UBS

Global risk radar

Late cycle musings

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Chief Investment Office GWM
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This publication series helps investors identify and assess global financial market risks and their investment implications.

At a glance

- CIO believes the US economy is now at a late stage of the business cycle, consistent with positive equity returns on average, but also higher uncertainty and volatility. The business cycle is less advanced in the rest of the world, but the US will likely set the scene for markets globally.
- Among possible triggers to end the global business cycle, we identify risks to US inflation and Fed policy, risks around ongoing trade tariff negotiations, a maturing US credit cycle, and downside risks to China's economic growth. In addition to these downside risks, we see a number of upside scenarios in which markets could rally.
- We have removed Italian politics and crude oil prices from our coverage for the time being. Risk scenarios for Fed policy and the US business cycle have been revised.
- CIO maintains a slight preference for risky assets over a tactical investment horizon of six to 12 months, while hedging our risk exposure with counter-cyclical positions.

Source: iStock

Volatility and risk aversion returned to markets in 2018 as the US economy started transitioning to a late stage of the business cycle. To help manage risk in this new market environment, CIO investigated and recommended a number of portfolio hedges throughout 2018. Positions such as our overweight to long-duration Treasuries helped to offset downside risk during volatile markets.

Transitions to a late stage of the US business cycle are not usually as violent for global markets as the experience of 2018 would suggest, but the situation last year was exacerbated by a number of idiosyncratic risks. Uncertainty around US–China trade negotiations led to fears about China's economic and financial stability; the threat of tightening regulation of big tech sparked speculation about longer-term headwinds for the global IT sector; and positive effects from the 2017 US corporate tax cut gradually faded from US growth numbers.

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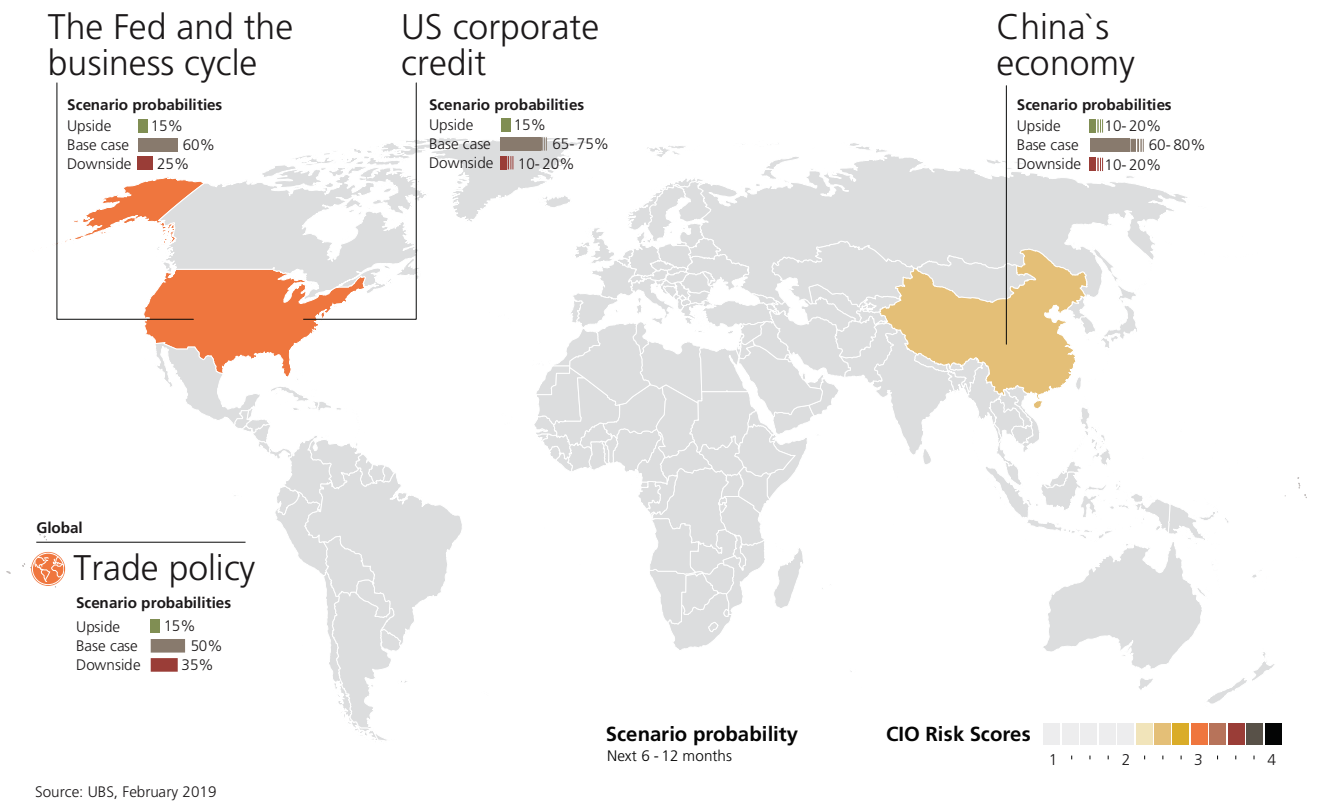
Fig. 1: Global risk map



Source: UBS, February 2019

Note: The CIO risk score is a composite of four risk "dimensions": probability of the downside scenario (the likelihood of occurrence within the next six to 12 months), urgency (how soon the event would likely take place), geographic scope (the extent of regional/global financial and economic contagion), and expected market impact (by how much the returns on the affected asset classes would deviate from the baseline if the downside scenario were to materialize). Each dimension score can take a value between 1 and 4, with 4 being the highest risk level; the overall CIO risk score is the average of the scores for the four risk dimensions.

Source: UBS, as of February 2019

With economic leading indicators softening and the Federal Reserve's policy interest rate approaching its cyclical peak, the US is more advanced in its business cycle than any other major economy. However, since the US remains a major driver of global growth and financial conditions at large, its late-cycle environment will inevitably spill over into other regions as well.

What might this mean for global investors?

- Higher volatility: In a late-cycle regime, higher market volatility translates into a broader range of potential outcomes for markets. This means that it is both easier and costlier for investors to err in their forward-looking projections.
- A change in central bank expectations: In a late cycle, central banks would no longer be expected to add more stimulus at first signs of economic weakness. Instead, they would be expected to withdraw more stimulus at first signs of excessive economic strength, which creates a different market dynamic in the face of changing economic expectations.
- Investor risk aversion: As investors become more concerned with systemic risks, they will demand higher compensation (or a lower price) for holding risky assets going into uncertain environments. This effect can be further amplified as we now enter a new era of global "quantitative tightening", a reversal of extraordinary monetary stimulus on a global scale.

Under these market conditions, forward-looking risk scenarios on our radar are poised to become more market-moving than they had been in previous years:

Fed policy: In a late cycle, the margin of error for central bank policy decreases dramatically. CIO still envisions a risk that rapidly rising US inflation could force the Fed to resume its rate hikes in coming months despite weakening economic growth, and against market expectations. Alternatively, if the US economy proves weaker than expected, there is a risk that even the current US policy rate of 2.5% turns out to be too high to sustain. Either of these risks could lead to a market downturn over our tactical investment horizon of six to 12 months. However, we consider both of these scenarios as unlikely for the time being.

Trade tariffs: Although recent trade negotiations between the US and China have seen some limited progress, it is still far from certain that the trade dispute will be resolved and that US tariffs on Chinese products will not be increased in March. The same can be said about US negotiations with the EU. A worst-case outcome in any one of the White House's trade policy pursuits could drag down global economic growth and markets.

US credit: CIO expects US corporate credit defaults to rise gradually in the base case, but not above long-term average levels (around 3.5% annually for US high yield bonds) throughout 2019. However, a shock to the US economic system, such as an inflation-driven Fed hiking cycle, could shake the US credit market greatly. For now, we regard this as a low probability risk scenario, but keep a close eye on developments in that space.

China's economy: China is currently in both a cyclical and a structural economic slowdown. So far, economic data out of China suggests that this slowdown is being successfully managed through state policy intervention. However, if the full scale of US tariffs against China were implemented, the likelihood of a much sharper downturn in Chinese growth would increase dramatically. Given the prominence that China has gained in Asia and globally over the past two decades, a hard landing in China could have a big impact on Asian and global markets.

US politics: Political risks from the US are not limited to the renegotiation of trade agreements. The US has just come out of a 35-day-long partial government shutdown created by political gridlock. CIO estimates that this shutdown has lowered US GDP growth by about 0.1 percentage points (ppt) in 4Q18 and around 0.2ppt in 1Q19. Divisive issues around Donald Trump's foreign policy and spending plans, which still include building a wall on the border with Mexico, are unlikely to be resolved soon. This means that the risk of another US government shutdown with further growth repercussions is still on the table, along with the risk that debt ceiling negotiations are left to the last-minute, causing unease in markets.

All of these risks deserve careful consideration, but investors looking to make an asset allocation decision today have to consider these risks through the lens of the current market environment. Following the December correction, we do not believe that markets are overly complacent about any particular downside scenario at the moment.

Table 1: Key investment risks

Selected Scenarios		Scenario Description	Expected market performance for select asset classes
Base case	**Positive outlook with increased volatility**	Global economic growth slows but the expansion remains in tact. Corporate earnings groth slows. However, ongoing trade tensions and uncertainty about Eurozone growth keep volatility high.	**US equities** +3-5% based on our 16x forward eps estimates **Chinese equities** +5-10% due to mid-to-high single digit earnings growth, cheap valuation and coordinated policy support **EURUSD** between 1.15 and 1.20 as monetary policy normalizes
Key downside scenarios	**Trade: Further US sanctions**	Further sanctions are implemented, notably an increase of tariffs on USD 200bn of Chinese goods from 10% to 25%, tariffs on remaining Chinese imports, and tariffs on car imports.	**US equities** down -10% composed of a 5% hit to our EPS estimates coupled with P/Es contracting 5% **Chinese equities** down 20-25% as sentiment tanks further with worse-than-expected economic consequences **USD** appreciates to around EURUSD 1.10 as US tariffs support the USD
	US credit crunch triggering a bear market	US corporate leverage has increased to record high levels by certain standards. A combination of risk factors could lead to rising default risk and a sharp rise in spreads.	**US IG** -2-3% as spreads widen to 280bps, 5y US Treasury drops back to 2016 low and additional loss from 5-10% rating dongrades into HY **US HY** -7-9% with spreads widening to 800bps. Default rates increase to 5% within 6 months **US equities** -10-15% as earnings growth disappoints by 5% and valuation compresses by 5-10%
Key upside scenarios	**Trade: Negotiations avert additional sanctions**	With China ready to make clear concessions to the US, both countries strike a new deal that reduces existing trade barriers.	**US equities** +10% as increased confidence in the cycle allows P/Es to expand to 17.5-18x and 2019 EPS estimates hold in the mid-USD 170s **Chinese equities** +15-20% due to a recovery on valuation as growth beats consensus expectations **USD** depreciates to EURUSD 1.20-1.25
	China: GDP growth accelerates	Chinese GDP growth remains in a 6.6-6.8% range as the current account balance goes back above USD 100bn.	**Chinese equities** +15-20% due to a recovery on valuation as growth beats consensus expectations **EMBIGD** bonds return 3-4% as spreads tighten to around 310bps due to improving EM growth prospects **CNY** up to USDCNY 6.50 as strong Chinese growth supports the domestic equity market, preventing outflows and supporting inflows of capital

Expected total returns over a 6-month horizon
Note: Upside and downside scenarios are possible events outside of CIO's base case expectations.
Please refer to the last published Global Risk Radar edition for further details on the risk scenarios and investment implications
For further information please contact CIO strategist Dirk Effenberger, drik.effenberger@ubs.com

Expected trend in asset class
+50% +25% 0% -25% -50%

Source: UBS, as of 11 February 2019

Furthermore, each downside risk we mention above has a complementary upside risk with a positive market outcome: The US economy may enter a cyclical growth upswing; trade negotiations could be resolved; or China's economic growth could stabilize. Any of these developments could further support risk assets. In addition, we have removed Italian politics from our coverage, as downside risks have decreased after the Italian government reached a compromise with the European Commission over its 2019 budget in December.

In general, history suggests that late-cycle regimes are consistent with strong performance in stock markets as long as economic growth remains sound. CIO believes that downside scenarios for global growth are still unlikely, and that they are adequately priced in by markets. We continue to hold a slight overweight in global and emerging market stocks, as well as a preference for EM hard-currency bonds versus US government bonds. But we also balance this risk with an overweight to long-duration Treasuries versus cash. Investors who can implement options should also consider protective puts on the S&P 500, but limit such hedges to only a fraction of the portfolio's equity exposure.

For more information about our latest investment positioning and recommendations, please see *UBS House View Letter: Autopilot shutdown,* 24 January 2019.

Table 3: Risk calendar

Key dates to watch

Feb
- 15 February, End of the three-week US spending deal
- 17 February, Deadline US investigation on auto imports

Mar
- 1 March, Deadline for US-China trade deal
- 1 March, End of US debt-ceiling suspension
- 5 March, China's National People's Congress
- 7 March, ECB meeting
- 15 March, BoJ meeting
- 20 March, FOMC meeting
- 21 March, BoE meeting
- 29 March 23:00 UTC, Brexit to take effect

Apr
- 10 April, ECB meeting
- 12-14 April, World Bank and IMF meeting
- 25 April, BoJ meeting

May
- 1 May, FOMC meeting
- 2 May, BoE meeting
- 2 May, England and Northern Ireland local elections
- 6 May, US Senior Loan Officer Opinion Survey
- 18 May, US auto import tariff action to be determined
- 23-26 May, European parliamentary elections

Jun
- 6 June, ECB meeting
- 19 June, FOMC meeting
- 20 June, BoJ meeting
- 20 June, BoE meeting
- 20-23 June, ASEAN summit in Thailand
- 28-29 June, G20 summit in Osaka (Japan)

Jul
- 25 July, ECB meeting
- 31 July, FOMC meeting
- 30 July, BoJ meeting

Aug
- 1 August, BoE meeting
- August, US technical default if no agreement is reached and the 'extraordinary' funding measures are exhausted

Ongoing Monitoring

Central bank policy
- Statements by key central bank members
- Inflation-related data (e.g. CPI, wage growth, unemployment)

Economics
- Key economic data
- National economic policy

Geopolitics
- Supranational organizations (e.g. G7, G20, IMF)
- US-China relations (e.g. One China policy, South China Sea)
- Middle East
- Elections
- Sanctions (e.g. Russia, Iran)

EU politics
- Brexit negotiations
- Italian political events
- Turkey

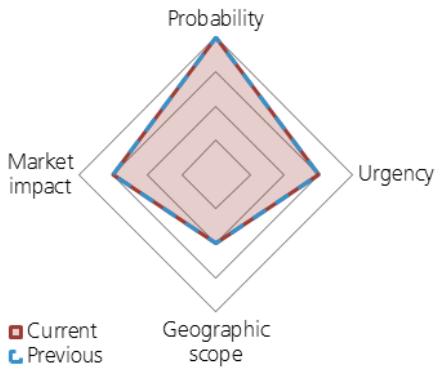
Rising protectionism
- Negotiation on new and existing free trade agreements (e.g. USMCA)
- Discussion and action on tariffs (e.g. tariff on Chinese goods)
- Brexit negotiation

Trade policy

Will import tariffs threaten to undermine global growth?

Trend Stable
Probability High

Risk dimensions
CIO expert assessment



Note: Distance from center (1-4) represents the dimension score. The CIO risk score is an average of the four risk dimensions.
Source: UBS, as of February 2019

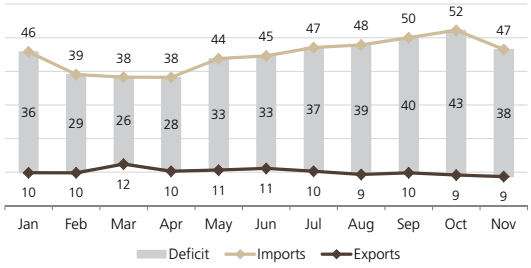
Recent developments

US-China: The two rounds of trade talks between the US and China in January signaled a positive tone without providing concrete details for a resolution of the trade dispute. If the two sides fail to agree to a deal before 1 March, tariffs on about USD 200bn worth of Chinese exports to the US may be increased from 10% to 25%. Official statements after the negotiations highlighted concrete and constructive discussions. However, core issues regarding the US demand for structural reforms by Beijing – such as the protection of intellectual property (IP), the ending of forced transfer of technology or the subsidies to state-owned enterprises (SOEs) – have yet to be resolved. Besides the pledge of China to buy more US goods, the talks ended with the agreement to continue negotiations in February. Since December, President Trump has softened his rhetoric amid the increased pressure of markets, US farmers and the risk of a slowdown in the US economy ahead of the 2020 campaign. As at the time of writing, there are no plans for both presidents to meet soon to help finalize a trade deal.

Auto tariffs: The threat of higher US tariffs on car imports remain an unresolved problem. The release of the report on the US Section 232 investigation is due by 17 February, with a decision of the US president expected to follow within 90 days. In recent months, the US and EU trade delegations held multiple rounds of talks. Divergences over what will be negotiated could sink the effort, as both sides have different interpretations of what was agreed at the Trump-Juncker meeting last July. The EU is ready to work towards a zero-tariff trade deal on industrial goods (including cars), but will immediately hit back if Trump follows through with the threat of punitive tariffs on EU cars. A sticking point remains the inclusion of agricultural products in any deal between the two sides.

USMCA: The outlook for a quick ratification of the new trade agreement between the US, Canada and Mexico, the so-called USMCA, has worsened. The stand-off between President Trump and Democrats in Congress over funding for a border wall with Mexico culminated in a partial shutdown of the federal government between December and January. The process of passing the USMCA through Congress will therefore be more turbulent, as it will require majorities in both the House and the Senate.

In November 2018, US trade deficit with China dropped for the first time in 7 months
US trade with China in 2018 (USD bn, monthly data)



Source: US Census Bureau, UBS, as of February 2019

Our view

Base case (50% probability): Partial deal that extends negotiations

Despite Trump's statements that the negotiations with China were making good progress, there is little time left before the 1 March deadline to find an agreement on core structural issues. We therefore think that the US government will agree to postpone the tariff increase on USD 200bn of Chinese imports for another limited period. The US conditions would likely involve the increase of Chinese imports from the US (agricultural, energy, manufactured goods and services), the opening of the Chinese market to US companies, and the commitment of Beijing to reform the economic system. Washington will likely ask for rapid progress on critical issues as IP protection, forced technology transfer, cyber intrusions and government subsidies. Furthermore, US

officials have said that any agreement would depend on a strict verification and enforcement mechanism. Any deal by 1 March will therefore incur the risk of being rolled back with the reintroduction of tariffs if China does not comply.

On the auto investigation, we believe that the Section 232 findings will confirm the threat to US national security of foreign car imports, recommending the imposition of tariffs or quotas. We believe that the US government will either delay any immediate decision on tariffs or announce duties but will grant exemptions to selected countries and regions such as the EU and Japan to spur negotiations.

Upside scenario (15% probability): Breakthrough in the negotiations

An ambitious and unexpected commitment by China to reform its state-driven model and its allegedly unfair trade practices would positively surprise President Trump and the hawkish members of his staff. In such a case, we believe that the two sides would step away from a further tariff escalation and agree to roll back some of the existing barriers bilaterally. A quick and comprehensive resolution of the dispute that would remove all existing sanctions would then be possible.

Downside scenario (35% probability): New sanctions as trade talks break down

Our bear case assumes that the US government would grow impatient about the progress of the trade talks with major trading partners. Further sanctions targeting Chinese technology companies could derail the negotiations with Beijing. If significant divergences in trade objectives are not overcome, the US might react with one or more of the following:

1. Step up the tariff rate on USD 200bn of Chinese goods currently subject to 10% duties. If China then follows suit, the US might decide to impose tariffs on all remaining Chinese imports.
2. Impose duties on US imports of cars and car components following the recommendations of the Section 232 investigation.

In this scenario, we include a 5% probability of a global escalation in the trade conflict with broad US tariffs leading to a fall in global trade volumes.

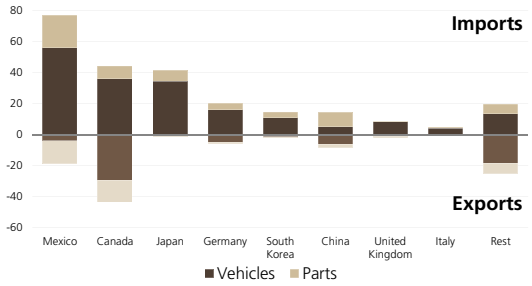
Investment conclusions

The restart of negotiations between the US and China in January and the positive messages coming from the White House supported the recent rally in global equities. Trump's trade agenda will therefore remain a major driver of market returns in 2019.

Upside scenario: If US and China agree to roll back tariffs, US and Chinese equities could rise 10–15% given renewed confidence in the cycle and improving sentiment. Better-than-expected fundamentals and a lack of disruptions to supply chains would also help lift global markets.

Downside scenario: If the US government decides to increase tariffs on Chinese imports, CIO believes that the total direct negative impact on US companies' 2019 earnings could rise to 5%, coupled with P/Es contracting 5%. Worse-than-expected economic consequences on the Chinese economy and negative investor sentiment would bring Chinese equities down by 20–25%. Furthermore, we would expect USDCNY to test 7.5 if all US imports from China face punitive tariffs.

US auto trade balance during January-November 2018
In USD bn



Source: SITC data, US Census Bureau, UBS, as of February 2019

Asset class impact
Expected relative performance of select asset classes in different outcome scenarios

Scenarios		Expected market performance for select asset classes	
Base case	Continued Sino-US tensions	US equities	+3-5%
		Chinese equities	+5-10%
		EURUSD	1.15-1.20
Downside scenario	Further US trade sanctions	US equities	-10%
		Chinese equities	-20-25%
		EURUSD	Around 1.10
Upside scenario	Negotiations avert additional sanctions	US equities	+10%
		Chinese equities	+10-15%
		EURUSD	1.20-1.25

Expected total returns over a 6-month horizon
Note: Upside and downside scenarios are possible events outside of CIO's base case expectations.

Source: UBS, as of 11 February 2019

Key dates to watch

- **17 Feb 2019:** Deadline for completing the US Section 232 investigation on auto imports
- **1 Mar 2019:** Tariff rate on USD 200bn worth of Chinese products increases from 10% to 25%
- **18 May 2019:** President Trump to determine whether to act on the findings of the US Section 232 investigation on auto imports

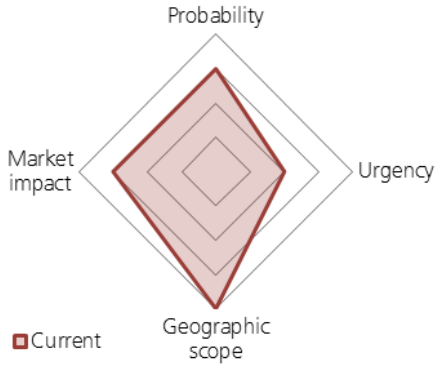
For further information please contact Luca Henzen , Brian Rose , Yifan Hu , Philip Wyatt , Fabian Thut .

The Fed and the business cycle

Will the Fed have to spark a US recession in the next 18 months?

Trend Stable
Probability Low

Risk dimensions
CIO expert assessment (weighted average of the downside scenarios)



Note: Distance from center (1–4) represents the dimension score. The CIO risk score is an average of the four risk dimensions.
Source: UBS, as of February 2019

Recent developments

CIO believes that the US economy has now entered a late stage of the business cycle. In a late cycle, the risk of an economic downturn (recession) gradually rises above long-term average levels, which we estimate at around 15% historically. Higher chances of a recession mean a smaller margin of error for the Federal Reserve in its monetary policy decisions, and a larger number of potential market outcomes over our tactical investment horizon of six to 12 months due to higher market volatility.

In December 2018, The Fed raised rates by 25bps – its fourth rate hike in 2018 and ninth in this cycle. But at its next meeting in January, the Fed signaled that it would likely remain on hold for an extended period. Among the listed reasons were softening economic data, muted inflation, and tighter financial conditions.

Markets welcomed the news of a Fed pause with a rally in most major asset classes. In the base case, CIO believes that global markets have further room to run. But some of the same reasons that convinced the Fed to pause lead us to consider a number of risk scenarios around our base case view.

Our view

Base case (60% probability): Status quo

With the federal funds rate at 2.5%, the Fed is now at the lower bound of what it considers a neutral level of interest rates. By the Fed's own estimates, current US monetary policy is neither strongly accommodative, nor restrictive for economic growth. In our base case, the Fed's assessment proves largely correct. With monetary policy on the sidelines, the US economy can continue to grow at a modest rate of about 2–2.5% a year, with core inflation around the Fed's target of 2%.

Downside scenario 1 (10% probability): Overheating US labor market

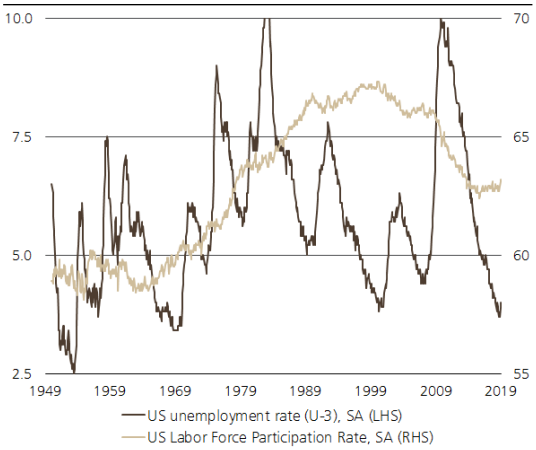
One possible risk to our base case is that the Fed may be unable to stay on hold for long. The US labor market is already very tight, with unemployment below neutral levels and wage growth gradually picking up. So far, better employment conditions have encouraged more people to participate in the labor force, but this resource may be depleted at any moment.

If the labor market were to reach an inflection point where it becomes much harder for businesses to find enough workers, it could ignite strong inflationary pressures as companies try to pass along rapidly increasing labor costs. In this scenario, the Fed would be forced to resume its rate hiking cycle because of its mandate to keep inflation at bay. This would have an adverse effect on growth and on markets.

Downside scenario 2 (15% probability): Stumbling US economy

Another risk is that the Fed has already raised rates too much. Previous rate hikes will gradually flow through the economy, the positive effects from the 2017 corporate tax cut will continue to fade, while political impediments to growth such as trade tariffs and lengthy government shutdowns are still a risk to consider. The underlying trend rate of US

US unemployment and labor force participation rates
in %



Source: Bloomberg, US Bureau of Labor Statistics, UBS, as of 6 February 2019

economic growth may prove weaker than current estimates suggest, making even the current fed funds rate too high to sustain.

In this scenario, 2019 could prove a very trying year for the US and global economy. A US recession would come earlier than anticipated – possibly as soon as in late 2019 – with knock-on effects felt in all major economic regions globally. This would spell an end to one of the longest global business cycles in history, and the next policy move by the Fed would likely be a rate cut.

Upside scenario (15% probability): Cyclical US growth upswing

There is a scenario in which the Fed resumes its rate hiking cycle, but markets are little concerned. Recent softness in global and US economic data, and the corresponding downturn in markets in late 2018, have certainly been aided by escalating political tensions such as the US-China trade dispute. There is a chance that these tensions abate in the near future, and that the US labor market proves able to sustain itself for longer without a rapid rise in wages. In this scenario, US investment spending could pick up as businesses respond to strong demand. US GDP growth could re-accelerate with inflation remaining at bay. The Fed could resume its rate hiking cycle at a moderate pace without disrupting the global financial market.

Investment conclusions

As we mentioned in the introductory remarks, market performance could be quite different under the four scenarios we outlined above.

Base case: Overall, CIO remains cautiously optimistic towards risk assets in 2019. A prolonged environment of moderate economic growth and inflation would be consistent with US earnings growth in the mid-single digits and a healthy – albeit not stellar – performance in US equities. Performance in credit markets may be somewhat weaker given rising leverage and, possibly, tightening financial conditions outside the US.

Downside scenario 1: If the Fed had to hike rates more than expected due to higher inflation, global markets would be primed for another bad year in 2019. Emerging market assets would be hurt by tighter financial conditions, while global equities would start to price in the risk of an impending US recession. The US Treasury curve would likely invert, and defensive assets would start outperforming cyclical assets.

Downside scenario 2: If the US economy were to stumble at the current fed funds rate of 2.5%, risk assets would arguably be the first to be affected our tactical horizon of six to 12 months. Global equities could enter a bear regime as soon as mid-2019, with high yield credit and emerging markets also experiencing major drawdowns. Safe assets such as Treasuries and high grade bonds would likely be the best-performing investments.

Upside scenario: A cyclical growth upswing in the US would arguably be the best-case outcome for risk assets. Equities could re-enter a strong bull market as credit spreads would come back down to compensate for rising interest rates. US Treasuries and high grade bonds would perform less well as improving growth expectations would push the US Treasury yield curve higher.

Asset Class impact

Expected relative performance of select asset classes in different outcome scenarios

Scenarios		Expected market performance for select asset classes	
Base case	Benign outlook for the US economy	US equities	+3-5%
		US high yield	+1-2%
		EURUSD	1.15-1.20
Downside scenario	Higher US inflation, faster Fed hikes, earlier US recession	US equities	-10-15%
		US high yield	-7-9%
		EURUSD	Below 1.10
Upside scenario	Stronger US growth, modest inflation, bull market	US equities	+10%
		US high yield	+4-5%

Expected total returns over a 6-month horizon
Note: Upside and downside scenarios are possible events outside of CIO's base case expectations.

Source: UBS, as of 11 February 2019

Key dates to watch

- **1 Mar 2019:** US ISM business surveys for February
- **8 Mar 2019:** US labor report for February
- **20 Mar 2019:** Next Fed interest rate decision

For further information please contact Daniil Bargman , Brian Rose , Jason Draho , David Lefkowitz .

US corporate credit

What risk does US corporate leverage pose to markets?

Recent developments

In the aftermath of the financial crisis, central banks were forced to cut interest rates to record-low levels while injecting trillions of dollars of liquidity into the global financial system in an effort to boost their economies. This led to widespread "yield-chasing" for investors looking for income-generating assets such as corporate bonds, sending bond prices soaring and yields plummeting. As a consequence, funding conditions for companies over the past decade have become highly favorable, encouraging US corporations to borrow heavily in the bond and loan markets.

As companies made use of this easy funding, US non-financial corporate gross debt to GDP rose to record highs, surpassing 45% last year. The growth in debt was particularly visible among issuers in the lower-rated investment grade segment – the US-dollar BBB universe grew by 180% since 2010 – as well as in senior loans, which grew by 120% since 2010. In the past few years corporations have increasingly used the proceeds of their borrowing to boost their stock prices via share buybacks, dividends, and mergers & acquisitions, with returns to shareholders in 2018 outpacing capital expenditures for the first time in 10 years, effectively inflating equity valuations.

Investors have started to worry about the end of this credit cycle, which could prompt an excessive amount of rating downgrades and rising defaults if the US economy starts to wobble, bringing credit losses and potentially spillover to other asset classes. A tightening in bank lending standards, which have recently moved from easing to a more neutral stance according to the Fed's senior loan officer survey, could be one leading signal for rising defaults and thus warrants monitoring.

Our view

Base case (65%-75% probability): stable US credit cycle

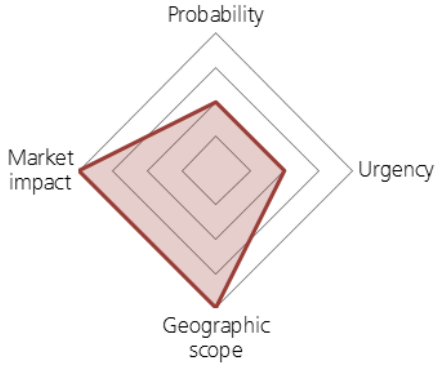
Based on our current outlook, which is for global economic growth close to its long-term trend, we see few, if any, signs of an end of the credit cycle. And we do not expect US high yield default rates to rise above the long-term average of 3.5% in 2019.

We note significant mitigating factors to the high absolute amount of corporate debt outstanding. It is important to put corporate leverage into perspective, and when looking at the main macro credit indicators for the US credit cycle, they are pointing to a relatively healthy state:

- Corporate assets, such as cash, have grown substantially in recent years. Taking assets into account, the net level of corporate debt to GDP is just 25% – pretty much in line with its average over recent decades (see side chart).
- The growth rate of real (i.e. inflation-adjusted) corporate debt since the financial crisis has been 4.0% per year. That's below the average since the late 1940s of 4.3% and considerably below the average of prior expansion phases, thus in itself not excessive.
- Corporate pre-tax profit growth remains steady. While corporate debt is at all-time highs relative to GDP, the ratio of US corporate debt to profits is slightly higher than 4x, which is the median of its 50-year range.

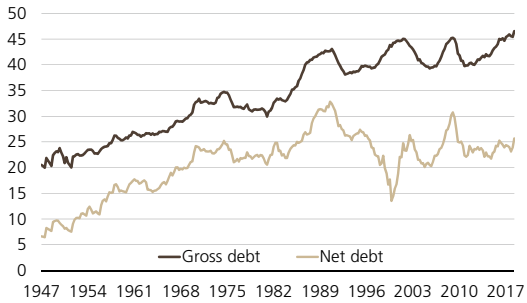
Trend	Stable
Probability	Low

Risk dimensions
CIO expert assessment



Note: Distance from center (1-4) represents the dimension score. The CIO risk score is an average of the four risk dimensions.
Source: UBS, as of February 2019

US non-financial net debt has been stable since the end of the crisis
US non-financial gross and net debt as % of GDP



Source: Morgan Stanley, BoAML, UBS as of February 2019

- Coverage ratios (earnings over interest expenses) remain healthy, as companies have locked in low interest rates for the immediate future, indicating the ability to service debt.
- A sharp rise in interest rates from current levels is unlikely, in our view. Even if marginal funding rates increased by 25bps per quarter by year end, we estimate that average interest costs for investment grade issuers would only rise from 4.1% to 4.2%.

Risk scenario (10-20% probability): US credit crunch triggering a bear market

In a scenario of stagflation, where the Fed is compelled to start hiking rates faster to fight inflation (rather than in response to strong economic growth), pressure on corporate profits and funding costs would rise simultaneously. Some companies would no longer be able to keep rolling their debt over, causing an increase in rating downgrades (especially from BBB into high yield) and defaults. A sharp rise in high yield spreads (to above 800bps) and investment grade spreads (to above 250bps) could ensue, in our view. The resulting credit sell-off and deterioration of the economy may cascade into an equity bear market and recession could follow. In another scenario, where the US economy is stable but the rest of the world (especially China) sees significantly weaker economic growth, we could also witness a drop in profits and pressure on key high yield sectors, such as energy and tech.

In any risk case, liquidity in credit markets would likely suffer, in particular in the BBB and high yield space, were a large amount of issuers to be downgraded. Investors would likely try to sell large quantities of bonds, and brokers would be unable to take those on to their balance sheets, leading to temporary phases of illiquidity and large price swings. The resulting credit sell-off would have the potential to spill over to other risky asset classes in the US and globally.

Upside scenario (15% probability): continued profit margin growth

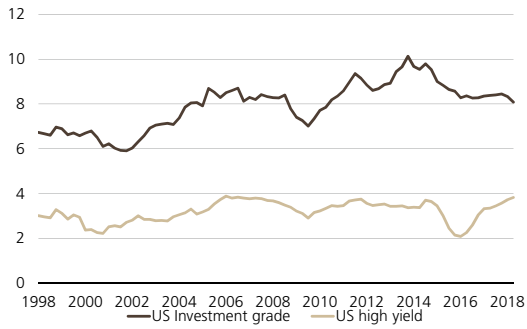
If US economic growth were to surprise to the upside with inflation remaining within the Fed's bounds, US companies' profit margins would continue to increase. As a consequence of strong earnings growth we could see leverage declining and rating upgrades continuing to outnumber downgrades, with default rates dropping below 2%.

Investment conclusions

Downside scenario: In the case of a credit crunch, global risk assets would suffer. In credit, US HY, and in particular US senior loans, would be the most exposed. Many BBB-rated USD investment grade bonds would likely suffer losses more akin to the US High Yield Index. Equities could fall 10-15% as earnings growth disappoints and valuation compresses. As equities represent a residual claim on a company's assets after the repayment of all of its debt, they are riskier than credit and so, unsurprisingly, their value would drop further relative to credit.
Upside scenario: In the event of an upside growth surprise in the US, risk assets would would appreciate broadly. US equities would appreciate slightly over our base case forecast of 3-5% growth.

For a summary of expected asset performance in the base case, downside and upside scenarios, please see the table on the right.

High coverage ratios indicate good capacity to service debt
US coverage ratios



Sources: Macrobond, UBS as of February 2019

Asset Class Impact
Expected relative performance of select asset classes in different outcome scenarios

Scenarios		Expected market performance for select asset classes	
Base case	Stable US credit cycle	US IG Index	+0-1%
		US HY Index	+0-2%
		US equities	+3-5%
Downside scenario	US credit crunch trigerring a bear market	US IG Index	-2-3%
		US HY Index	-7-9%
		US equities	-10-15%
Upside scenario	Continued profit margin growth	US IG Index	+1-2%
		US HY Index	+4-5%
		US equities	+5-8%

Expected total returns over a 6-month horizon
Note: Upside and downside scenarios are possible events outside of CIO's base case expectations.

Key dates to watch

- **20 Mar 2019:** FOMC Rate decision
- **6 May 2019:** US Senior Loan Officer Opinion Survey

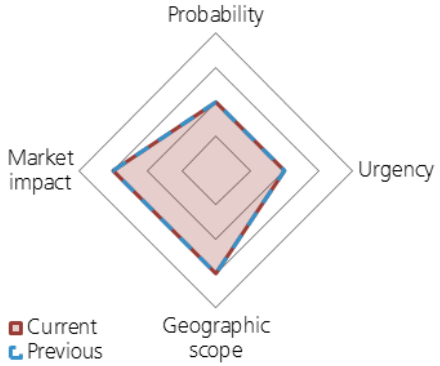
For further information please contact Philipp Schöttler , Clemence Rusek .

China's economy

Will China experience a sharp economic slowdown in 2019?

Trend Rising
Probability Low

Risk dimensions
CIO expert assessment (downside scenario)



Note: Distance from center (1-4) represents the dimension score. The CIO risk score is an average of the four risk dimensions.
Source: UBS, as of January 2019

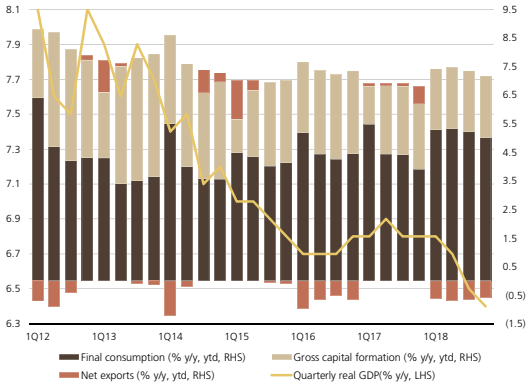
Recent developments

CIO maintains a positive view on the Chinese economy, but the ongoing risk of further US trade tariffs leads us to consider downside risks to Chinese growth in the short to medium term.

We have seen signs of weakness in the Chinese economy already. China's GDP growth moderated to 6.6% year-on-year in 2018 due to weaker investment and net exports, while 2018 investment growth decelerated to an unprecedented low of 5.9%. 2018 retail sales also slowed to a 15-year low of 9%, mainly dragged down by auto sales, while 2018 credit growth decelerated to a record low of 9.8% year-on-year due to the ongoing contraction in off-balance-sheet lending. As a policy counter-measure, the Chinese central bank (PBoC) cut the reserve requirement ratio (RRR) by 250 basis points (bps) in total in 2018, and by another 100 bps this January.

We expect another 100-200 bps of PBoC RRR cuts over the course of 2019. GDP growth should slow moderately to 6.1% as investment growth picks up, retail sales stabilize, and credit growth remains around 10%. China's debt-to-GDP ratio is likely to increase again after stabilizing in 2017 and 2018. This shift will provide near-term policy relief, but rising leverage also increases the longer-term debt sustainability risks as China continues to slow. More ambitious government projects such as accelerated market opening, more active promotion of regional free trade, and domestic structural reforms may be higher priority now, but it will still take a while before these projects have a meaningful economic effect.

China's GDP growth continues its orderly deceleration
China's quarterly GDP growth and component contributions



Source: CEIC, UBS, as of 4Q18

Our view

Base case (70-80% probability): On track for moderation

CIO remains positive on the financial stability and growth outlook for China. With 6.1% GDP growth expected in 2019, China's economic trajectory is still very strong compared to its peers. It has also long been the consensus view that some economic slowdown in China is a healthy and necessary side effect of reducing leverage and transitioning to a more sustainable growth model.

We expect Chinese real estate prices to continue falling gradually amid continuous housing policy tightening. We do not expect a financial crisis in China, though concerns around overall leverage levels in the economy could re-emerge as local government debt levels pick up temporarily in the first half of 2019. State efforts to reduce leverage will likely resume later in 2019, once the overall economy regains solid footing.

Downside scenario(10–20% probability): Sharp slowdown

Despite some progress in US-China negotiations, the US White House has maintained a standing threat to impose investment restrictions and 10%–25% tariffs on all Chinese imports (over USD 500bn annually) before 2020. If this threat were acted upon, China would experience a much sharper slowdown in 2019 than our base case currently suggests. China's GDP growth would likely fall to around 5% for at least two quarters, with the current account balance deteriorating sharply due to a slowdown in exports. USDCNY could easily rise beyond 7.5 within a quarter, alongside a steep decline in official FX reserves, forcing the

government to further tighten capital controls. In this environment, contagion in global markets could not be avoided.

Upside scenario (10–20% probability): Stable GDP growth
As an orderly slowdown is widely expected, stable Chinese growth at around 6.6–6.8% would constitute a strong positive surprise, especially if other economic targets, such as deleveraging and a transition to a consumption-driven economic model, continue to be met. This environment would allow the Chinese current account balance to go back above USD 100bn. In such a scenario, commodities and risk assets, especially those in Asia and emerging markets (EMs) more broadly, would appreciate considerably.

Investment conclusions

Downside scenario: 5% growth in China would not constitute an end to the global business cycle, nor should it derail markets to the same extent as a Fed-induced US recession or a global trade war. But a sharp Chinese slowdown would certainly not go unnoticed by Asian and global markets. Risk assets would likely sell off sharply, led by Asian and EM equities, while safe-haven investments such as high grade bonds and US Treasuries would appreciate. Energy commodities and industrial metals would also suffer significant price declines as many of these commodities are mainly consumed by Chinese companies (in aggregate, about 50% of all global industrial metals go to China). Safe-haven currencies like the US dollar, the Swiss franc and the Japanese yen would appreciate against more cyclical currencies like the euro and commodity-driven currencies such as the Australian dollar and the Norwegian krone, as well as against the broad EM FX complex. How much the Japanese yen appreciates, however, would also depend on the extent of economic contagion in the US and the rest of the world.

Upside scenario: In the event of an upside growth surprise in China, commodities and risk assets, especially those in Asia and emerging markets more broadly, would appreciate considerably.

For a summary of expected asset performance in the various scenarios (base case, downside and upside), please see the table on the right.

Asset class impact
Expected relative performance of select asset classes in different outcome scenarios

Scenarios		Expected market performance for select asset classes	
Base case	On track for moderation	Chinese equities	+5-10%
		EMBIGD	+2-4%
		USDCNY	7.10
Downside scenario	Sharp slowdown	Chinese equities	-15-20%
		EMBIGD	-3-5%
		USDCNY	7.50
Upside scenario	Stable GDP growth	Chinese equities	+15-20%
		EMBIGD	+3-4%
		USDCNY	6.50

Expected total returns over a 6-month horizon
Note: Upside and downside scenarios are possible events outside of CIO's base case expectations.

Source: UBS, as of 11 February 2019

Key dates to watch

- **14 Feb 2019:** China January trade data
- **28 Feb 2019:** China February business surveys
- **5 Mar 2019:** China National People's Congress
- **8 Mar 2019:** China February trade data
- **14 Mar 2019:** China Jan-Feb fixed asset investment, retail sales and industrial production data

For further information please contact Daniil Bargman , Yifan Hu , Kathy Li , Philip Wyatt .

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