

Global risk radar

A tale of two (risk) tails

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Chief Investment Office, WM

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

At a glance

- We reflect on how 2018 has changed the global investment landscape, what risks lie ahead, and how investors can prepare for the future.
- As markets start to show a more balanced attitude toward risk, we argue that investors too need to become increasingly mindful of potential upside scenarios.
- CIO believes the current environment still favors an overweight position in equity markets, and that the recent sell-off marks a bull market correction rather than the beginning of a bear cycle. However, we also hold a number of counter-cyclical positions that should perform well if one of our downside scenarios were to materialize.



Source: iStock

The year when markets acknowledged risks

2018 has been a much more difficult year for global investors than 2017. At the time of writing, global equities are down 10% from their January peak, while 10-year US Treasury yields are around 85 basis points higher than they were 12 months ago. All major regions except the US missed expectations on economic growth, while ever-escalating trade tensions kept adding to uncertainty.

But this challenging environment has also had a positive effect on financial markets. The roller coaster of 2018 has shaken investors out of their complacency and brought valuations and volatility back to historical norms across major asset classes. As a result, markets are finally starting to pay attention to risk where such attention is due. Here are a few examples.

Cyclical peak in US growth: US business activity surveys have likely reached their cyclical highs in 2Q, while US financial conditions, though still quite loose in aggregate, have continued to tighten. This does not mean that a downturn in US economic growth is imminent, but it is a sign that US growth will likely be more modest in 2019 when ex-US growth is also likely to remain subdued.

Higher US interest rates: With a tightening US labor market and inflation at the Federal Reserve's target, further rate hikes are to be

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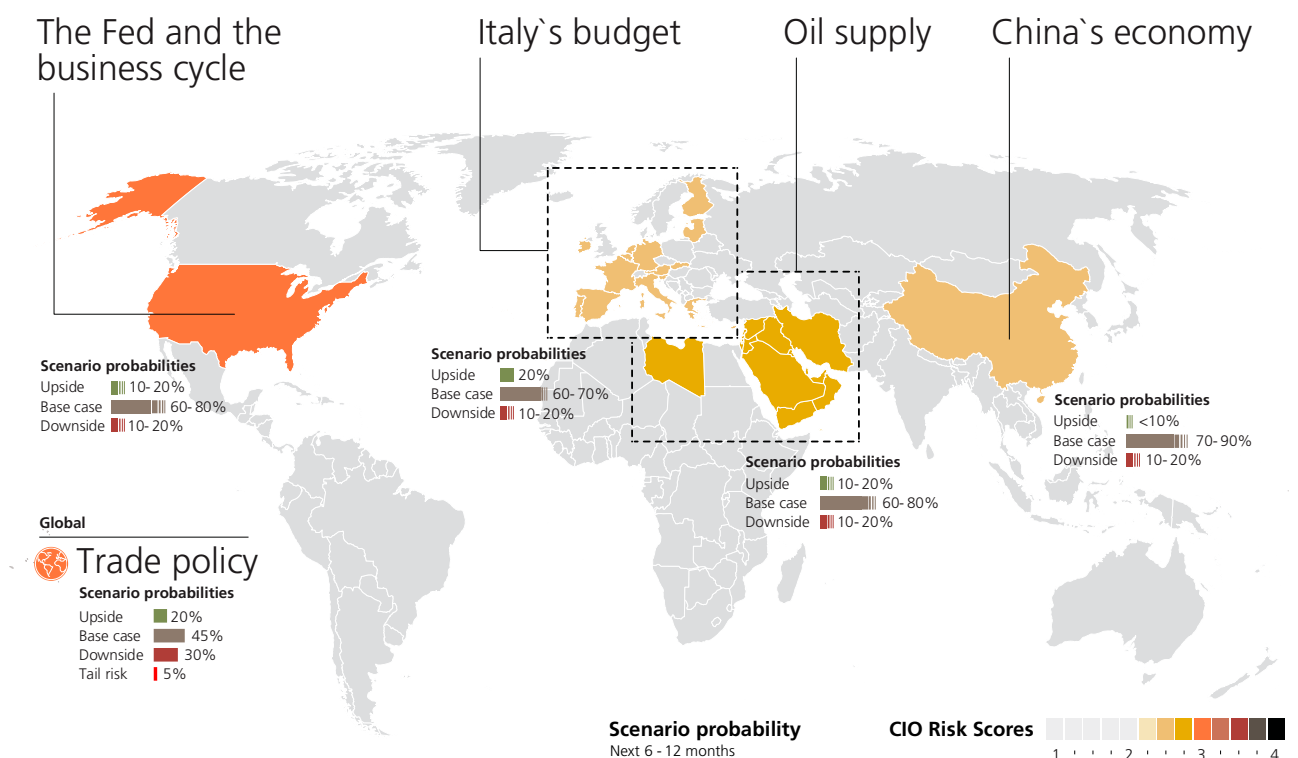
- UBS Energy: "Crude Oil: OPEC+ lays the groundwork for production cut", 12 November 2018
- UBS Volatility: "CIO Systematic Hedging: November 2018", 9 November 2018
- UBS House View Letter: "From TINA to TIARA," 18 October 2018
- UBS US economy: "Forging ahead despite tariffs", 17 October 2018
- UBS Global Risk Radar: "Are you prepared? Risk scenarios to watch," 30 August 2018
- UBS Global Risk Radar: "From trade talk to action," 19 July 2018

expected. This environment is consistent with higher US Treasury yields, which have been on the rise this year. With the 10-year Treasury note currently yielding around 3.2% a year, more investors are becoming inclined to increase their allocation to this asset at the expense of some riskier and more volatile alternatives like equities or high yield credit.

US-China trade: A Trump–Xi meeting is scheduled during the G20 summit on 30 November, and markets are left to ponder a few alternate outcomes for US-China trade relations. Over the course of 2018, a sweeping tariff on all Chinese goods shipped to the United States has graduated from a near impossibility to a high-probability downside scenario. Granted, such a tariff measure would have much greater economic repercussions for China than for the US, but the US economy is still unlikely to emerge from this decision unscathed.

Vulnerabilities in Italy: A populist coalition of M5S and Lega Nord is working on a budget proposal that would entail more government spending and less emphasis on reducing the country's debt-to-GDP ratio. If such a budget is agreed on and market participants start to question Italy's debt sustainability, Italian sovereign bond yields may come under much stronger upward pressure as the European Central Bank (ECB) withdraws its extraordinary policy support. In the worst possible outcome, markets may need to brace for the risk of a repeat in European financial stress akin to 2011–2012 levels.

Fig. 1: Global risk map



Source: UBS, November 2018

But the current economic environment is far from being all doom and gloom. Although potential downside scenarios still loom ahead, we are also increasingly mindful of several upside risks that could lift global

assets in the months to come. In fact, as markets are ending 2018 with a more balanced attitude toward risk, we find it fitting that our publication series takes a similar approach (also see Table 1).

China: Despite a soft patch in Chinese economic data and the potential of further trade escalation, we see encouraging signs that Beijing is taking a proactive approach to counteract a sharp economic slowdown. For example, the People's Bank of China recently cut the reserve requirement ratio for banks. We believe the government will take more steps to support the real economy, capital reform and foreign investment. Furthermore, we think Chinese onshore equities have more than priced in the economic weakness related to the US-China trade conflict.

Trade: While we cannot rule out further escalation in trade tensions between the US and China, we still assign a 20% probability to a more market-friendly outcome, such as an at-least-temporary agreement at the forthcoming G20 meeting. Actual progress in negotiations would benefit Chinese and US assets (see Table 1).

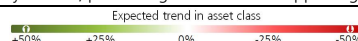
Europe: While recent economic data weakened, this may have been due to one-off effects such as the introduction of new emission test procedures that led to a sharp decline in German car production. If this is the case, we see a good chance that economic momentum in Europe will pick up again in the first half of 2019.

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 performance remains solid, but ongoing trade tensions and uncertainty about Eurozone growth keep the volatility high.	US equities +0–5% due to solid economic activity supported by government spending, business confidence and capital access Eurozone equities +0–5% amid political uncertainty surrounding Italy, Brexit and the ongoing trade conflict EURUSD between 1.15 and 1.20 as monetary policy normalizes
Key downside scenarios	Trade: Further US sanctions US-China trade disputes induce a slowdown in China, considerable uncertainty and a rerouting of global trade. More countries start to feel pain via disrupted supply chains.	US equities down 5–10% composed of a 5% hit to our EPS estimates coupled with P/Es contracting 0–5% 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
	Oil: Escalating tensions disrupt energy exports Escalating tensions disrupt energy exports, causing oil prices to spike sustainably to USD 120/bbl – a level that would hurt the global economy.	Crude oil spikes to USD 120/bbl US energy equities +15–20% as they are in general closely correlated to oil prices NOK appreciates, bringing USDNOK down 15–20% as higher oil prices lift the revenue of Norway's oil export sector (around 15% of GDP)
	Fed ends the business cycle sooner As US inflation rises rapidly, the Fed is forced to hike rates at each FOMC meeting. This leads to a flat or inverted US Treasury yield curve toward mid-2019, followed by an equity bear market. A US recession starts in early 2020.	US equities down 10–15% as valuations fall 5–10% as fears about the end of the cycle rise and earnings do not grow in 2019 US high yield down 6–9% as spreads widen towards recession levels, while mid- to longer-term US Treasury yields fall USD appreciates, bringing EURUSD to or below 1.10 as the USD strengthens due to contractionary monetary policy
Key upside scenarios	Trade: Negotiations avert additional sanctions Negotiations between the US and China restart, leading to actual progress and a reduction of trade barriers. Although tensions remain high, both countries agree on a trade truce.	US equities +10–15% 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 +10–15% due to a strong recovery on risk sentiment and better-than-expected fundamentals USD depreciates to EURUSD 1.20–1.25
	China: Stable GDP growth 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 6–7% as spreads tighten to around 310bps due to improving EM growth prospects CNY appreciates 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.



Source: UBS, as of 8 November 2018

Overall, we acknowledge that the bull market is becoming more mature and that many risks remain. In this environment, higher volatility and more modest gains for risky asset classes are to be expected. However, as the bull matures, it also becomes wiser and more aware of its

potential weaknesses. CIO believes that the value offered by global equities today justifies tolerating higher potential volatility, and has added to its overweight in global equities on 7 November. At the same time, our countercyclical positions – such as overweight in 10-year US Treasuries and the Japanese yen, and a put option on the S&P 500 – should help stabilize our portfolio should market sentiment temporarily take a turn for the worse.

For a full list of current CIO recommendations that should provide additional support to investors in one or the other CIO downside scenario, please refer to Table 2.

Investment idea overview

While table 1 summarizes the investment implication around our main down and upside scenarios, Table 2 shows a selection of current CIO investment themes and tactical investment ideas that we expect to perform well relative to their benchmarks in our base case, as well as in some of our risk scenarios.

For more details on potential asset classes that outperform relative to others and those which underperform relative to others in a given risk scenario please refer to the investment table shown in our latest Global Risk Radar report published 30 August.

Table 2: Investment ideas for the CIO base case and one or more risk scenarios

Asset class	Investment ideas	Fed ends the cycle sooner** Phase 1 Phase 2		Further US trade sanctions	Sharp slowdown in China	Oil supply: Escalating tensions disrupt energy exports	Italy's budget: Overshoot in the deficit target
Equities	Generate yield: "Buy-write" on US equities	✓	✓	✓	✓	✓	✓
	Generate yield: "Buy-write" on Eurozone equities	✓	✓	✓	✓	✓	✓
	Global quality matters		✓		✓	✓	✓
	Eurozone Sustainable High Dividend Yield		✓	✓	✓	✓	✓
	Swiss high-quality dividends		✓	✓	✓	✓	
	UK quality		✓	✓	✓		✓
	UK diversified dividends		✓	✓	✓	✓	
	Sustainable value creation in Emerging Markets				✓		
	Finding Value in EM					✓	
	EM(U) Winners						✓
	Eurozone multi-style strategies to invest beyond the cycle		✓			✓	✓
	European leisure flies high			✓	✓		✓
	Gender diversity matters				✓		
	Put option on selected indexes (DAX, Euro Stoxx 50 and CAC 40)		✓	✓		✓	✓
	Put option on the S&P 500***		✓	✓	✓		
Fixed Income	Replacing well-worn bonds	✓	✓	✓	✓	✓	
	GCC: A new oasis on the global credit map	✓				✓	✓
	Go Synthetic	✓					
	Long-dated USD high grade bonds: Buy now or never		✓		✓		✓
	Long US Treasury vs USD cash		✓		✓		✓
Currencies	Long JPY vs TWD		✓	✓	✓		
Hedge Funds	Navigating rising US rates with hedge funds	✓	✓				

☐ Global Investment Strategy
 ☒ CIO Investment Themes*
 ☐ CIO Systematic Hedging

Note: For more details, please consult your client advisor or refer to the related CIO report.

* CIO Investment Themes should outperform their respective performance benchmarks in the mentioned CIO risk scenarios.

**The downside scenario of the Fed ending the cycle sooner is characterized by a period of inflation-driven Fed rate hikes (Phase 1), followed by a global equity bear market (Phase 2). The two economic regimes are covered by the left and right section of the column, respectively. A change in market conditions from phase 1 to phase 2 may warrant a rotation from one set of hedging solutions to another as the scenario unfolds. See "The Fed and the business cycle" section for more information.

***GCC credit is expected to outperform in case of an oil supply shock, unless the shock originates from a geopolitical escalation involving one of the six GCC countries. For example, the theme would outperform in case of further US sanctions on Iran, but not in case of a direct confrontation between Iran and Saudi Arabia.

Source: UBS, as of November 2018

Table 3: Risk calendar

Key dates to watch

Nov	—	■	13 November, revised Italian budget proposal
	—	■	17-28 November, special EU leaders summit on Brexit
	—	■	30 November, EC's assessment of the Italian budget
	—	■	30 November to 1 December, G20 summit in Argentina including a Trump-Xi bilateral meeting
Dec	—	■	6 December, OPEC meeting
	—	■	13 December, ECB meeting
	—	■	19 December, FOMC meeting (hike expected)
	—	■	20 December, BoJ meeting, BoE meeting
	—	■	31 December, deadline for Italian budget approval
Jan	—	■	1 January, US increases tariffs on USD 200bn of Chinese imports to 25%
	—	■	22-25 January, WEF
	—	■	23 January, BoJ meeting
	—	■	24 January, ECB meeting
	—	■	30 January, US 2018 annual GDP (advance estimate)
	—	■	30 January, FOMC meeting
Feb	—	■	1 February, FOMC meeting
	—	■	7 February, BoE meeting
	—	■	17 February, deadline for US investigation on auto imports
	—	■	24 February, Moldovan election (Parliament)
Mar	—	■	7 March, ECB meeting
	—	■	15 March, BoJ meeting
	—	■	20 March, FOMC meeting
	—	■	21 March, BoE meeting
	—	■	29 March 23:00 UTC, Brexit takes effect
	—	■	31 March, Ukraine presidential elections
	—	■	31 March, Turkish local elections
Apr	—	■	10 April, ECB meeting
	—	■	25 April, BoJ meeting

Ongoing Monitoring

■ Central bank policy

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

■ Economics

- Key economic data
- China economic policy

■ Geopolitics

- 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)
- New tariffs on goods and services (e.g. tariff on Chinese goods)
- EU-UK negotiation

Trade policy

Will import tariffs threaten to undermine the global trading system?

Recent developments

On 17 September, US-Sino trade relations took another hit, as the US announced additional 10% tariffs on USD 200bn worth of imports from China, with the tariff rate rising to 25% on 1 January 2019. In response, China announced 5%–10% retaliatory tariffs on USD 60bn worth of products from the US, which also went into effect on 24 September. China will likely increase these tariffs to 5%–25% in January. US President Donald Trump threatened to slap tariffs on the remainder of imports from China (approximately USD 267bn worth of goods) in the event that Beijing imposes retaliatory measures. These latest developments came after List 1 and List 2 were implemented on 6 July and 23 August, respectively, levying tariffs on 50bn of Chinese imports into the US, alongside equal retaliatory tariffs from China on US goods.

Official negotiations between the two countries have stalled in the past months. However, both sides recently signaled willingness to negotiate a trade deal around the Trump-Xi meeting on the sidelines of the G20 summit in Buenos Aires.

On other trade fronts, Canada joined the US and Mexico in a new trade agreement called USMCA that will eventually replace NAFTA. Japan also agreed to enter bilateral talks with the US to reach a free trade deal. These announcements seem to confirm our expectation of a de-escalation of tensions with other trading partners. But they do not rule out the possibility of further US sanctions, specifically tariffs on US auto imports. The trade deal between the US, Mexico and Canada must still be ratified by the US Congress that is now split between the two major political parties.

Our view

Base case (45% probability): Continued Sino-US tensions

We believe hostilities between the US and China will continue in 2019. Although we exclude the imposition of another round of tariffs on Chinese products (Trump's so-called phase 3) from our base case, we think that the relations between the two countries have further deteriorated over the past months and could spill over into other domains (e.g. military, politics). Tensions will likely increase soon after the US raises the tariff rate on USD 200bn Chinese products to 25% on 1 January. We expect China will react accordingly by raising the rate of the retaliatory duties on USD 60bn worth of US goods.

On auto tariffs, the USMCA trade agreement reduces the near-term risk of the US announcing duties on auto and auto part imports. Ongoing negotiations with the EU and Japan further bolster our decision to exclude car tariffs from our base case.

Upside scenario (20% probability): Trade negotiations avert additional trade barriers

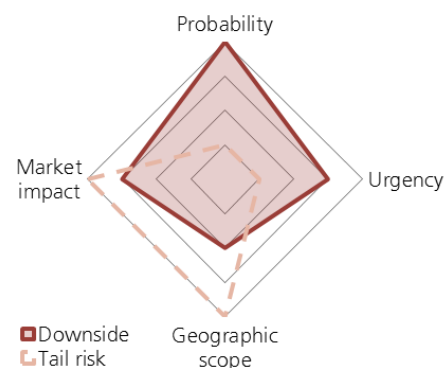
A potential announcement of a ceasefire of sorts, released at or shortly after the G20 summit, could provide temporary relief for stock markets and offer room for further trade talks in the future. That said, we assign a low probability that such a statement of intent could lead to

Trend
Probability

Stable
High

Risk dimensions

CIO expert assessment

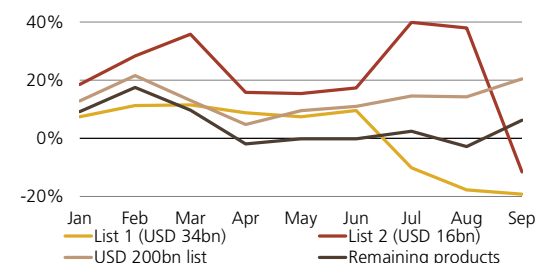


Note: Distance from center (1-4) represents the dimension score. The CIO risk score is an average of the four risk dimensions.

Source: UBS, as of November 2018

US imports from China drop after frontloading period

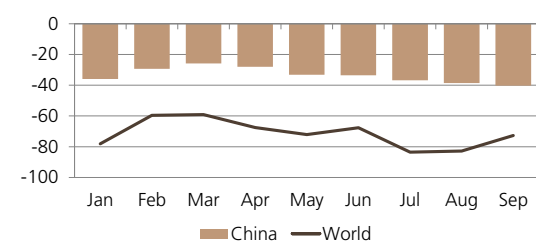
US import volumes from China by tariff list, monthly data y/y (%)



Source: US Census Bureau, UBS, as of 3 November 2018

US deficit with China keeps increasing

US monthly trade in goods balance (USD bn)



Source: US Census Bureau, UBS, as of 3 November 2018

a comprehensive trade deal that eliminates the existing tariffs. For that to happen, China has to signal clear willingness to make concessions, such as lowering the trade surplus with the US, offering higher market access to US companies and addressing non-market practices.

Downside scenario (30% probability): Further US trade sanctions

In this scenario we would expect the US administration to implement additional trade policies against major partners in an effort to reduce the trade deficit in goods, which has recently widened to near-record levels, as it aims to strike better trade deals. We would envisage a significant deterioration in the current situation if one or more of the following conditions materializes. First, tariffs on nearly all Chinese products may be levied early next year, if US-China talks over the coming weeks collapse. Second, auto tariffs are also still looming, as the inclusion in the USMCA agreement of a quota provision for auto imports from Mexico and Canada to the US suggests that the White House might be contemplating car duties under Section 232 of the Trade Expansion Act of 1962.

We think that tariffs on the remaining Chinese goods would be disproportionately more disruptive than tariffs imposed up until now, and may even be implemented in stages over a longer period, due to the higher concentration of higher value-added consumer IT products in the as yet untouched portion of China exports. This move would mean greater disruption to IT supply chains, and the relative lack of substitution means a higher pass-through to the headline CPI. Despite the disruption and higher costs involved from shifting production, it is increasingly clear that President Trump sees greater overall benefit from raising tariffs on most, if not all, China-sourced goods.

We don't anticipate China will start imposing tariffs on US services or making business difficult for US companies operating in China. On the FX front, in our view China will not actively devalue the CNY as a tool in the trade spat, especially since it will dampen foreign investors' confidence and willingness to put capital into China at a time when it is needed most. Furthermore, given China's sizable US Treasuries holdings, any reduction here would ultimately be self-defeating.

Tail risk (5% probability): Global trade war

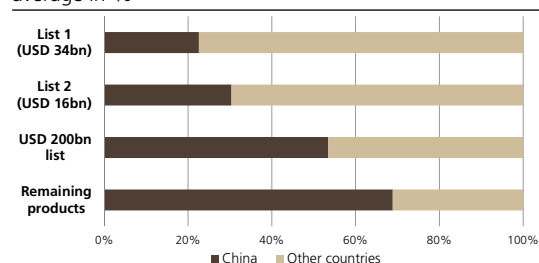
In our tail risk scenario, the escalating trade conflict between the US and the rest of the world leads to the rerouting of products subject to US tariffs to new destinations at lower prices. This forces other developed economies to implement restrictive trade policies of their own to prevent unfair price competition. As a consequence, global trade volumes would fall substantially, weighing on business sentiment and ultimately, on markets.

Investment conclusions

Downside scenario: US equities have digested the increase in US-China trade tensions with remarkable ease. As we have noted in previous publications, this was primarily because the first order impact of the US-China measures implemented so far was relatively muted relative to the earnings growth. Although market moves in October suggest the market is beginning to refocus on the trade risk, tariffs don't appear to be reflected in 2019 consensus estimates. CIO believes that the total direct negative impact on US companies' 2019 earnings could rise to 4%–5% if the US moves to place tariffs on all Chinese imports. With P/E contracting 0%–5%, the US equity market could

China's share as a supplier of imports increases with every round of tariffs

China's share of US goods import by product list, weighted average in %



Source: US Census Bureau, UBS, as of November 2018

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	+4–5%
		Chinese equities	+5–10%
		EURUSD	+0%
Downside scenario	Further US trade sanctions	US equities	-5–10%
		Chinese equities	-20–25%
		EURUSD	Around 1.10
Upside scenario	Negotiations avert additional sanctions	US equities	+10–15%
		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 8 November 2018

Key dates to watch

- **30 Nov 2018:** G20 summit in Buenos Aires
- **1 Jan 2019:** Increase of tariff rate to 25% on USD 200bn Chinese goods under US Section 301
- **17 Feb 2019:** Ultimate deadline for completing the US Section 232 investigation on auto imports

drop by about 5%–10%. While companies are taking steps to mitigate the effect of the tariffs, escalating trade tensions could impact sectors with higher exposure to China (e.g. industrials, materials).

For Chinese equities, we believe valuations have largely priced in the impact of the 25% tariff on USD 200bn of Chinese imports, while the risk case of US tariffs on all Chinese goods would produce a more severe result.

On the FX front, the Chinese government maintains strict capital control amid currency depreciation pressure. China has no intention of actively devaluing the CNY as a trade measure, especially since it would dampen foreign investors' confidence and willingness to put capital into China at a time when it is needed most. On the other hand, US tariffs should support a stronger USD and the EURUSD could dip to around 1.10. It's also worth noting that a stronger USD compensates for some of the damage done by tariffs by making foreign goods cheaper for Americans and lifting margins for exporters.

Upside scenario: Both the Chinese and US markets would likely rebound once the two superpowers come to the negotiating table in earnest. We think both US and Chinese equities could rise 10%–15% given renewed confidence in the cycle and improving sentiment. Better than expected fundamentals and no disruptions to supply chains also would help lift global markets.

For more details on winners and losers, please refer to our previous edition of the *Global Risk Radar* "Are you prepared? Risk scenarios to watch" from 30 August. Furthermore, the table on the right provides a summary of expected impacts on selected asset classes in the different scenarios.

The Fed and the business cycle

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

Recent developments

By setting the minimum interest rate at which institutions can borrow and lend US dollars, the US Federal Reserve (Fed) has the power to affect the rate of US growth and inflation, the attractiveness of major asset classes to investors, and, ultimately, the state of the global business cycle. The Fed has been raising rates since December 2015 to make sure that US inflation remains at bay as the labor market continues to tighten. US core personal consumption expenditures (PCE) inflation is currently at the Fed's target of 2%, but it has been on an upward trend recently (see chart). If inflation gets too high – we estimate the pain point at around 2.5% – the Fed may be prompted to raise interest rates more quickly, which could cause a bear market in global risky assets and end the global business cycle sooner than anticipated.

In a typical business cycle, an overheating labor market leads to rising wages and more purchasing power for consumers, which in turn incentivizes companies to invest in new projects and grow the economy. Under normal economic conditions, this would give equity markets and other growth-proxy assets a final boost in the cycle, until the high interest rate set by the Fed would force the US economy to slow down and the business cycle to end. This year, however, the specter of political uncertainty looms over the business community with a string of unexpected tariff announcements and sanctions. As a result, markets have experienced sharp corrections despite strong fundamentals. This is not good news for the business cycle – if inflation picks up materially and the Fed is forced to end the business cycle sooner, markets may not have the traction to appreciate much further before entering a bear regime.

Our view

Base case (60-80% probability): Benign outlook for the US economy

At the time of writing, the lengthy recovery of the US economy since the 2008 crisis has not yet led to a troubling pickup in inflation, inflation expectations, or wage growth. So the Fed has no immediate cause for alarm, despite unemployment already falling well below their estimated equilibrium level (NAIRU). Core PCE inflation and breakeven inflation expectations are both around the Fed's 2% target, while year-on-year growth in average hourly earnings is around 3.1% at the time of writing (it exceeded 3.5% at the peak of the previous cycle).

CIO does not expect sharp moves to occur in any of these economic indicators in the coming months. Inflation expectations are largely anchored, and wage growth is picking up only gradually, so core PCE inflation should stabilize slightly above 2% next year. We expect GDP to grow at a moderate pace, although more tariffs may cause a temporary slowdown. The Fed seems on track to continue raising rates gradually into next year, which should give global equity markets enough scope to resume their modest upward trajectory after the recent bull market correction subsides.

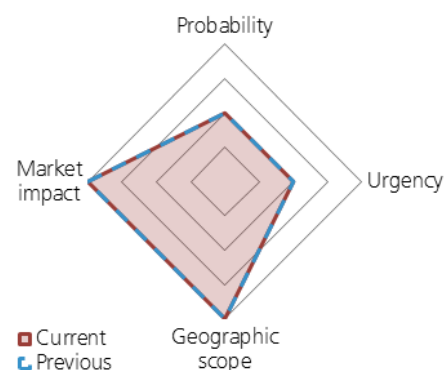
Several factors could contribute toward a sharper-than-expected near-term pickup in any or all measures of US inflation. The biggest risk is that of an inflection point in the US labor market, causing wage growth to accelerate much more rapidly and inflation expectations to rise. In

Trend
Probability

Stable
Low

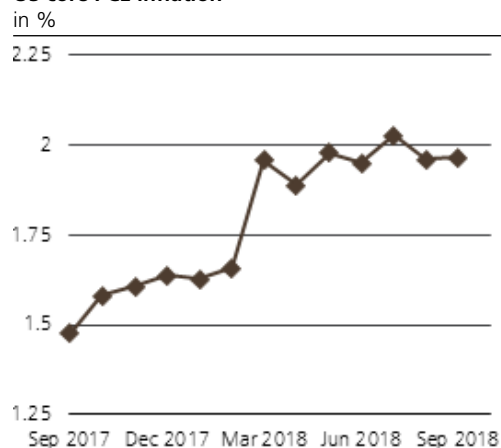
Risk dimensions

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 November 2018

US core PCE inflation



Source: Macrobond, UBS, as of 31 October 2018

addition, trade tariffs could exert more upward pressure on import prices, while geopolitical escalation in the Middle East could lead to a severe shortage in the oil supply.

Downside scenario (10-20% probability): Fed ends the business cycle sooner

If core PCE inflation breaches 2.5%, the Fed will likely be compelled to start hiking rates twice per quarter, instead of its current more moderate pace of one hike per quarter or fewer. In an environment of heightened political uncertainty, such a policy shift would not be good news for markets. A much higher Fed funds rate would likely lead to a flat or even inverted US Treasury curve towards mid-2019, and upside for global equities over that period would be very limited. An equity bear market would likely start in the second half of 2019, with a US recession following in early 2020.

Upside scenario (10-20% probability): Stronger US growth, modest inflation, bull market

In our upside scenario, the attention of US and global investors and businesses could turn back to strong economic fundamentals rather than looming political risks. In this environment, business investment could pick up substantially and prompt the US economy to grow robustly without a troubling pickup in inflation or inflation expectations. The Fed would likely raise rates further to reflect the stronger pace of growth, but it would not have to raise rates rapidly, and would likely return to its previous trajectory of one interest rate hike per quarter. US and global equities could re-enter a bull market for the next two years on another global cyclical growth upswing.

Investment conclusions

Downside scenario: Higher inflation causing the Fed to end the US business cycle would be one of the worst-case outcomes for global markets over the next 12–18 months. After a period of, at best, lackluster performance as the Fed raises rates (call it "phase 1" of the scenario), global equities would likely enter a prolonged and severe downturn (call it "phase 2"). The average duration of an equity bear market is 13 months, and we would expect US equities to drop by around 30% over that period. Other equity markets may suffer even larger losses, especially in the case of second-order effects like a debt crisis in Italy or emerging markets.

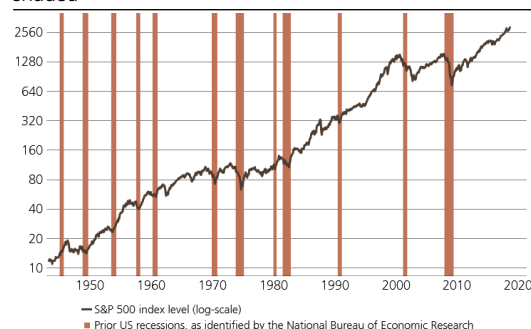
Safe-haven investments such as high-quality bonds (high grade bonds, US Treasuries, US inflation-linked bonds), gold and certain currencies (US dollar, Swiss franc, Japanese yen) should provide protection in such a scenario. High grade bonds and US Treasuries could suffer initially (i.e. in phase 1) due to higher inflation and higher interest rates, but these asset classes would likely be among the best performers during the subsequent bear market (phase 2). Conversely, assets such as gold and US inflation-linked bonds could offer more protection during phase 1 of the scenario, while their appreciation during phase 2 could be less pronounced.

Upside scenario: In the upside scenario of stronger US growth and modest inflation, risky assets such as equities and high yield would outperform safer assets like high grade bonds and US Treasuries.

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

US recessions are normally preceded by bear markets in US equities

S&P 500 index level (log scale), with NBER recessions shaded



Source: Macrobond, UBS, as of 31 October 2018

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	+4–5%
		US high yield	+1–2%
		EURUSD	+0%
Downside scenario	Higher US inflation, faster Fed hikes, earlier US recession	US equities	-10–15%
		US high yield	-6–9%
		EURUSD	Below 1.10
Upside scenario	Stronger US growth, modest inflation, bull market	US equities	+15–20%
		US high yield	+4–6%

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 8 November 2018

Key dates to watch

- **29 Nov 2018:** US October core PCE inflation
- **3 Dec 2018:** November ISM business surveys
- **7 Dec 2018:** US labor report (November)
- **19 Dec 2018:** Next Fed interest rate decision

China's economy

Will China experience a sharp economic slowdown in 2019?

Recent developments

CIO maintains a positive view on the Chinese economy and China in general, but the risk of further US trade tariffs leads us to consider downside risks to Chinese growth in the short to medium term. We still expect a moderate slowdown in China next year, with a GDP growth rate of around 6%. But we also see a risk that the Chinese economy will slow down much more sharply if the full scale of US tariff threats is realized.

An external economic shock has different economic implications for a country like China than it does for a country like the US. Rather than relying heavily on market forces, China's main absorption mechanism for economic shocks is state policy intervention. As the Chinese government already has its hands full with a transition to slower growth and less economic leverage, a heavy external blow to the country's terms of trade would come at an inopportune time.

In response to earlier US trade measures, China's state policy emphasis has already shifted from "deleveraging" the economy to "stabilizing leverage." As a result, China's debt-to-GDP ratio may start rising again at a slow pace, possibly reaching as high as 280% next year. This shift will provide near-term policy relief, but rising leverage also increases the longer-term risk of debt sustainability 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 more of a priority now, but it will still take a while before these projects have a meaningful economic effect.

Our view

Base case (70-90% probability): On track for moderation

CIO remains positive on the financial stability and growth outlook for China. With 6.5% GDP growth expected this year and 6% in 2019, China's economic trajectory is still very strong compared to 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.

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

Given the recent rhetoric from the White House, it is becoming increasingly likely that the US could impose investment restrictions and 10–25% tariffs on all Chinese imports (over USD 500bn annually) before 2020. In such a scenario, 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. The USDCNY could easily depreciate beyond 7.5 within a quarter, alongside a steep decline in official FX reserves, forcing the government to further tighten up capital controls. In this environment, contagion in global markets could not be avoided.

Upside scenario (0-10% probability): Stable GDP growth

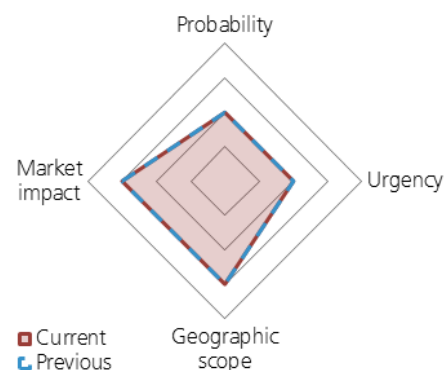
With an orderly slowdown regarded as a welcome norm, stable Chinese growth at around 6.6–6.8% would constitute a strong positive surprise, especially if other economic targets, such as deleveraging and

Trend
Probability

Rising
Low

Risk dimensions

CIO expert assessment (downside scenario)

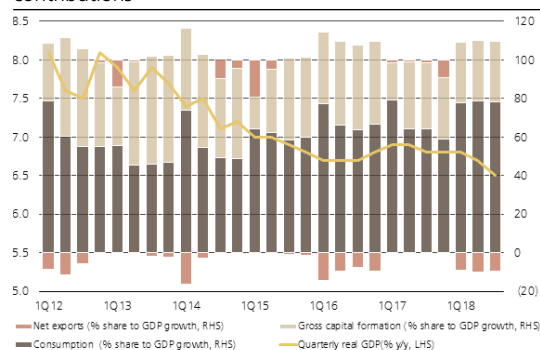


Note: Distance from center (1-4) represents the dimension score. The CIO risk score is an average of the four risk dimensions.

Source: UBS, as of November 2018.

China's GDP growth moderated in 3Q due to slower investment and consumption

China's quarterly GDP growth and component contributions



Source: CEIC, UBS, as of 3Q 2018.

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 (EM) more broadly, would appreciate considerably.

Investment conclusions

Downside scenario: 5% growth in China would not constitute an end to the global business cycle or derail markets to the same extent as a Fed-induced US recession or a global trade war. But a sharp Chinese slowdown would definitely not go unnoticed by Asian and global markets. Risky assets would likely sell off sharply, driven 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, approximately 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. The extent of appreciation in the Japanese yen, 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 (EM) more broadly, would appreciate considerably.

For a summary of expected asset performance in the base case, downside and upside scenarios, 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	-4–2%
		USDCNY	7.50
Upside scenario	Stable GDP growth	Chinese equities	+15–20%
		EMBIGD	+6–7%
		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 8 November

Key dates to watch

- **30 Nov 2018:** China November business surveys
- **7 Dec 2018:** China November FX reserves
- **8 Dec 2018:** China November trade data

Oil supply

How will oil supply evolve over the next months and what will it mean for markets?

Recent developments

Crude oil prices have retreated in recent weeks, after reaching a four-year high at the beginning of October. Various factors seem to have contributed to the price drop. Some see slowing economic growth as the cause, but oil demand growth still appears solid. US oil demand grew by a strong 5.2%, or 1.05 million barrels per day (mbpd) y/y, in August, and Chinese crude imports rose to a record 9.65mbpd in October.

Investors, in our view, should look at the supply side instead: US production reached a new record high in August, Russian production notched a post-Soviet high, and Iran managed to maintain its oil exports in October despite the US's looming sanctions. On 5 November, the US administration also announced it had granted "significant reduction exemptions" for buying Iranian oil to eight markets – including China and India. Market participants seem to have perceived the departure from the previous guidance of "zero Iran oil exports" as a bearish development. That said, analysts were not expecting such an outcome. At the last OPEC+ meeting, key oil minister have opened the door for production cut in 2019. The size will however likely depend on how much oil demand growth will slow down into 2019, how much Iranian supply falls due to US sanctions, and how strongly US supply increases over the coming months.

Our view

Base case (60-80% chance): Limited upside to oil prices

CIO expects oil prices (Brent) to trade at USD 85/bbl on a six- to 12-month perspective, supported by a relatively tight crude oil market. The latest US oil inventory data showing a peak mid-October and a decline thereafter suggests that the oil market has likely moved into a deficit. In addition, US sanctions on Iranian oil exports came into effect on 5 November. While the US administration decided to grant waivers to eight markets buying Iranian oil for six months, it also requested that they significantly cut their purchases. As such, we continue to forecast a 1–1.5mbpd reduction in Iranian exports from April's level into year-end. Meanwhile, Venezuelan production continues to drop. With Saudi Arabia and its allies committed to covering production shortfalls, spare capacity will continue to decline and fall to a decade low. As a result, we expect oil prices to remain very sensitive to any additional supply disruptions in the near future

Downside scenario (10-20% chance): Escalating tensions disrupt energy exports

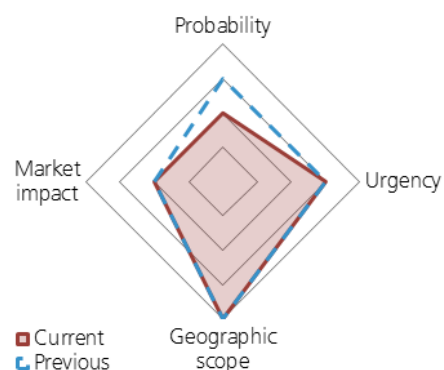
Our risk case of significant oil supply disruptions sees prices soaring to USD 120/ bbl. Because of the exemptions granted by the US administration, a larger plunge in Iranian production and exports versus our base case seems less likely. As a consequence, we have reduced the probability of the risk case to 10-20% from 20-30% previously and see the probability of the oil supply risk at the bottom of the new range. A price spike could nevertheless result from large supply disruptions in other fragile oil-producing countries such as Libya, Nigeria or Venezuela. Other threatening catalysts may include a potential move by Iran to block Persian Gulf exports in the Strait of

Trend
Probability

Declining
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 8 November 2018

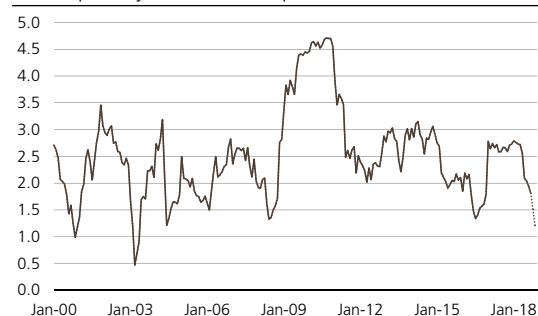
Note: Spare capacity

Spare capacity refers to the additional volume of (crude oil) production that can be brought on quickly and sustainably to the market. It is an important determinant of the oil market's ability to respond to potential crises, and oil prices tend to incorporate a higher risk premium when OPEC spare capacity reaches low levels.

Source: UBS, as of November 2018

Spare capacity expected to fall to multi-year low

Spare capacity of Saudi Arabia, UAE and Kuwait in million barrels per day (dotted line expected)



Source: IEA, UBS, as of November 2018

Hormuz, through which more than 30% of seaborne crude passes. A sustained blockade remains very unlikely however in our view. but prices could, however, spike for as long as the blockage persisted.

Finally, the Middle East remains a source of heightened geopolitical uncertainty in general. As such, there is always a risk of revived unrest in multiple regional hotspots, which may also result in an additional shock to global oil supply.

Upside scenario (10-20% chance): Limited decline to oil prices

Lower oil prices could result from a sharp increase in US crude production and/or less demand growth in emerging Asia due to an economic slowdown. If such an economic deceleration is contained, a fall in oil prices to USD 50-60/bbl would become a net positive contributor to global growth. We see a low probability (10-20% chance) that oil prices fall back to USD 50-60/bbl levels over the next six months on a sustained basis.

Investment conclusions

Downside scenario: During previous oil supply shocks, global equities have fallen about 15% on average, but then generally recovered within six months. Because of the sensitivity of US energy equities to oil prices, the sector, however, tends to benefit as oil prices spike. In the second quarter of 2018, US energy equities rose 18% when oil spiked from from USD 100 to USD 140. Similarly, higher oil prices lift the revenues of oil exporting countries, especially in Norway where previous oil price spikes lifted the NOK by about 25% against the USD.

Given current global growth momentum, major economies have been able to absorb a higher oil price so far, as expected. But if prices climb above USD 100/bbl for a protracted period, the impact on global growth would become a net negative, as gains made by producers would not be enough to offset losses from consumers. In the case of a sustained rise in prices, central banks may be forced to hike rates to curb inflation, increasing the risk of recession down the line.

Upside scenario: Conversely, a fall in oil prices to the USD 50-60/bbl range would be a net positive to global GDP growth, as gains to consumers through lower prices would outweigh losses suffered by oil producers. In such a context of global economic growth, US energy equities could still rise by about 5% but would underperform the rest of the market. Currencies linked to the oil price such as the NOK and the CAD would only suffer limited losses in our view, particularly if central banks continue with their hiking trajectory, as the oil export sector has become much leaner after the 2014-16 oil price drop.

The table on the right provides a summary of expected impacts on selected asset classes in both the downside and upside scenarios.

Oil supply shock

Expected relative asset performance in the risk scenario, by asset class category*

Scenarios		Expected market performance for select asset classes	
Base case	Oil prices trade sideways at USD 75-90/bbl	Crude oil	USD 75-90/bbl
		US Energy equities	+7-9%
		USDNOK	8.0
Downside scenario	Disruptions of oil supply	Crude oil	USD 120/bbl
		US energy equities	+15-20%
		USDNOK	6.7
Upside scenario	Limited downside to oil prices	Crude oil	USD 50-65/bbl
		US energy equities	+5%
		USDNOK	+8.4 - 9.0

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 8 November 2018

Key dates to watch

- **6 Dec 2018:** OPEC meeting in Vienna
- **7 Dec 2018:** OPEC+ meeting in Vienna

Italy's budget

Will the Italian government stand firm on the budget plan?

Recent developments

On 4 October, the new M5S-Lega coalition government in Italy unveiled a budget plan that implies a looser fiscal position and a more gradual decline in the public debt-to-GDP ratio than projected by the previous government. Italian bond yields rose after the government announced the budget, with spreads against German Bunds trading around 300bps in October. The government's spending plans imply that Italy's budget deficit will increase to 2.4% of GDP in 2019 and confirms the commitment of the ruling parties to push forward their populist election promises, i.e. a basic income, a lower corporate tax and pension reform. In its current formulation, the budget draft raises serious concerns about the country's debt sustainability.

In an unprecedented move, the European Commission (EC) decided on 19 October to start the process to request a revised budget and threatened to launch an Excessive Deficit Procedure (EDP) if the Italian government fails to submit a more compliant plan. In its autumn economic forecast, the Commission expects Italy's deficit to increase to 2.9% in 2019 and to 3.1% in 2020 – a more pessimistic outlook than that of the Italian government. Italy has now until 13 November to send in a revised draft budget to Brussels.

As expected, rating agencies adjusted their view accordingly. On 22 October, Moody's lowered Italy's credit rating to Baa3, one notch above junk status, and assigned a stable outlook. A week later, S&P Global Ratings changed the outlook on Italy's sovereign credit rating to "negative" from "stable", leaving its debt rating at BBB, two notches above sub-investment grade.

Our view

Base case (60-70% probability): Heightened tensions with the European Commission

We believe the Italian government is unlikely to adapt the 2019 draft budget plan to address the concerns raised by the EC, as any tentative move to back down on some of the announced spending measures would come at a political cost for the two ruling parties by undermining their domestically successful populist narrative. Nevertheless, the decision to conditionally postpone the implementation of two of the major electoral promises – minimum guarantee income and pension reform – is a first move to reconcile with the EC. On the other hand, we think that the Italian government will reply to Brussels by confirming next year's deficit target at 2.4% of GDP – which equals a 2.9% deficit in the European Commission's calculations. A deviation of this order from the limit is most likely to result in the launch of an EDP by the end of the year.

Downside scenario (10-20% probability): Overshoot in the deficit target

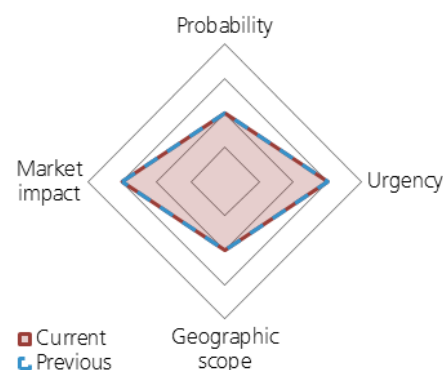
High public debt, the government's decision to expand the fiscal deficit in the currently benign economic environment and a failure to push through structural reforms needed to increase economic growth potential will make Italy more vulnerable to shocks, in our view. A weakening of the economic outlook and a growth shortfall caused by tightening credit conditions and a deteriorating business sentiment could lead to an overshoot of the deficit towards 2.8%-3.0% already

Trend
Probability

Rising
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 November 2018

Growing spread reflects increased concerns over Italian government debt

Yield differential between Italian and German bonds, in %



Source: Bloomberg, UBS, as of 5 November 2018

in 2019 and go beyond 3% in 2020. The recent fall in Italian PMI numbers already indicates a pronounced deceleration in Italy's growth momentum. Uncertainties around a surging debt-to-GDP ratio and a deterioration in the economic outlook would, in our view, cause rating agencies to rethink their assessment of Italy's debt sustainability. The risk of a cut in sovereign debt below investment grade would ultimately lead to forced selling of Italian bonds.

Upside scenario (20% probability): Italian government surrenders

In this scenario, the Italian government eventually capitulates to pressure from the EC, markets and rating agencies. The 2019 target deficit would be adjusted to around 2% of GDP with the implementation of main policies postponed to a later undefined stage. Italy's public debt would be put on a downward path again. Lower tensions with the EC would be followed by a fall in the yield of Italian sovereign bonds.

Investment conclusions

Downside scenario: During the Eurozone debt crisis, in 2011-12 10-year Italian and Spanish sovereign bond yields breached 7%, and a stressed banking sector dragged down Eurozone equity markets. The euro depreciated against major currencies, in particular "safe havens" such as the Swiss franc. If tensions between Italy and the EC increase, we expect a similar reaction in Italian spreads, but a relatively small drop in EMU equities of around 4%-8%, given lower contagion potential. We would expect Euro high yield spreads to widen, led by the financial sector. Default risks would likely stay low, leading to a relatively mild correction in Euro high yield bonds. The euro on the other hand could come under pressure, with EURCHF potentially falling to 1.10.

Upside scenario: If the Italian budget crisis is resolved, we expect Eurozone equities to rise by 5%-6%. At current valuations, they do not appear particularly cheap, in particular relative to other regions. We think Italian equities could outperform Eurozone equities, partly narrowing the performance gap of the past months. A moderate spread tightening in Euro high yield would be somewhat offset by rising Bund yields. Furthermore, an easing of tensions would lift euro slightly relative to CHF. In order to overcome EURCHF 1.20, a strong rebound in European growth would also be needed.

The table on the right provides a summary of expected impacts on selected asset classes in the case the budget crisis should deviate from our base case.

Asset Class Impact

Expected relative performance of select asset classes in different outcome scenarios

Scenarios		Expected market performance for select asset classes	
Base case	Heightened tensions with the EC	EMU equities	+3–5%
		EUR high yield	+0–1%
		EURCHF	+0%
Downside scenario	Overshoot in the deficit target	EMU equities	-4–8%
		EUR high yield	-0–1%
		EURCHF	-4–5%
Upside scenario	Italian government surrenders	EMU equities	+5–6%
		EUR high yield	+2–3%

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 8 November 2018

Key dates to watch

- **13 Nov 2018:** Deadline for the Italian government to send a revised budget proposal
- **30 Nov 2018:** Deadline for EC to publish an opinion on Italy's draft budget
- **31 Dec 2018:** Deadline for budget approval

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Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- **Hedge Fund Risk:** There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-U.S. securities and illiquid investments.
- **Managed Futures:** There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- **Real Estate:** There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- **Private Equity:** There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- **Foreign Exchange/Currency Risk:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.