottom	Associated recession decline
Jun-48	Jun-49						-20.6%
Jan-53	Sep-53						-14.8%
Jul-57	Oct-57						-20.7%
Aug-59	Oct-60						-13.9%
Dec-68	Jun-70	Jul-69	-5.6%	1.8%	-11.1%	-20.2%	-36.1%
Jan-73	Dec-74	May-73	-0.4%	0.0%	-9.5%	-37.4%	-48.2%
Aug-78	Nov-78	Jun-79	4.2%	2.5%	-2.1%	NA	-17.1%
Nov-80	Jul-82	Feb-81	11.3%	30.7%	-5.3%	-14.8%	-27.1%
Oct-89	Oct-90	Oct-90	22.6%	8.6%	10.7%	-2.2%	-19.3%
Aug-00	Feb-03	Jul-00	6.7%	27.4%	0.8%	-43.1%	-46.9%
Oct-07	Mar-09	Nov-07	5.4%	18.3%	-5.0%	-48.3%	-56.8%
Average							-29.2%
Median							-20.7%
Average since LEI became available			6.3%	12.7%	-3.1%	-27.7%	-35.9%
Median since LEI became available			5.4%	8.6%	-5.0%	-28.8%	-36.1%

*turn down in LEI only considered 3 months after the peak to allow for confirmation and reporting lags

Source: Conference Board, Haver, Deutsche Bank

Figure 52: While a narrative of regular 10% corrections being normal has gained traction, we note that they used to be extremely rare outside of recessions. Indeed from 1950 to 2007, or almost 6 decades, there were only 10 such corrections



Source: BLS, CBO, Haver, Deutsche Bank



Sector Allocation

Across sectors, the defensive rotation has upended historical relationships between relative valuations and their drivers. Sector relative valuations have historically been well explained by near and long term expected earnings growth (+), dividend (+) and buyback (+) payout ratios, and leverage (-). However, relative valuations for defensive sectors have risen since late May despite unchanged or even deteriorating fundamental drivers. Consumer Staples is now the second most expensive sector behind Consumer Discretionary, and has a higher multiple than Technology, as does Utilities.

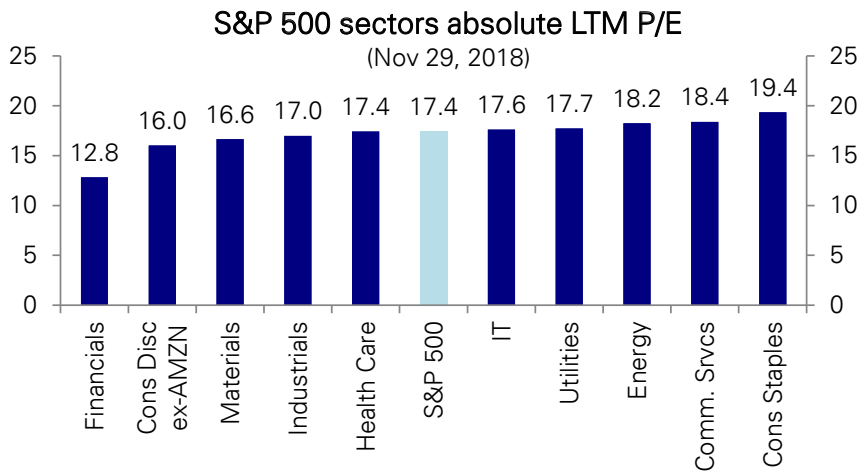
- **Remain underweight Consumer Staples, which trades at near the highest valuations in the S&P 500 despite having near the slowest growth.** It does have high dividend payout ratios which are supportive of valuations but we note that it has very little room to raise payouts from cash flow and moreover has high and rising leverage. While the sector enjoyed extremely stable earnings growth historically, we note that there has been a long-lived slowdown over the last 5 years with both sales and margins under pressure. This calls into question whether the sector can behave defensively as it has in the past and that would justify higher valuations.
- **Remain underweight the defensive bond proxies Utilities and Real Estate, which are already pricing in a significant decline in 10y yields to 2.5%.** Utilities and Real Estate have outperformed over the last 2 months, and at current levels are already pricing in 10y yields closer to 2.5%, or almost 50bps lower than current yields. Our house forecast remains that the 10y yield will rise to 3.6% by end 2019.
- **Remain underweight Energy where valuations and earnings expectations are stretched again.** We have been underweight Energy since mid-2017, as relative valuations remained well above historical averages. As oil prices and earnings rose through September, Energy valuations had been normalizing down but the sharp decline in oil prices since then means that earnings expectations and valuations are too high again. Oil prices are now slightly below our estimate of medium term fair value and positioning is also much cleaner. However with Energy equity valuations too high, rising oil prices are unlikely to translate into equity outperformance. Indeed oil prices rallied over 80% from their trough in June 2017 through the recent peak last month, but Energy equities were flat to the market over this period.
- **Raising Materials from underweight to neutral.** After severely underperforming this year, valuation is now cheap but a period of sustained outperformance is likely to begin only with the next dollar down cycle.
- **Raising Healthcare from neutral to overweight as valuation is cheap and earnings growth has remained steady.** Unlike the other defensives, Healthcare valuation is well below levels implied by its fundamentals. It has continued to maintain steady trend earnings growth, in place for over 2 decades, implying it should trade with a defensiveness premium. Free cash flow well in excess of current payouts and low leverage also suggest plenty of capacity to raise payouts.



- **Raising Technology from neutral to overweight.** We had been neutral Tech despite strong earnings growth as it looked well priced in and positioning was extended. After the recent sell-off, valuations have now fallen well below levels indicated by the fundamental drivers, while positioning is also being unwound. With free cash flow well above payouts for the median company and the lowest leverage across sectors, there is ample scope to raise payouts which can raise valuations further.
- **Raising Consumer Discretionary from neutral to overweight on undervaluation.** After the recent sector reshuffling, Consumer Discretionary has a disproportionate weight in Amazon (30%). Valuations for the sector ex-Amazon are down sharply this year (-18%) and it trades at a large discount to the market despite in-line growth. Our internet sector analyst remains positive on Amazon and thinks the recent sell-off provides an attractive entry point.
- **Remain overweight Financials, the cheapest sector on an absolute basis as well as relative to its drivers.** One of the key reasons Financials are trading as if the 10y were at 2.1% instead of 3% is that corporate debt growth has been weak despite broader macro growth being strong. One reason for weak debt growth has been deleveraging by corporates who have slashed issuance at a scale usually seen only in recessions. While unusual amidst the strong macro growth we have seen this year, we note that this is in line with past corporate behavior around windfall cash flow gains and exactly what we anticipated they will do from the extra cash flow from the tax cut and access to foreign cash ([What Will Corporates Do with The Tax Windfall, Mar 2018](#)). Aggregate leverage has been coming down, is in the middle of its historical range, and as the cycle continues we see the pace of deleveraging abating, removing an overhang on Financials valuations.
- **Remain overweight the Industrials as they are already pricing in a recession.** Industrials have been hit hard on concerns around slowing global growth and the trade war and as highlighted earlier they are already pricing in a PMI of 50. Capital spending has been rising back towards its long run trend and has room to catch up, supporting continued strong earnings growth.
- **Neutral Communication Services as strong growth looks well priced in.** The newly formed Communication Services sector has expected long run earnings growth above the market, low leverage and has plenty of scope to raise payouts. However it's already trading at a premium and the positives look well priced in.

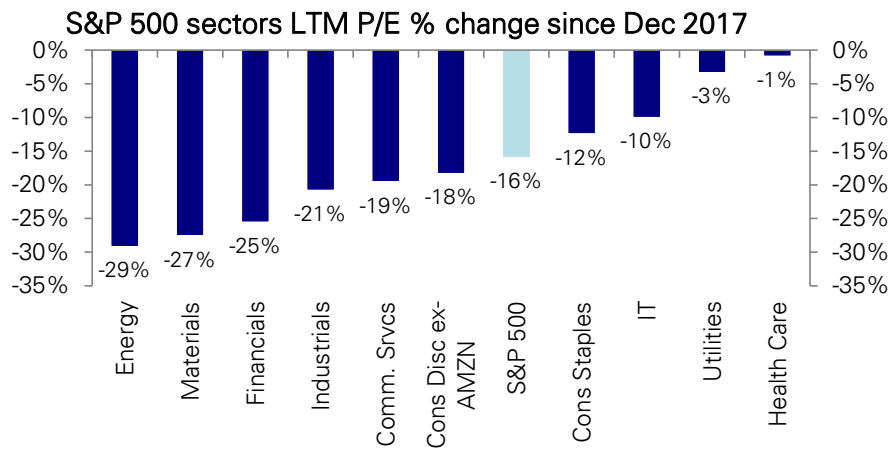


Figure 53: The low growth Consumer Staples sector is now the most expensive and trades above Technology, as does Utilities



Source: Factset, Deutsche Bank

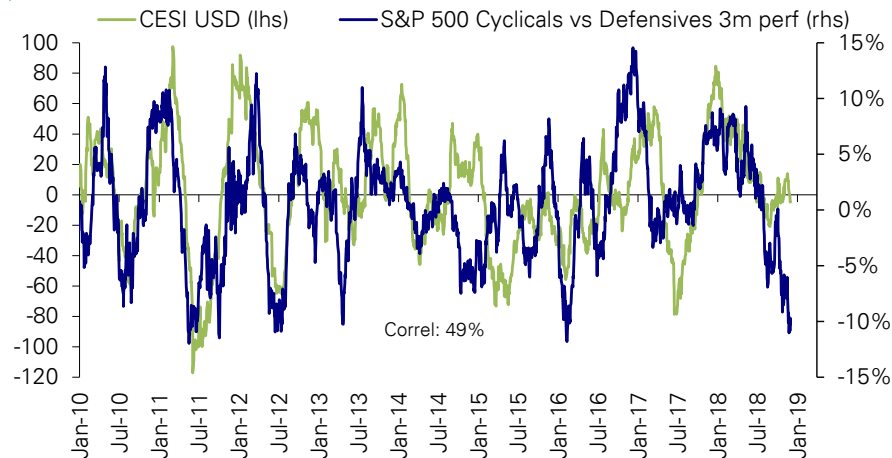
Figure 54: Broad based de-rating but concentrated in cyclical sectors



Source: Factset, Deutsche Bank

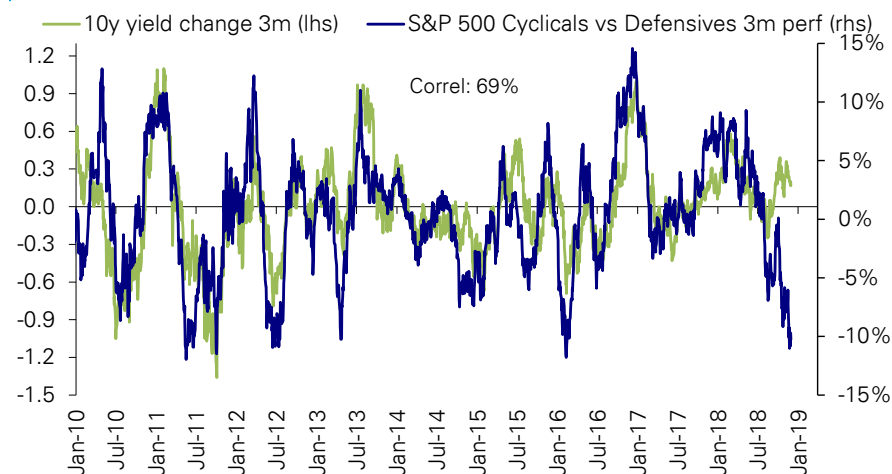


Figure 55: The performance of cyclicals relative to defensives has disconnected from macro drivers such as data surprises...



Source: Citigroup, Factset, Haver, Deutsche Bank

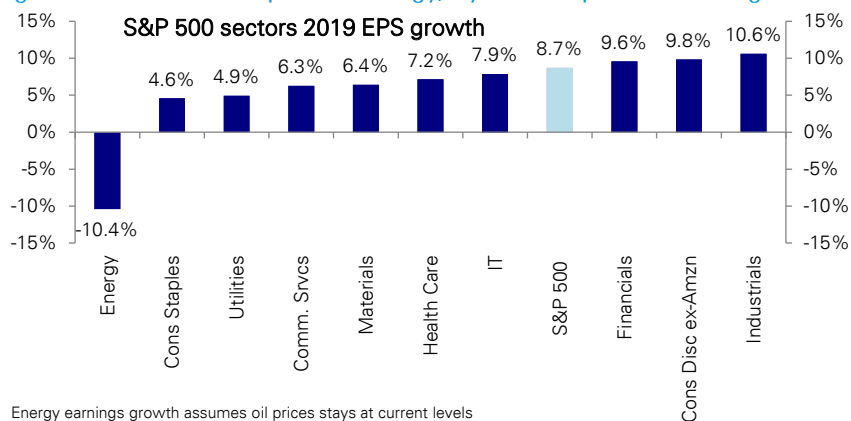
Figure 56: ... and rates



Source: FRB, Factset, Haver, Deutsche Bank

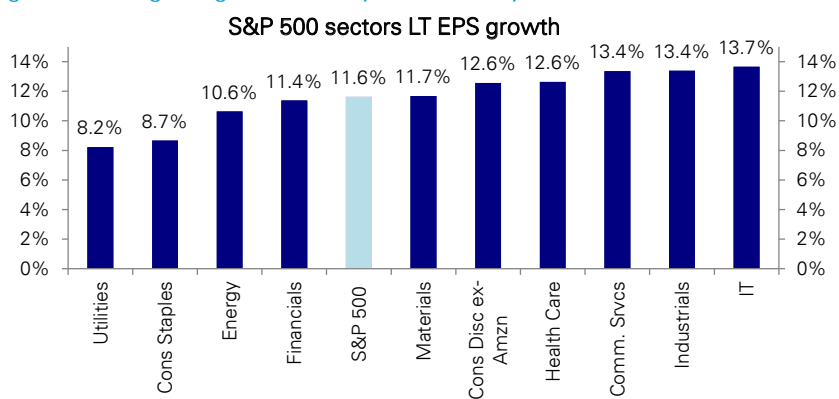


Figure 57: With the exception of Energy, Cyclical expected to lead growth



Source: Factset, Deutsche Bank

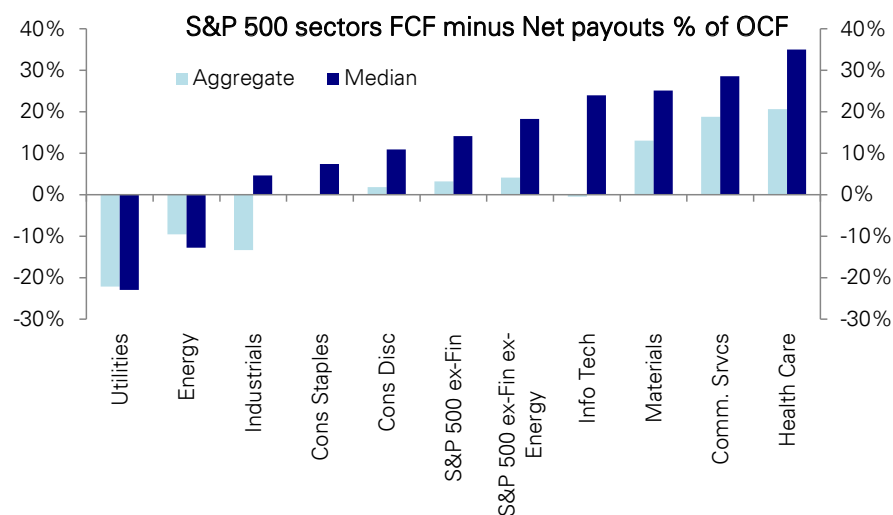
Figure 58: Long run growth clearly favors the cyclicals



Source: Factset, Deutsche Bank

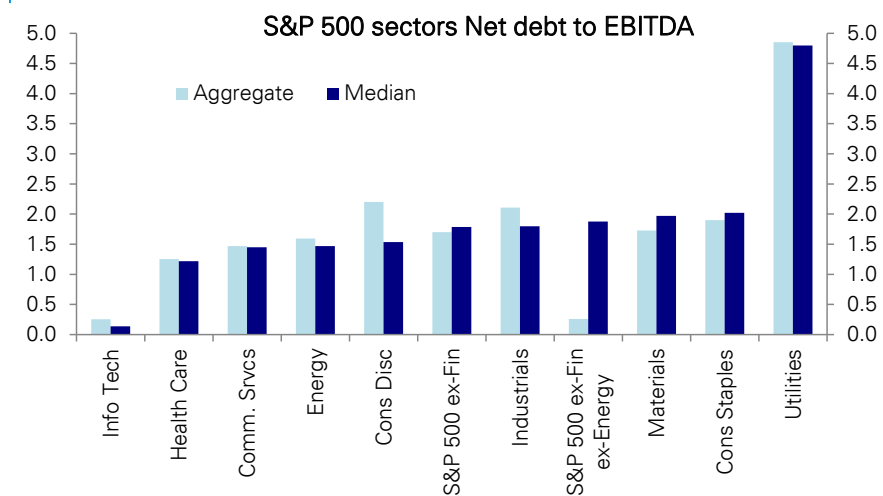


Figure 59: Most cyclicals have plenty of capacity to raise payouts



Source: Compustat, Deutsche Bank

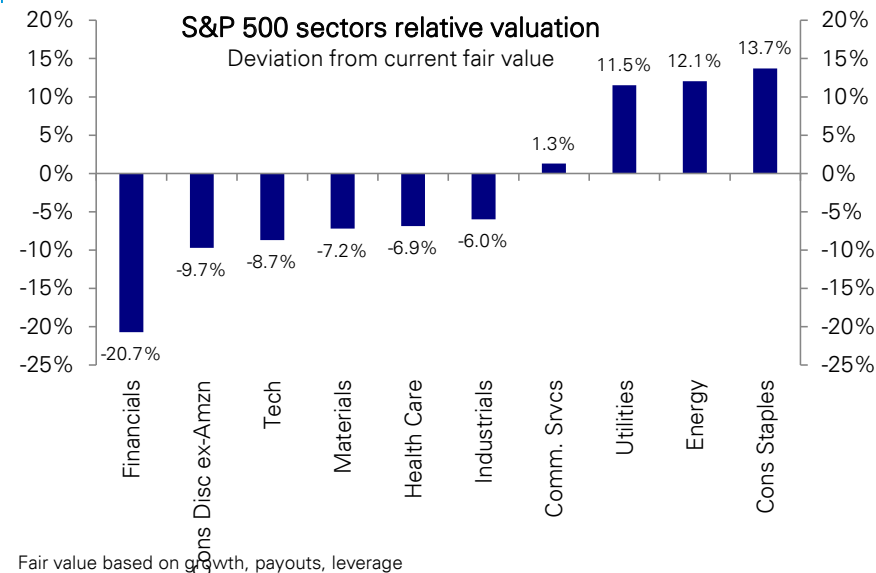
Figure 60: Tech, Healthcare and Communication Services have low leverage



Source: Compustat, Deutsche Bank



Figure 61: The defensive Consumer Staples and Utilities are the most expensive relative to growth, payouts and leverage, while most cyclicals are cheap



Source: Factset, Compustat, Deutsche Bank

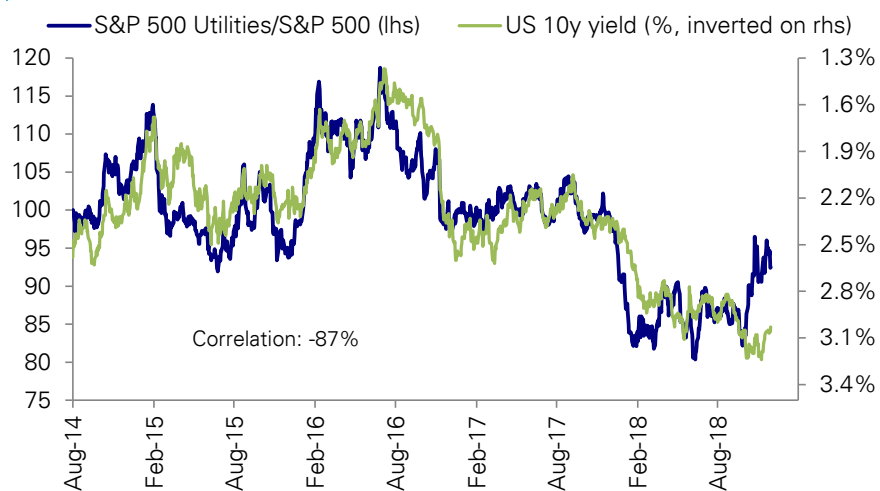
Figure 62: Sector allocations

Sector	Previous	Now	Comments
Cons Staples	●	●	Most expensive sector with near the lowest growth
Utilities	●	●	Expensive valuation; trading as if 10y were at 2.5%
Real Estate	●	●	Bond proxy trading as if 10y were at 2.5%
Energy	●	●	Estimates and valuation again too high at current oil prices
Materials	●	●	Valuation is now cheap but need next dollar down cycle to start
Health Care	●	●	Valuation is cheap; steady growth justifies higher defensiveness premium
Info Tech	●	●	Valuation is now cheap; positioning getting cleaner; strong balance sheets
Cons Disc	●	●	Valuation is cheap; consumer spending remains bright spot
Financials	●	●	Pricing in 10y near 2%; loan growth should pick up as deleveraging abates
Industrials	●	●	Pricing in economic stagnation; capex growth should remain strong
Comm Serv	●	●	Strong growth and balance sheet but reflected in premium valuation

Source: DB US Equity Strategy

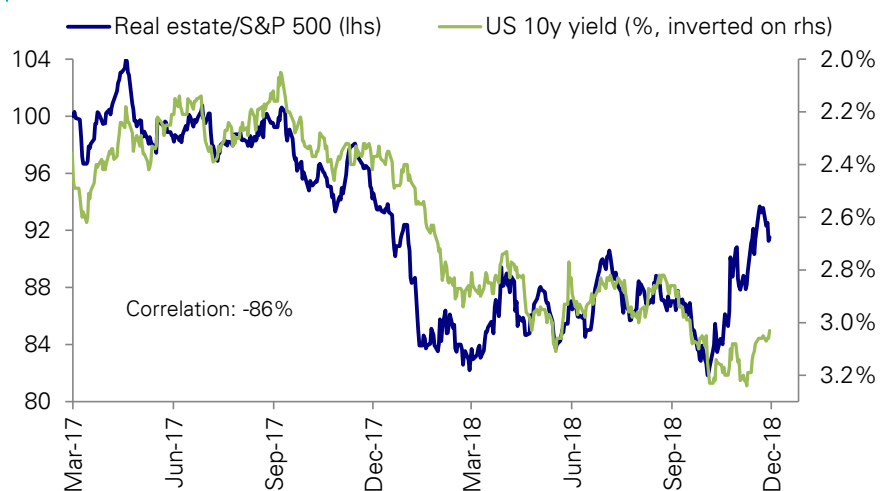


Figure 63: Utilities are pricing in a 10 yield closer to 2.5%...



Source: FRB, Haver, Deutsche Bank

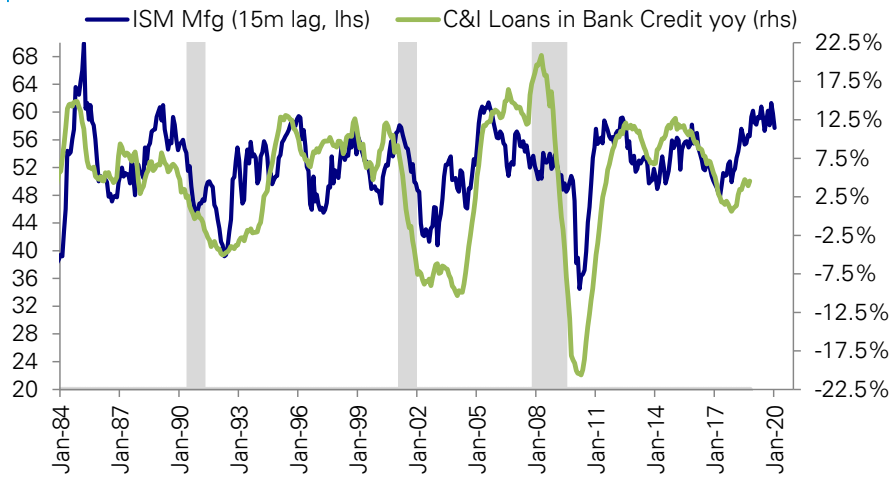
Figure 64: ...as are REITs



Source: FRB, Haver, Deutsche Bank

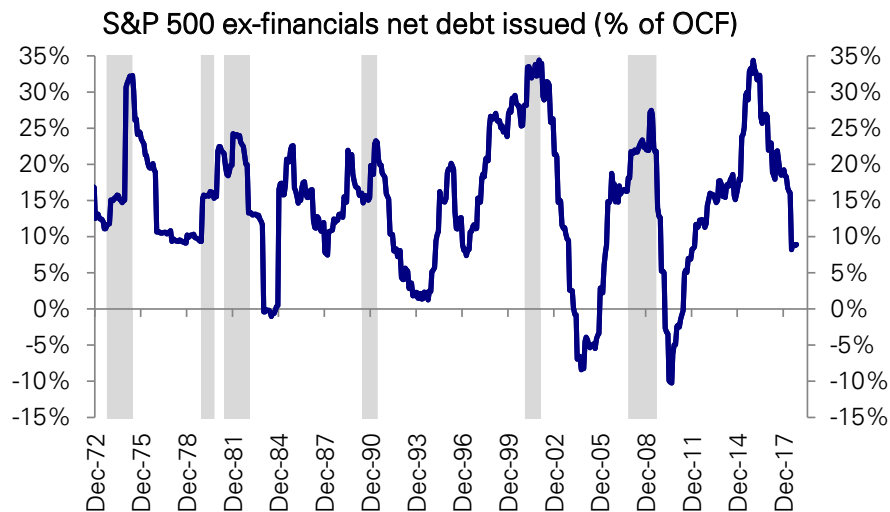


Figure 65: Loan growth has been much weaker than implied by broader macro growth



Source: ISM, FRB, Haver, Deutsche Bank

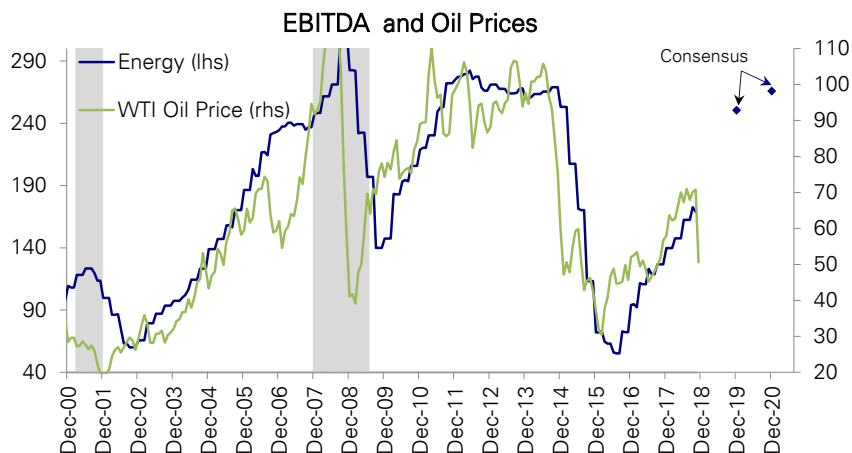
Figure 66: Part of the reason is large deleveraging by corporates flush with cash from tax reform



Source: Compustat, Haver, Deutsche Bank

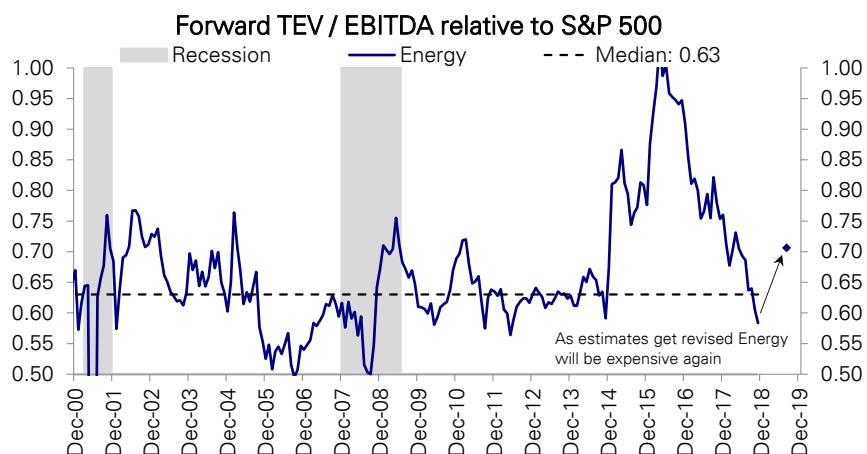


Figure 67: Energy estimates will have to revised down sharply if oil prices stay at current levels



Source: Haver, Compustat, FMA, Factset, Deutsche Bank

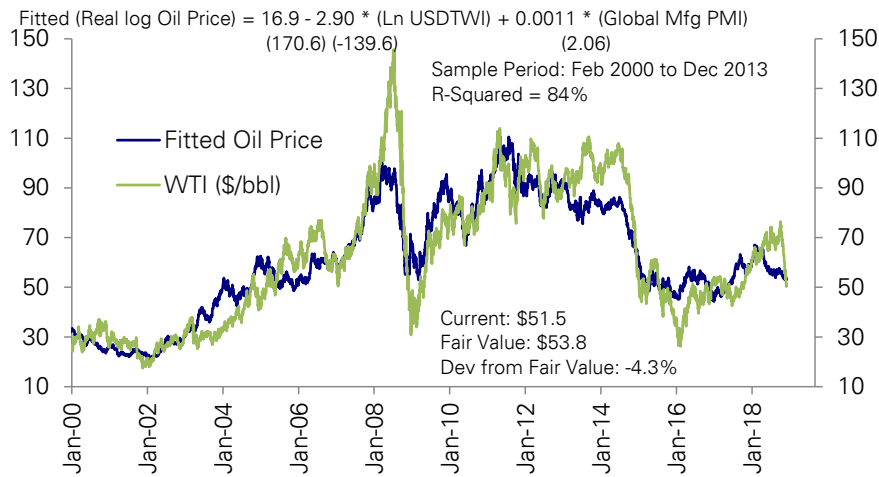
Figure 68: As estimates get revised down Energy will be expensive again



Source: Haver, Compustat, FMA, Factset, Deutsche Bank

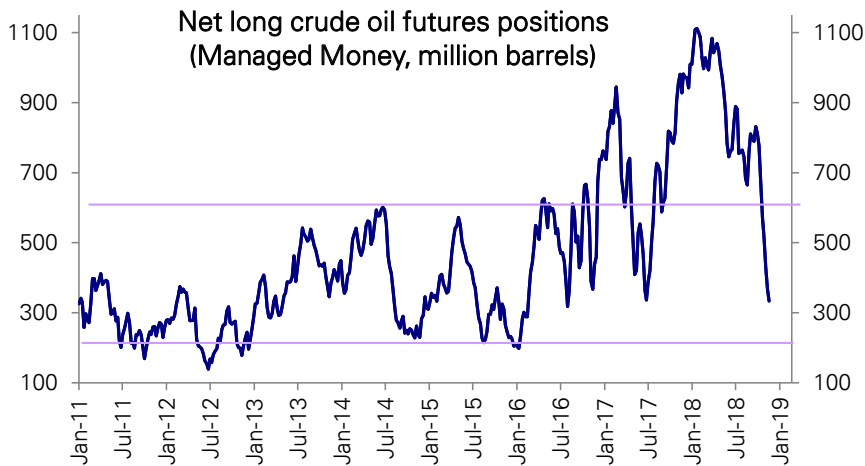


Figure 69: Oil prices are now slightly below medium term fair value...



Source: FRB, Markit, Haver, Deutsche Bank

Figure 70: ...while positioning has come down sharply

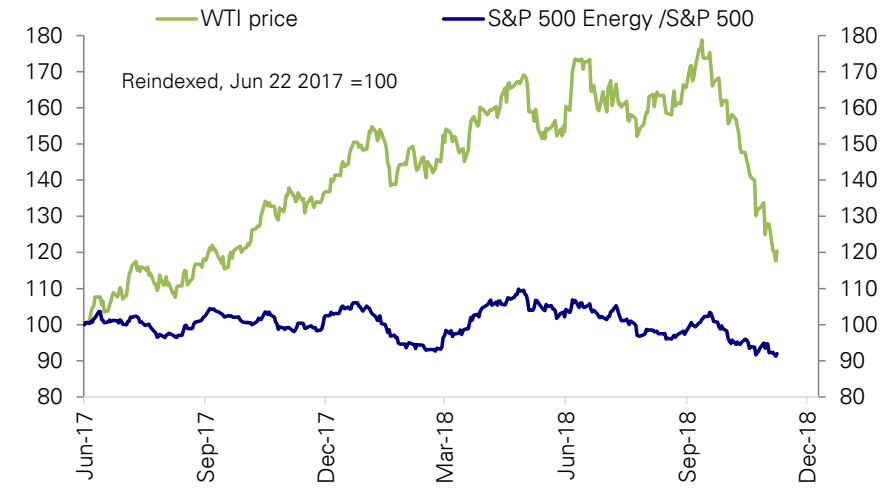


Note: Net positions of combined WTI and Brent crude oil positions

Source: CFTC, Bloomberg Finance LP, Haver, Deutsche Bank

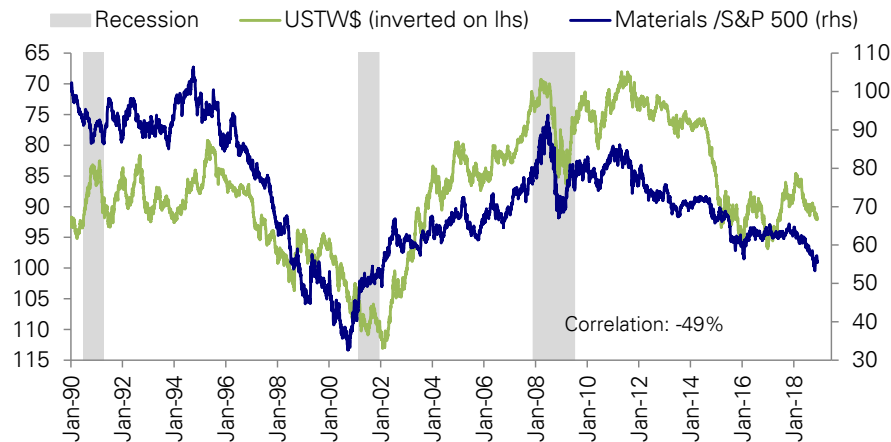


Figure 71: In the oil rally from the Jun 2017 lows to the recent September peak oil prices rose 80% from trough to peak but Energy equities were flat versus the S&P 500



Source: Haver, Deutsche Bank

Figure 72: Materials are now cheap but a period of sustained outperformance is likely to begin only with the next dollar down cycle



Source: FRB, Haver, Deutsche Bank

Long small over large caps

- **At the bottom of their historical range.** Small caps/SPX have been in a clear range for the last 9 years which spans about 10% bottom to top usually, but has stretched to 15% when everything fell into place. In the recent small cap sell-off, the ratio moved from the top of the 10% range to the bottom.



- **Trade, cyclical rotation, growth and the dollar.** US small caps were spared in the initial stages of the defensive rotation underway since May due to their perceived resilience from a higher dollar and from trade tensions given their larger domestic exposure. Since June, however, the cyclical aspect of small caps has dominated and at current levels they are already pricing in a significant decline in growth. They are also pricing in a steep decline in the dollar which otherwise would be a headwind for small caps. While a resolution on the trade conflict helps the foreign exposed large caps more than small caps, we see the resulting broad easing of growth concerns as likely to dominate relative performance.
- **Positioning in small caps is favorable.** Net positioning in Russell 2000 futures has turned short but is still long in the S&P 500.

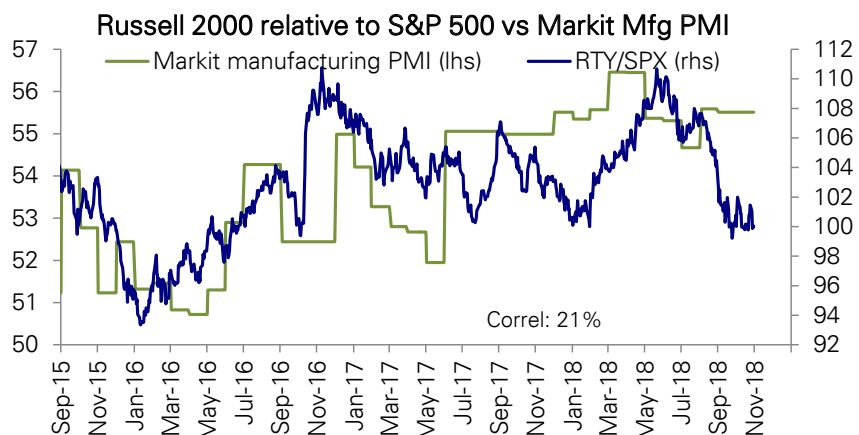
Figure 73: Small caps relative to large caps are at the bottom of their historical range



Source: Haver, Deutsche Bank

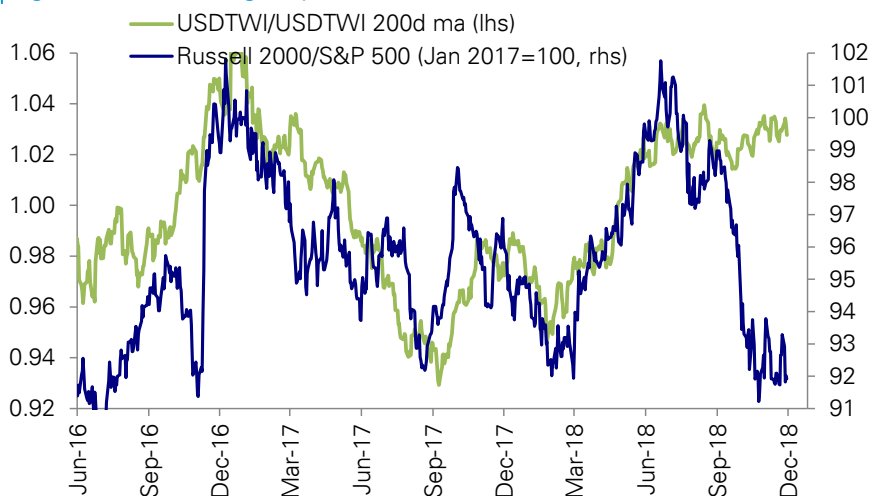


Figure 74: At current levels, they are pricing in a large growth slowdown..



Source: Markit, Haver, Deutsche Bank

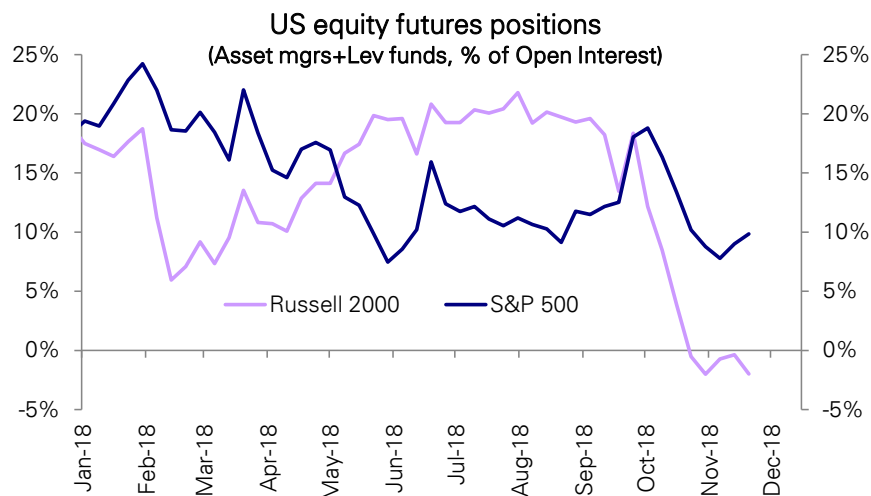
Figure 75: ...and a big drop in the dollar



Source: FRB, Haver, Deutsche Bank



Figure 76: Positioning in Russell 2000 futures is now slightly short but still long in the S&P 500



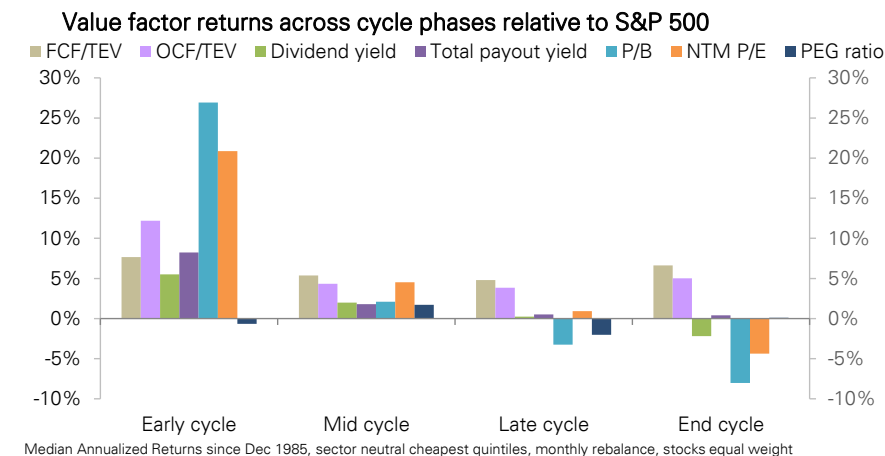
Source: CFTC, Haver, Deutsche Bank

Long our cash flow-based value basket (DBUSVALU)

We believe that the business cycle is late but has further to go. We recommend being long our cash flow based value basket (DBUSVALU), which outperforms through the late cycle phase, unlike traditional value indexes based on popular metrics like P/B or P/E. The basket is up 24% since September of last year, outperforming the S&P 500 since then and also year to date. The basket is sector neutral and so is well diversified. Since these stocks have good cash flow relative to enterprise value they are able to undertake measures to raise valuations. The basket is cyclical but is underpricing current growth. It is also sensitive to rates (higher rates are better) despite having no Financials in it.

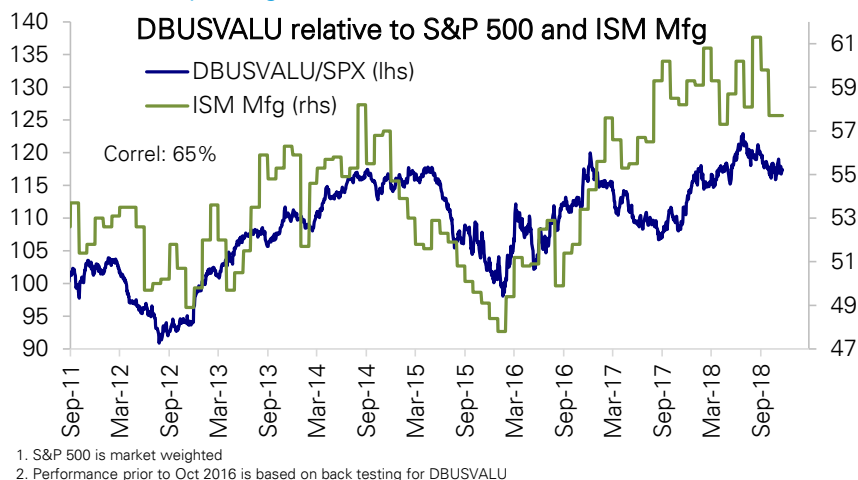


Figure 77: Cash flow based value outperforms even in the late cycle unlike other value metrics



Source: Compustat, Deutsche Bank

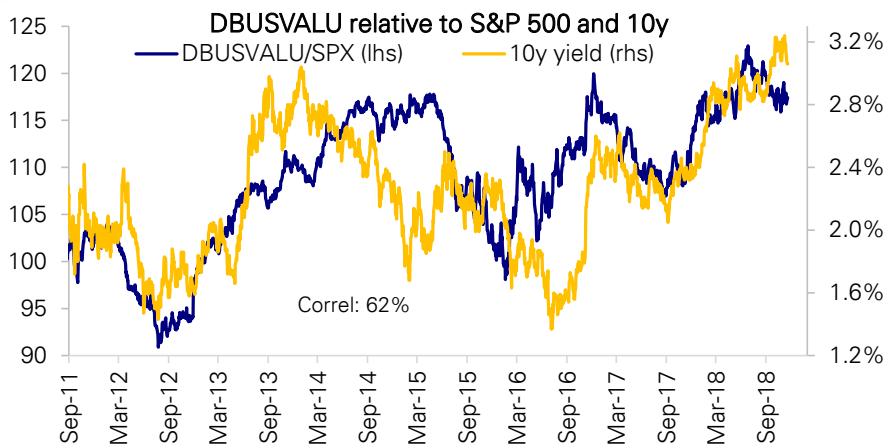
Figure 78: The relative performance of DBUSVALU has been positively correlated with cyclical growth indicators (ISM)...



Source: Compustat, Haver, Deutsche Bank



Figure 79: ...and with the 10y yield even though it does not have any Financials in it



1. S&P 500 is market weighted
2. Performance prior to Oct 2016 is based on back testing for DBUSVALU

Source: Compustat, Haver, Deutsche Bank

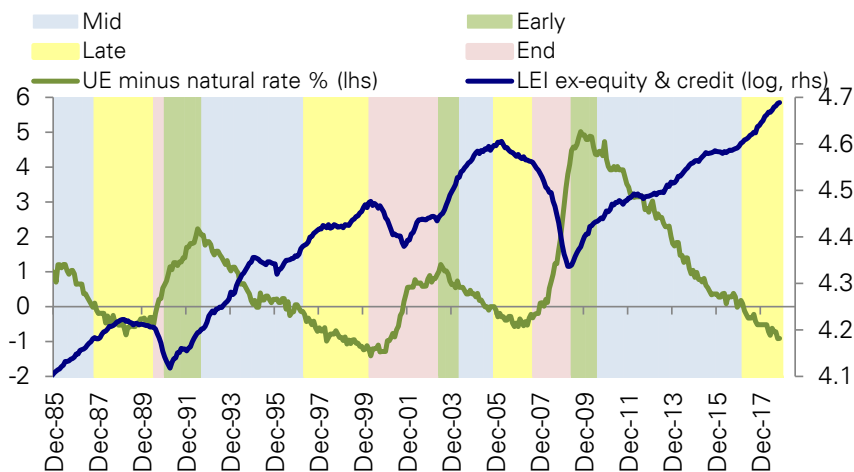
Introducing our phase of cycle long/short baskets

- **We define four phases of the business cycle: early; mid; late; and end-cycle.** We define early cycle as the period of equity market rebound from the recession bottom, continuing until the lagging indicators of economic activity turn up. The mid cycle when economic recovery is robust but there is plenty of slack in the labor market. The late cycle when growth is still robust but the labor market has tightened and unemployment fallen below the natural rate. The end-cycle phase as marked by when the index of leading indicators (ex-market variables) starts to fall sharply, continuing until the equity market bottoms.
- **Stock performance during each phase varies widely.** To identify stocks that outperform/underperform in each of these phases we analyzed a large number of factors (64) for their performance across each of the phases during the last 3 business cycles. The factors span a variety of characteristics capturing growth, valuation, leverage, liquidity, capital spending, profitability, operating leverage, cash flow generation, operational efficiency, payout ratios, momentum, volatility and market betas.
- **Late cycle is not the same as end cycle.** In the late cycle phase, with growth continuing but cost pressures and risks rising, companies that outperform are: cheap on cash flow, have high cash flow from earnings conversion ratios, high asset turnover, low growth in capex, low debt growth and maintain large cash balances. Companies at the other end of the spectrum on these factors typically underperform but additionally notable are companies with low volatility, low market beta and also the losers from rising rates. In the end cycle phase on the other hand, with growth clearly weakening, companies which generate cash flow at cheap valuations continue to outperform but the emphasis is on safety and quality: low vol and high ROE outperform while those with a high market beta, high leverage and low dividend payout ratios underperform



- **A long/short basket pair for each phase.** For each phase of the cycle we select factors that have shown a) strong average returns in the target phases; b) consistent performance in the target phases in each of the past 3 cycles and c) which are uncorrelated to each other (<50%). We then score each stock on an equal weighted combination of the selected factors and take the top 50 names in each on a sector neutral basis to create separate long/short baskets for each phase:
 - Late Cycle Long (DBUSLATL) and Short (DBUSLATS);
 - End Cycle Long (DBUSENDL) and Short (DBUSENDS)
 - Early Cycle Long (DBUSEARL) and Short (DBUSEARS)
 - Mid Cycle Long (DBUSMIDL) and Short (DBUSMIDS)
- **The baskets have been working as advertised.** With the market starting to price in the end of the cycle, the end cycle long/short basket pair has massively outperformed since late September and was up 10% when the overall market was at its lows. The late cycle basket long/short pair, has held up very well and has been flat. In our base case that the cycle continues and the market re-prices accordingly, we see the end-cycle basket underperforming and the late cycle basket beginning to outperform again.

Figure 80: We define late cycle by when unemployment falls below the natural rate; but before leading economic indicators turn down to a recession which we term the end-of-cycle



Source: Conference Board, BLS, CBO, Haver, Deutsche Bank



Figure 81: The phase of cycle long/short baskets do especially well in their target phases

Strategy	Phase				
	Early Cycle	Mid Cycle	Late Cycle	End Cycle	
	Early Cycle basket	50.3%	-1.7%	-6.2%	-13.7%
	Mid Cycle basket	14.6%	13.6%	11.0%	12.5%
	Late Cycle basket	-27.5%	9.1%	15.4%	5.0%
	End Cycle basket	-26.1%	8.0%	5.0%	23.5%

Source: Compustat, Conference Board, BLS, CBO, Haver, Deutsche Bank

Figure 82: As the market began pricing in the end of the cycle recently, the End cycle long/short basket has done extremely well



Source: Compustat, Conference Board, BLS, CBO, Haver, Deutsche Bank



Figure 83: The Late cycle long/short basket pair has held up pretty well but we expect it to outperform as growth end of cycle concerns abate



Source: Compustat, Conference Board, BLS, CBO, Haver, Deutsche Bank



Appendix 1

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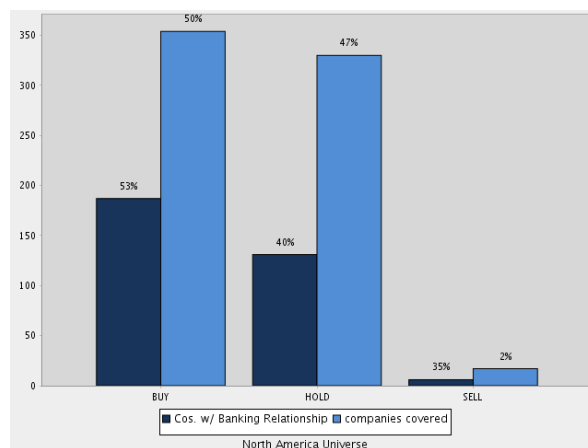
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Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock.

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

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