Marketing Material

CIO | VIEW

October 2018

Casualties of conflict

How emerging markets suffer from global trade wars

DWS

WHAT DOES FALL HAVE IN STORE?

Things are going well – in the United States at least. Since the end of August, the S&P 500 has enjoyed the longest bull run in its history, posting new highs ever since. If we experience the typical year-end rally, the 3,000 mark could soon fall. The other indices simply cannot keep up. The MSCI AC World Index did venture into positive territory in the course of the year but only because of its U.S. components. The U.S. economy could soon emulate the equity market and post a new record of its own. It is already in the second-longest economic upswing of the post-WWII era. In July 2019, it would become the longest. At the risk of sounding pro-cyclical, this is also our current expectation. The pace of gross-domestic-product (GDP) growth has taken us by surprise, so we have raised our U.S. GDP forecast for 2018 from 2.7% to 2.9%. Appropriately, the U.S. Federal Reserve (the Fed) sticks to its tightening strategy, and we expect neither interest rates nor inflation to overshoot. Meanwhile, the corporate sector is enjoying its new regulatory and financial freedom, rewarding first and foremost shareholders: profits are distributed rather than invested in wages or capital spending. This development, however, is unlikely to be sustained – just like Trump's fiscal impulse will expire in 2019.

That begs the question: in which stage of the cycle are we now? The answer depends on the country in question. Unemployment and interest rates in the U.S. are, for example, on a completely different level than those in Europe. And in China, so far Beijing pretty much seemed to dictate the cycle by decree. But what scope will be left for China if the conflict with the U.S. escalates? This is just one of an array of looming political risks: trade war, Brexit, Italy's budget and the U.S. mid-term elections. Important decisions are pending in the coming months. That is one reason why our positioning is relatively neutral for fixed income, equities and currencies as we head into the fall. We do, however, see one glimmer of hope despite the risk of fall storms: our indicators suggest the cycle will not end any time soon. But markets appear to be pricing that in anyway. A fresh impulse could come from an extension of the cycle, for example via productivity gains.

Stefan Kreuzkamp
Chief Investment Officer

"Despite all the risks, we remain bullish on the global economy for the time being. But this in itself is not likely to give the markets a fresh boost."

Important terms are explained in our glossary. All opinions and claims are based upon data on 10/9/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. DWS Investment GmbH

CIO | VIEW

October 2018

FOCUS

At the first glance, troubles in Turkey and Argentina look very idiosyncratic. However, these countries and emerging markets in general have also been early victims of the simmering global trade war.

MACRO

Heading into 2019, we expect global economic growth to remain steady at 3.8%. However, keep in mind that troubles in financial markets can and do impact real economies in surprising ways.

FIXED INCOME

We remain constructive on corporate credit and see selective opportunities in emerging markets. 2-year U.S. Treasuries look quite attractive on a risk-adjusted basis.

EQUITIES

Silicon Valley's lead is widening. We are impressed but note that the tech sector is pretty heterogeneous. More broadly, we are keeping an eye on key political decisions ahead.

CASUALTIES OF TRADE CONFLICTS

» How emerging markets became early victims of the simmering global trade war. «

Happy families are all alike, Leo Tolstoy observes at the start of Anna Karenina, but "every unhappy family is unhappy in its own way." The same could be said about several of the emerging markets these days. From Turkey to Argentina and Brazil to South Africa, the turmoil still looks more like a collection of individual countries getting into trouble than the beginning of a lasting emerging-market downturn.

"The majority of emerging-market economies has become much more robust to external shocks in recent years," argues Elke Speidel-Walz, Chief Economist Emerging Markets at DWS, before ticking off all the ways in which this time might indeed be different: "Since the crises of the 1990s, prudent fiscal policy has become a policy priority in most countries. Flexible currencies should help as shock absorbers. Current-account deficits are much lower than in the past. Central banks mostly appear to have inflation under control and to have earned credibility in financial markets."

Only two of the 20 most important emerging-market countries run a current-account deficit of significantly more than 3% of gross domestic product (GDP). Those two are Turkey and Argentina. Indeed, Turkey's crisis does look country-specific and unique. In recent years, Turkey had embarked on an unsustainable growth model. In 2017, GDP grew by 7.5%, largely as a result of large-scale policy stimulus, such as minimum-wage and welfare-benefit increases. This helped fuel private consumption. Predictably, it has also led to an overheated economy with sharply accelerating inflation.

To make matters worse, Turkey has long relied on foreign short-term capital inflows to finance its profligate ways. A current-account deficit is just another way of measuring the amount by which domestic savings fall short of domestic demand, notably for corporate investment. In Turkey's case, the corporate sector has seen rapidly rising debt levels, increasingly borrowing in foreign currencies, mostly dollars. When its currency came under pressure, the burden of its dollar-dominated debt kept rising, just as the domestic outlook for revenues and profits kept darkening. The absence of adequate economic-policy responses further fueled investor fears. The room for maneuver of Turkey's once widely respected central bank had already been curtailed in the run-up to the June presidential and parliamentary elections. Its belated decision to raise rates in September only partially restored its credibility.

More trouble ahead?

At the first glance, Turkey's troubles look like the sad culmination of known weaknesses and unforced errors. Argentina has been doing rather better on the policy front. It also has high fiscal and current-account deficits, high external short-term debt and very high inflation. But its market-friendly government had already enlisted help from the International Monetary Fund. It committed to a wide range of painful policy measures. The reason for the currency selloff is that financial markets increasingly doubt reformers can win a popular mandate in the elections, due to be held in October 2019.

Other countries lately under market scrutiny include Brazil and South Africa. Fundamentally, both look rather more solid, though recent economic growth rates have been disappointing, hinting at structural weaknesses. In Brazil's case, the main problem has been government spending growing at a much faster pace than tax revenues. Attempts by the outgoing president to trim its unsustainably costly pension system failed earlier on this year. Following widespread corruption scandals, Brazil's political landscape looks set to become even more fragmented after October's general elections. South Africa has bigger structural problems, a comparatively high current-account deficit but also a new president willing to tackle its structural problems. Unfortunately, the task was not made any easier when U.S. President Donald Trump decided to intervene in the contentious issue of South African land reform via Twitter.

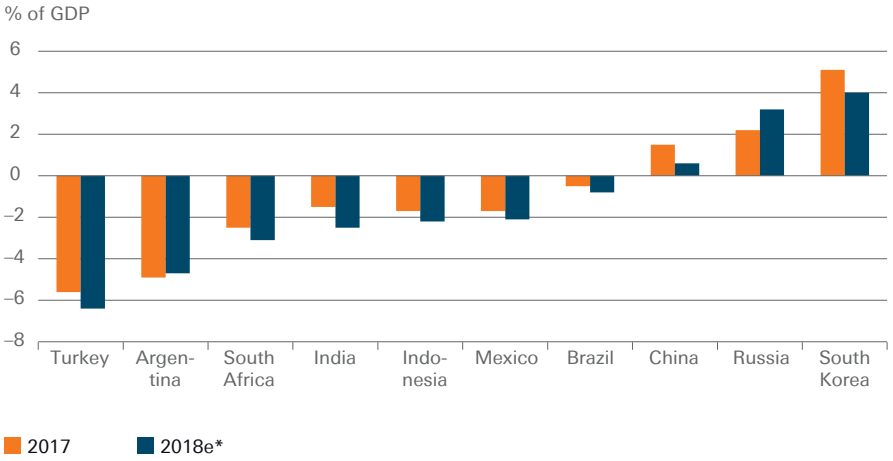
Which brings us back to Anna Karenina. At the heart of Tolstoy's novel is a story of love – and betrayal. The immediate trigger of the collapse in the Turkish lira was the U.S. decision to double the tariffs on steel and aluminum from Turkey, in protest of the continuing imprisonment

of American Pastor Brunson. Not so long ago, such a measure would have been unthinkable. Since the protectionist days of the 1930s, Western democracies have rightly and wisely been reluctant to use trade sanctions in order to further geopolitical goals. Turkey, after all, has been a traditional ally.

Part of the reason that most emerging markets entered recent turbulences in relatively solid shape is that they have been following a set of macro- and microeconomic policies that used to be known as the Washington consensus. Typically, emerging-market policies over the past two decades have included steps to free up markets, as well as commitments to free trade and sound monetary and fiscal policies. To turn recent turbulences into a lasting crisis would probably require a wholesale repudiation of these principles. That still looks unlikely but not as unthinkable as it once was. What happens in Washington will continue to reverberate. One drag on emerging markets has been the strength of the dollar, partly driven by last year's deficit-financed U.S. tax cuts and spending increases. A stronger dollar and rising U.S. interest rates at the end of this long cycle have always been likely to present some challenges to emerging markets. But matters have been made worse by market-rattling U.S. trade policies.

MOSTLY SOLID CURRENT-ACCOUNT BALANCES

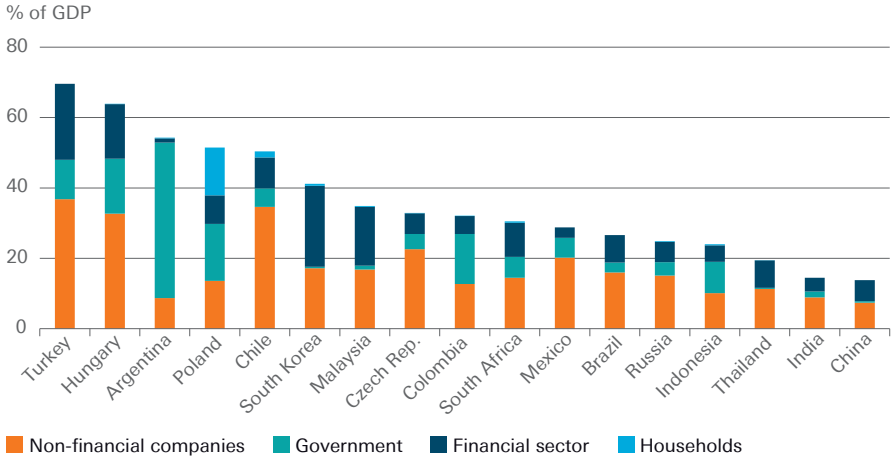
Generally, foreign capital inflows have financed long-term, growth-enhancing investments in emerging markets rather than consumption.



Sources: Deutsche Bank AG, DWS Investment GmbH as of 09/2018
* e = expected

SOME TROUBLE SPOTS

In recent years, some emerging markets have seen rapid growth in foreign-currency-denominated debt, mostly as a result of corporate borrowing.



Sources: The Institute of International Finance Inc., Bank for International Settlements, DWS Investment GmbH as of Q1/2018

SO FAR, SO GOOD

» Conventional analysis continues to paint a reassuring picture of the global economic outlook. «

Johannes Müller
Head of Macro Research

IN A NUTSHELL

- Heading into 2019, we expect global economic growth to remain steady at 3.8%.
- Especially in the Eurozone and China, momentum appears to be slowing but only slightly.
- However, keep in mind that troubles in financial markets can and do impact real economies in surprising ways.

Another turbulent quarter in markets has passed. In this issue's focus article, we explain why countries such as Turkey, Argentina and South Africa have gotten into trouble – and why we do not expect any lasting spillover to emerging economies across the board. There have also been plenty of unnerving headlines in developed markets on Italy's budget negotiations, ongoing Brexit talks and continuing trade tensions. In U.S. politics, the mid-term elections loom large. And in China, there have lately been surprisingly many signs of disagreement among the ruling elite. With the possible exception of some emerging-market hotspots, you would not be able to guess any of this from glancing at our revised forecasts. For the Eurozone, we have slightly reduced our expectations for gross-domestic-product (GDP) growth, from 2.2% to 2% in 2018, and from 1.9% to 1.8% in 2019. That remains comfortably above European trend growth and reflects downward revisions to economic growth in the first half as much as evolving risks. The biggest of these continue to be global trade tensions.

China's ongoing trade conflict with the U.S. has clearly taken its toll on the Middle Kingdom. For 2019, we expect GDP growth to slow to 6.0%, compared to the 6.3% we had previously penciled in. For 2018, we continue to expect 6.5%. The further slowdown reflects two competing trends. With the latest round of U.S. tariffs, some 44% of Chinese imports will now be subject to new tariff levies of some sort. This corresponds to Chinese goods worth some 250 billion dollars, using 2017 trade figures. Part of this will probably be reflected in higher prices, shrinking volumes and re-rooting of exports to other markets. Moreover, the drag on growth will likely be partly offset by various policy measures to boost China's domestic demand.

Over the next year, the net impact on GDP and inflation is likely to be fairly modest on both sides of the Pacific. To be sure, there is plenty of uncertainty and indeed scope for positive surprises if tariffs are lifted quickly. Moreover, U.S. tariff rates on the latest 189 billion dollars' worth of goods have initially been set at 10% in September. This rate is set to increase to 25% on January 1, presumably to spare U.S. consumers from even heftier price increases until Christmas. The inclusion of some 60 billion dollars' worth of Chinese consumer goods suggests the U.S. is starting to run low on targets in other areas. China has retaliated by slapping tariffs ranging from 5% to 25% on an additional 60 billion dollars' worth of U.S. exports.

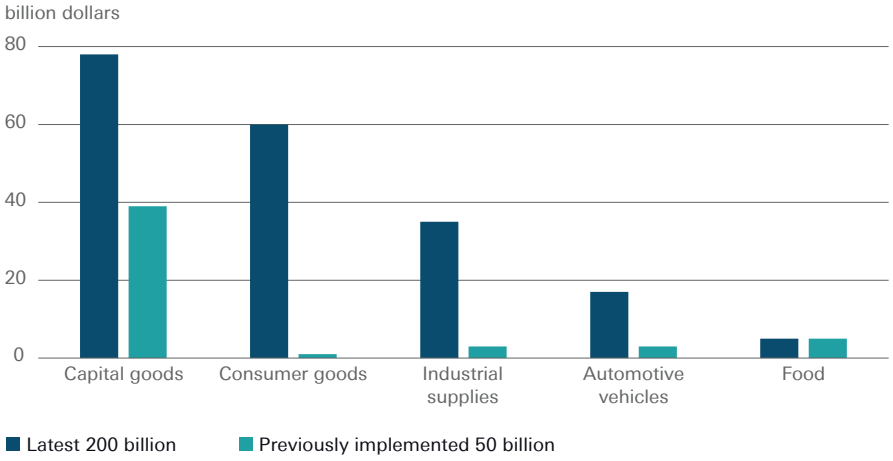
This will leave plenty of unsatisfied customers but is unlikely to derail the global economic cycle. That would probably take administrative measures such as quotas, directly threatening global supply chains. Import tariffs and quotas both reduce economic efficiency and productivity growth in the longer run. Tariffs tend

to do less and less lasting damage as customers can still get their hands on imports they really need. Tariffs can still cause plenty of disruption.[1] Just like even a particularly badly designed sales tax, however, tariffs are unlikely to derail an otherwise robust recovery. Indeed, we very slightly increased our U.S. GDP-growth forecast to 2.8%, from 2.7% for 2018. Our forecasts for 2019 are unchanged at 2.4%, partly reflecting the fading benefits of this year's U.S. tax cuts.

Taken all together, we expect the world as a whole to continue growing at 3.8% in both 2018 and 2019. Much of the world remains well away from any tangible signs of recession risks. So far, so good then, right? Well, yes and no. We remain sanguine for the next 12 months and can easily imagine a scenario where growth continues beyond that – potentially much longer. However, it is also worth keeping in mind that troubles in financial markets can and do impact real economies in surprising ways. Add angry voters, fickle elected officials and the fading effects of quantitative easing in developed markets to the mix, and the scope for policy mistakes is certainly increasing. History shows as much, most recently in Turkey.

A GROWING U.S. TARGET LIST

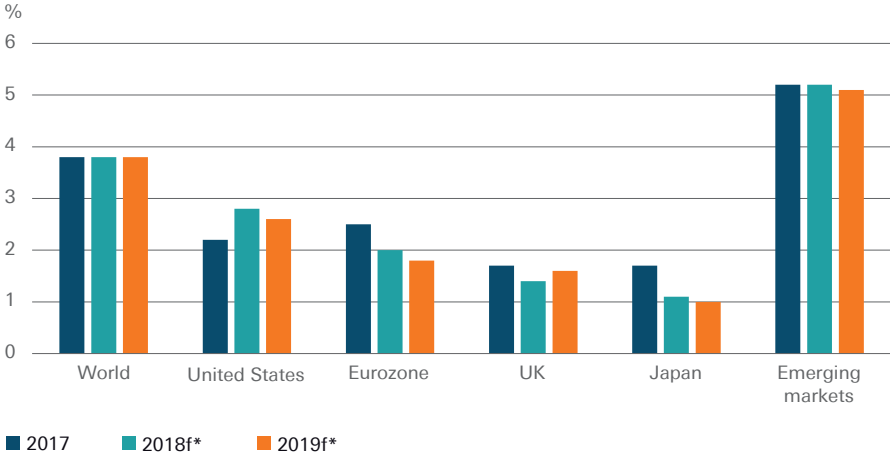
With the latest round of U.S. tariffs on imports from China, a growing number of goods and services will start to feel the impact.



Sources: Citigroup Inc., DWS Investment GmbH as of 09/2018

THE WORLD'S ECONOMIC GROWTH PROSPECTS

Global economic growth continues to be robust, but the composition is changing, partly reflecting slightly slower economic momentum in the Eurozone.



Sources: DWS Investment GmbH as of 9/18/18

* forecast

[1] The Economist neatly summed things up in a recently headline. „Why tariffs are bad taxes: Uneven and discriminatory, they can often have unintended consequences". The Economist, July 31st, 2018, available online at https://www.economist.com/the-economist-explains/2018/07/31/why-tariffs-are-bad-taxes

CREDIT, WHAT ELSE?

» We remain constructive on corporate credit and see selective opportunities in emerging-market bonds. «

Jörn Wasmund
Head of Fixed Income/Cash

IN A NUTSHELL

- We expect 2-year U.S. Treasuries to deliver a total return of approximately 2.8%, which looks quite attractive on a risk-adjusted basis.
- That said, we remain constructive on corporate credit.
- Some recent market moves look overdone to us. We see selective opportunities in emerging markets.

A lot has happened since this time last year. Overall, we have underestimated U.S. growth momentum so far this year. At least temporarily, tax cuts and spending increases have produced a bigger effect than we had initially thought. We also underestimated the potential for Fed action, following the change of leadership. By contrast, European growth has been slower than we expected. We were late in understanding the market consequences of Italy's changing political landscape and did not foresee the speed and extent of the spread widening in emerging-market bonds. On the plus side, our out-of-consensus currency call of 1.15 dollars per euro proved spot on.

As we head into the fall, our outlook remains broadly intact. We remain strongly in favor of the short to medium end of the U.S. Treasury curve. We expect 2-year Treasuries to deliver a total return of approximately 2.8%, which looks quite attractive on a risk-adjusted basis, particularly since we expect the dollar to trade sideways. That said, we remain constructive on corporate credit and see selective opportunities in emerging markets.

To take each of these themes in turn, we continue to see solid economic momentum in the United States. With no recession in sight, Fed tightening remains on track. In addition to the rate hike just implemented in September, we expect three more increases by September 2019. There might be one more, later on in 2019, perhaps marking the end of this tightening cycle. This would translate into a federal funds rate peaking in the range of 2.75% to 3.25% and may well coincide with an even flatter yield curve. For now, we have left our strategic forecasts for 10-year and 30-year Treasuries unchanged, at 3.25% and 3.45%, suggesting returns too low in longer-dated Treasuries to compensate for the corresponding duration risks.

In Europe, we currently tend to avoid core government bonds. Italy may continue to offer some tactical trading opportunities but with a lot of binary risk related to its uncertain politics and ratings outlook. We expect that a downgrade to junk can be avoided. In the short term, spreads will obviously depend on ongoing budget negotiations. Assuming no escalation in Europe's periphery, the ECB looks set to start its hiking cycle relatively slowly and to continue to reinvest proceeds from their various purchasing programs.

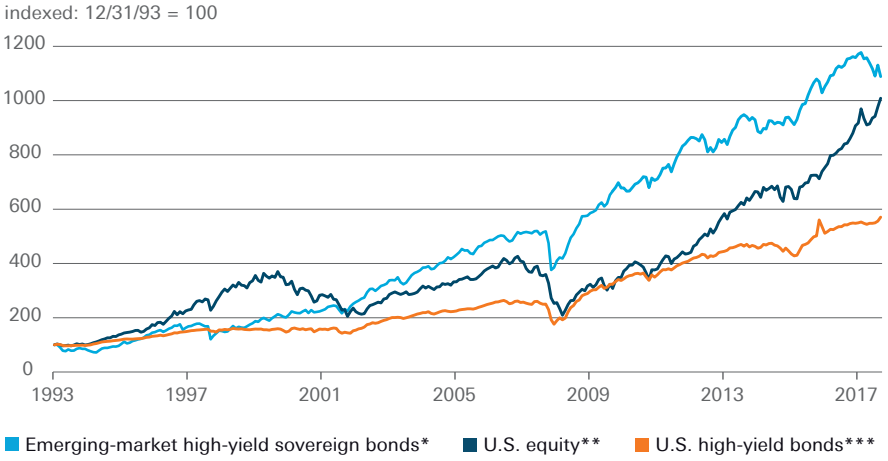
All this should provide a fairly favorable backdrop for corporate credit. In particular, we think that European credit markets have overreacted to the admittedly negative news flow we have seen in recent months. Going forward, we believe that spreads in investment-grade credit as well as euro high yield will tighten. In U.S. high yield, we think that it is reasonable to assume some widening but still see positive absolute returns. In contrast to many other riskier credit

assets, U.S. high yield has held up very well in recent months. In both Europe and the U.S. credit fundamentals remain solid, and default rates extremely low.

Recent sell-offs have also created selective opportunities in emerging markets. With spreads on emerging-market hard-currency sovereigns at 350 basis points, we see strategically attractive entry levels, for example in Russia. The recent increase in oil prices will help some emerging markets and hurt others. To be sure, there are plenty of risks to watch, including the upcoming presidential elections in Brazil. The rise of populism in both emerging and developed markets as well as the resulting tariff measures and trade tensions may continue to weigh on sentiment. Economically short-sighted U.S. trade policies could increase the scope for instability and could also contribute to slow or misguided policy responses in other countries. U.S. relations with Mexico's new left-wing government may prove more difficult to manage. That said, a lot of all this is already reflected in current emerging-market spread levels. With markets likely to remain volatile, a thorough understanding of country-specific factors will prove essential to correctly assess and time emerging-market opportunities. It is also worth keeping in mind that over the past 25 years, emerging-market bonds have been performing quite strongly, compared to other risky assets.

LONG-TERM RETURNS ON EMERGING-MARKET BONDS

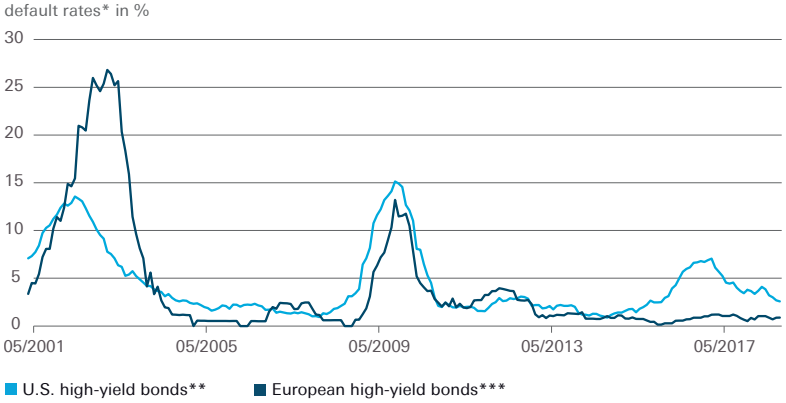
Despite recent setbacks, emerging-market sovereign bonds have outperformed U.S. equities and U.S. high-yield bonds over the past 25 years.



* J.P. Morgan EMBI Global Diversified High Yield Index
** S&P 500
*** ICE BofA Merrill Lynch US High Yield Index
Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 8/3/18

SOLID FUNDAMENTALS

High-yield default rates remain very low by historic standards, on both sides of the Atlantic.



* Default rate based on issuers 12 months prior to the date of default
** U.S.-domiciled companies in the ICE BofA Merrill Lynch Global High Yield Index
*** Europe-domiciled companies in the ICE BofA Merrill Lynch Global High Yield Index
Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 9/3/18

ON AN EVEN KEEL

» We currently see little reason for the rates of key currency pairs to shift. But that could soon change. «

IN A NUTSHELL

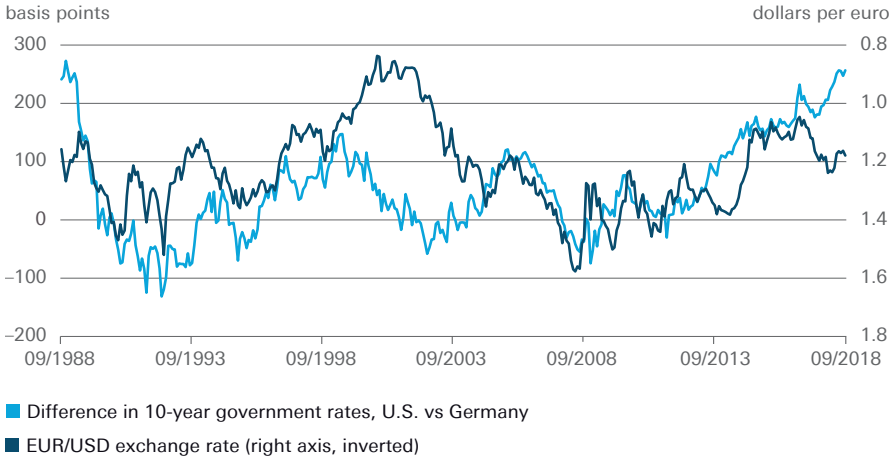
- We still see euro/dollar locked in a stalemate; economic and political factors continue to balance each other out.
- We see little need for adjustments in other currency pairs at the moment, but that could change in the fall.
- We expect the renminbi to continue weakening for a while, though Beijing could still intervene.

The probability that most currency pairs will trade more or less at their current levels for twelve months is, of course, very low. Yet we expect the exchange rates of the most important economic regions to fluctuate in a narrow range of plus/minus 4% – with movements of more than 10% only for emerging-market currencies. Why? There can be two reasons for predicting such low volatility. The first is the belief that all known input factors are adequately priced in, which we believe is the case now for the euro/dollar. The second reason is the certainty of momentous uncertainty. This means that we anticipate decisions during the forecast period that can produce very different results with, in turn, major significance for capital markets. These events include Brexit, the budget plans of the Italian government, the U.S. mid-term elections, and the question as to how far Trump is willing to escalate the trade conflict. Their outcome, or even the probability of the many different possible outcomes, is very hard to predict, and we prefer to take a neutral stance.

China's willingness to manipulate its own currency also falls into this category. In the case of the renminbi, however, we assume that it will continue to weaken even without any intervention and that 7.00 yuan to the dollar is not an obstacle. For the vast majority of the other currency pairs, our positioning remains Neutral. We will adopt a clearer stance again in the coming quarter within the framework of our full-year forecast for 2019 – provided there are good reasons to do so.

TELL ME SOMETHING NEW

The word is probably out that nominal rates are higher in the U.S. than in Germany, so the spread is of little help to predict short-term currency moves.



Source: Thomson Reuters Datastream as of 9/25/18

TECH IS KING – EVERYWHERE?

» Silicon Valley's lead is widening. We are impressed but not across the board, as the sector is pretty heterogeneous. «

Given the political news flow, equity markets have weathered the summer astonishingly well – at least from an American standpoint, which the U.S. President seems to never tire of stressing as the one that really counts: when America is doing well, the world is doing well. Well, not quite. First, global economic prosperity now almost equally depends on the well-being of China, whose GDP, adjusted for purchasing power, outstrips that of the United States. Second, too many American wins may also have a cost, triggering U.S. interest-rate hikes and a stronger dollar that could hurt emerging markets. But there's no doubt that, from the American perspective, things have been going exceptionally well.

In May, U.S. indices decoupled from their global counterparts, and since then have hit a raft of new all-time highs. Since August 22, Wall Street has experienced the longest S&P 500 bull run in its history – 3,453 days without a 20% pullback. The bullish reasons are easy to find. Thanks to a robust economy and the tax reform, the net profit of S&P 500 companies was up by an average of 25% in the second quarter, thereby beating 80% of analyst projections – a multi-year record. Furthermore, CEOs know exactly how to please their shareholders, who do not want repatriated foreign profits to trickle down through capital expenditure (capex) and higher operating profits but prefer the direct route: juicy share buybacks. In the first half of this year, buybacks, up by 48%, exceeded capex, up only 19% year-on-year, for the first time in ten years. One key driver of this development has been technology (tech). Its market dominance is giving us good reason to take a closer look.

We spent two months in Silicon Valley, the beating heart of the tech sector, and spoke with over 100 experts and senior executives during visits to both private and listed companies. Silicon Valley is truly astonishing. It is home to only 1.25% of the U.S. population but accounts for one third of the market cap of the S&P 500. Half of the U.S. venture capital is invested there. The starting salaries of top college graduates exceed even those on Wall Street. And rents have skyrocketed: it would take 4.7 minimum-wage jobs to afford a 2-bedroom apartment in San Francisco, as this can cost anything between 2,000 and 7,000 dollars per month. All this one can read. But in order to fully understand the exceptional status of this region and its companies, a field trip was necessary. After all, the investment decisions of active fund managers are also based on first-hand impressions. The most formative of these were:

_ From a European perspective, Silicon Valley appears to be years ahead of much of the rest of the world in some regards.

_ This has to do with the Valley's proverbial network effects but also

Thomas Schüßler
Co-Head of Equities

Andre Köttner
Co-Head of Equities

IN A NUTSHELL

_ Our regional and sector stance is Neutral heading into fall, when we expect key political decisions.

_ We remain convinced of the tech sector's structural strengths, but we are adopting a more cautious tactical position.

with the vast sums top players here can plough into tech projects that may take years to monetize.

_ Much of the available cash flows into acquisitions, driving prices for young companies to levels that few outside the Valley can afford.

_ The big, successful players also cement their concentration of power in other ways. In the competition for talent, a company must be able to score points for innovation leadership or a hip image. Even established tech companies from the turn of the millennium struggle to keep up with the trendiest new entrants.

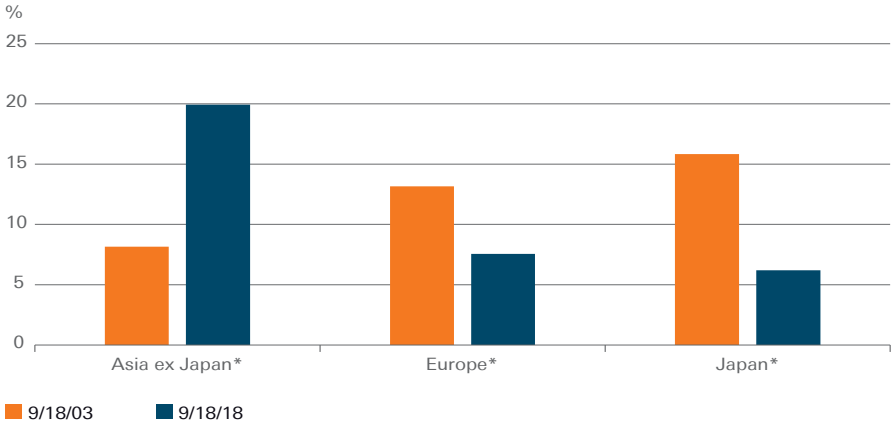
_ In the Valley, it's (almost) all about scalability and speed. The objective is to seize new markets ahead of the competition, create barriers to access through size and achieve exponential sales growth. If a company shows it is on track to achieve these goals, no one cares about operating losses, even if they are large.

So much for our impressions on the ground. What can we incorporate from this into our investment strategy? We have undoubtedly gained respect for this powerhouse, which in many regards looks unassailable. For some time it looked as though Chinese firms, in their protected domestic market, could hold their own against the big boys from the West Coast. But the Chinese tech sector has lost almost one quarter of its value since its high in the summer, with the trade war unleashed by President Trump undoubtedly a contributing factor. European or Japanese competition has meanwhile become almost negligible, as can be clearly seen in the chart showing the development of the market capitalization of the respective tech indices. We left the Californian coast suitably impressed, especially since we believe that the new wave of digitalization and networking will bring structural tailwinds to the sector for years to come. Valuations on certain metrics are high, but price-to-earnings multiples are not as demanding as at the beginning of the millennium – because profits are so impressive. And yet, surprising as it may seem, we are downgrading the sector to Neutral on tactical grounds.

Leaving aside medium-term concerns about regulation, competition and changed customer preferences and focusing on the short term, the summer has demonstrated just how high the expectations pinned on this far from homogeneous sector are. Some heavyweights saw their stock prices plummet after their apparently unassailable competitive position was called into question. But our downgrade also has to do with the restructuring of the MSCI Information Technology Index on which we base our sector weighting. At the end of November, some of our favorite stocks will move to the newly created "Communication" Index, thereby increasing the weight of the more cyclical semiconductor stocks. (This reclassification has already happened in the S&P 500 index). We are therefore upgrading the "Communication" sector, which comprises the old Telecom Index, to Neutral. Consequently, we are entering the fall with no clear regional and sector preferences. But the coming months will bring key political developments, on Brexit, the trade conflict and Italy as well as the results of the U.S. mid-term elections. What happens in the coming months will give us a better basis on which to build our next forecast cycle.

U.S. TECH STOCKS EXTEND THEIR LEAD

Europe's and Japan's tech sectors are losing ground versus the United States', while Asia is closing the gap.

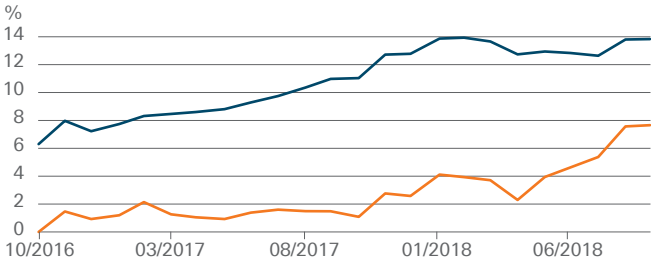


* Market capitalization of the regional MSCI Information Technology indices as a percentage of the market capitalization of the MSCI USA Information Technology Index
Source: Thomson Reuters Datastream, DWS Investment GmbH as of 9/18/18

VALUATIONS OVERVIEW

UNITED STATES: NEUTRAL (NEUTRAL)*

The last few months have seen U.S. equities reinforce their special status by racing ahead of the other global exchanges. Seldom before has the U.S. market decoupled so quickly and so far – also in terms of valuation – from other markets. The primary factor here is the tech sector – alongside short-term support from the tax reform and a higher oil price. From here on, we, however, believe the potential for positive surprises is limited.

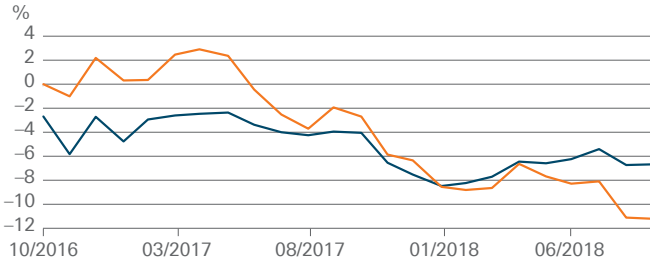


■ Relative valuation (P/E ratio): S&P 500 vs. MSCI AC World Index

■ Relative performance: S&P 500 (in dollars) vs. MSCI AC World Index (in local currency)

EUROPE: NEUTRAL (NEUTRAL)*

European equities are currently coming under pressure from numerous sides. The trade conflict and the weakness in emerging markets are having a major impact on this region that relies so heavily on exports. In Germany, this also includes an auto sector struggling with its own specific problems and a slowdown in global demand. Earnings growth, valuation and the potential for positive surprises do, however, speak in favor of this region.

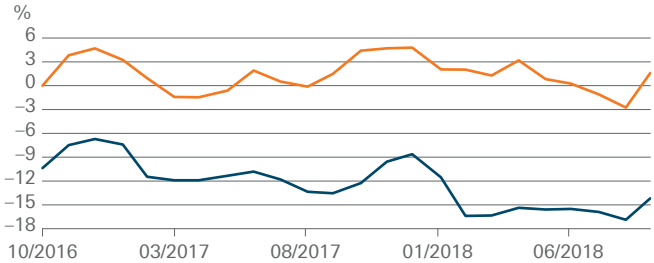


■ Relative valuation (P/E ratio): Stoxx Europe 600 vs. MSCI AC World Index

■ Relative performance: Stoxx Europe 600 (in euros) vs. MSCI AC World Index (in local currency)

JAPAN: NEUTRAL (NEUTRAL)*

The picture in Japan is unchanged. The reform process is running its course, also reflected in returns on equity that are slowly approaching the international average again. The latest quarterly numbers were also convincing, but earnings growth is currently losing momentum. As in Europe, the trade conflict and the weakness in emerging markets are also hurting Japanese equities. We are waiting for a new trigger.

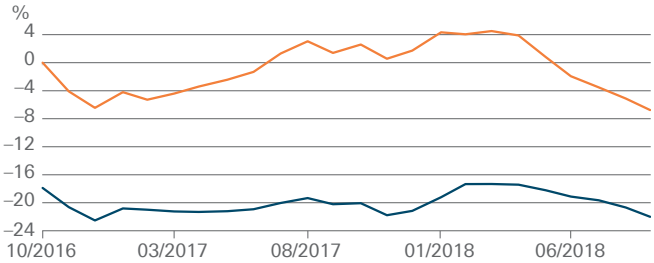


■ Relative valuation (P/E ratio): MSCI Japan Index vs. MSCI AC World Index

■ Relative performance: MSCI Japan Index (in yen) vs. MSCI AC World Index (in local currency)

EMERGING MARKETS: NEUTRAL (NEUTRAL)*

This year, investors are closely monitoring emerging markets. Since February, equity markets there have lagged behind their foreign counterparts after rising U.S. interest rates and a strong U.S. dollar had amplified the problems of some frail countries. These are primarily outside Asia where, however, the trade war is casting a longer shadow. Nevertheless, we do not expect market contagion. We continue to see opportunities primarily in Asia.



■ Relative valuation (P/E ratio): MSCI Emerging Markets Index vs. MSCI AC World Index

■ Relative performance: MSCI Emerging Markets Index (in dollars) vs. MSCI AC World Index (in local currency)

* Our assessment is relative to the MSCI AC World Index, the last quarter's view is shown in parentheses.
Sources: FactSet Research Systems Inc., DWS Investment GmbH as of 9/29/18

ESSENTIAL INFRASTRUCTURE

» Why the investment appeal of infrastructure continues to grow. «

Hamish Mackenzie
Head of Infrastructure

IN A NUTSHELL

- It is easy to understand why infrastructure continues to attract long-term investors.
- Mature markets continue to offer inflation-hedged, long-term income-return stability, relatively low cash-flow volatility, and some capital-growth potential.
- Regulatory frameworks can help protect infrastructure assets against political risks.

In recent years, infrastructure has become increasingly popular among long-term investors. Ports, airports, electricity generation, grid networks and telecommunications networks are by their nature essential to modern, industrialized economies. Typically, barriers to entry are high. Performance can be resilient against cyclical headwinds. Moreover, cash flows generated by infrastructure assets tend to be long-term and predictable, offering varying degrees of inflation protection.

European infrastructure looks well positioned for further growth, reflecting the continuing solid underlying economic momentum. Of course, European politics could once again get in the way. The issues we are watching include the Brexit developments, budget negotiations in Italy and upcoming elections, such as European parliament elections next year. Do not be too distracted by unnerving headlines, however. Western European markets such as the United Kingdom, Germany, the Netherlands, the Nordics and France offer transparent regulatory frameworks and a long history of private infrastructure ownership supporting infrastructure investment. Sometimes political risks can also create opportunities for long-term investors. Today, some infrastructure assets in Europe's Southern periphery can offer attractive risk-adjusted return potential in this regard.

Infrastructure is increasingly playing a key role in governments' agenda to boost economic growth. Eurozone bond yields remain below their long-term historical average. A gradual pick-up in inflation would hurt bond prices – but support the performance of infrastructure assets with inflation-linked revenues. Although returns vary by country, sector and asset, we estimate levered, unlisted infrastructure-equity entry returns for lower-risk assets in mature European markets to be in the range of 7% to 8% in 2018.[1] Returns are likely to remain compressed, particularly for regulated networks. The main reason is fierce competition among potential buyers, especially for larger deals. There are more opportunities for investors to acquire infrastructure assets in the middle market[2], particularly via bilateral transactions, where entry-return assumptions can be in the 10% to 12% range, and active asset management can support value generation. The devil, as always, is in the details, and a sound understanding of underlying market, regulatory and sector dynamics is key.

Among different asset types, we see transportation outperforming and traffic volumes improving, particularly across European airports. The outlook for European ports is relatively stable. If trade tensions continue, we would still see ports in strategic locations proving resilient in the medium term. Challenges also remain in the power segment. For years, European electricity demand has been fairly weak, due to rising energy efficiency. This has forced utilities to rethink their business models.

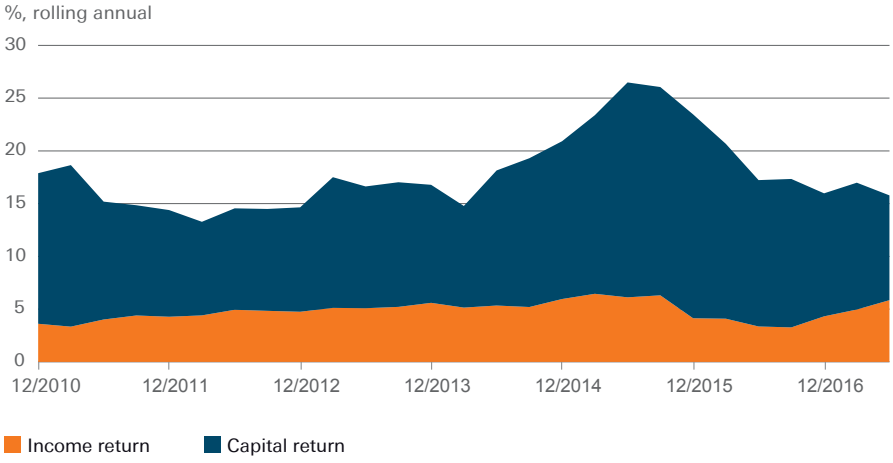
From a long-term investor perspective, we see opportunities to partner with smaller utilities in Europe, while recognizing that fading subsidies for renewables can expose investors to excessive tail risks. Therefore, at the moment, we prefer renewables in the United States, where a market for power purchase agreements (PPA)[3] is developing quickly, improving long-term return visibility.

This is just one example of how U.S. infrastructure could gradually offer more opportunities for long-term investors to diversify their European portfolios globally. The U.S. private-infrastructure market is relatively mature and represents one of the largest globally in terms of transaction volumes. In the medium term, the renewed policy focus on infrastructure could offer more opportunities to build diversified infrastructure portfolios beyond the energy sector.

Finally, we view the telecom networks favorably, as digitalization continues to generate unprecedented data-demand growth and need for infrastructure investment. More broadly, technological change represents an accelerating and highly disruptive driver for the infrastructure industry, with battery storage, smart grids and electric mobility triggering new synergies among utilities, telecoms and networks. We believe that, as these technologies mature, new investment opportunities are likely to emerge.

STEADY RETURNS IN GLOBAL TRANSPORTATION INFRASTRUCTURE

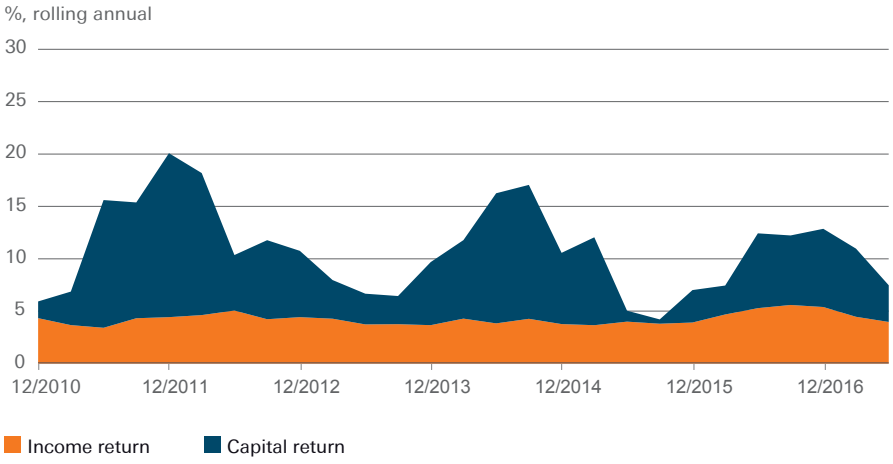
We see transportation outperforming as traffic volumes are improving, particularly across European airports.



Sources: DWS Investment GmbH, MSCI Inc. as of 09/2018, using the MSCI Global Infrastructure Asset Index in local currency

RETURN VOLATILITY IN ENERGY INFRASTRUCTURE

Challenges remain in the power segment. In Europe, the growing share of renewables capacity continues to squeeze conventional electricity generation.



Sources: DWS Investment GmbH, MSCI Inc. as of 09/2018, using the MSCI Global Infrastructure Asset Index in local currency

[1] This is based on Internal Rate of Return (IRR) estimates commonly used to assess the profitability of unlisted investment opportunities. It measures the discount rate at which the net present value (NPV) of all cash flows from a particular project is equal to zero.
[2] Term used for companies in-between main-street companies (with revenue up to approx. $100 million) and multi-national companies (with revenues above $1 billion).
[3] Legal contract between a power purchaser and an electricity generator.

HARMONY – WITH OFF-NOTES

» We believe the economic and market upswing will continue, but risks are getting bigger. «

Christian Hille
Head of Multi Asset

IN A NUTSHELL

- The economy continues to hum along, and the markets are loving it, above all in the United States.
- Risks are rising, and yet we believe investors may be right to stay invested.
- Some risk parameters will deteriorate further, but we think this also harbors opportunities.

In the third quarter, a familiar trio, good economic data, political disappointment and patient investors, combined to produce a remarkably happy melody in the markets. We think they will also provide the music for the final quarter of the year. Although some emerging markets started to go badly out of tune in the summer, the global economy as a whole remained harmonious. And even though by June 2019 the United States could set the record for the longest economic upswing in post-WWII history, we are having a hard time finding reliable indicators that suggest the cycle will end soon – at least when we look at traditional models.

And yet we see the potential for threats disturbing the market's harmony as politics throws out more and more wrong notes and central banks start to sing from a completely different hymn sheet. In Europe, Brexit and anti-globalization populism are entrenched as long-term sources of discord. The latest signals from Rome to Brussels could also prove an enduring headache. Meanwhile, some emerging markets are coming up with sour notes that are reminiscent of times past. And the new, unorthodox foreign and trade policies of the U.S. are highly unpredictable and have the potential to create discord. The central banks are doing all they can, but they have a new priority: the serious business of shortening their balance sheets.

Politics and the changing tune of the central banks could test the nerves of the third element of the trio: investors. They have been kept happy in part by large doses of a calming drug called monetary expansion. What has also reassured them is that so far none of the political hotspots has succeeded in throwing global GDP growth off course. Therefore, every market setback has been seen – for good reason – as a buying opportunity. And, indeed, those who avoided the riskier, higher-yielding asset classes because of the imponderables alluded to above are now feeling left out and are thinking twice about playing it safe. An environment of this kind fosters complacency and a more relaxed attitude towards risk. That is evident now in historically high valuations and volatility which, while not at the record lows of last year, has escaped the turbulence at the beginning of the year. It is indeed in very quiet waters again – though this is only true for the most popular volatility indicator, the volatility implied in futures contracts.

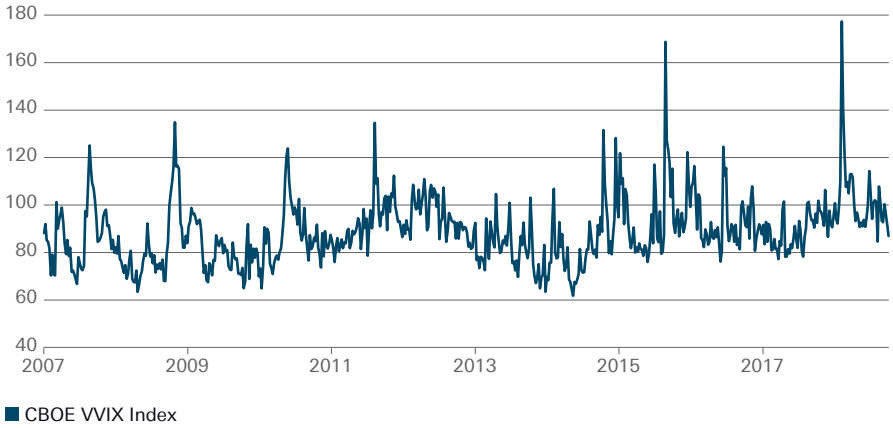
Alternative indicators paint a very different picture. Take, for example, the CBOE VVIX Index (VVIX), which measures the implied volatility of VIX options on the S&P 500. So far this year, the average VVIX reading has been above all annual averages calculated since the index was created in 2007. A second source shows underlying strain: kurtosis, which describes the shape of a probability distribution. Applied to capital markets, this

measure shows the extent to which price fluctuations are normally distributed or characterized by extreme fluctuations. In a normal distribution, the kurtosis reading is 3. As the chart shows, the S&P 500 occasionally rises above 3, but it has never been as high as this year.

Exactly why market reactions are currently more often outside the "normal" bandwidth of expectations is a topic for another time. It may be the current cluster of political events with highly uncertain outcomes and a potentially major impact on capital markets. At any rate, we think the market fluctuations will tend to increase rather than diminish in intensity. That may sound bad since investors are afraid of uncertainty, but we also see a silver lining. Namely, that thorough analysis is needed and may be rewarded. Investors must conduct a careful analysis and gauge how much faith they put in different outcomes. They must then deduce the level of risk that is acceptable to them and take appropriate positions. Risk management of this kind is ultimately one of the core missions of Multi-Asset Management – and a potential source of added value.

THE NERVOUS VOLATILITY OF S&P 500 VOLATILITY

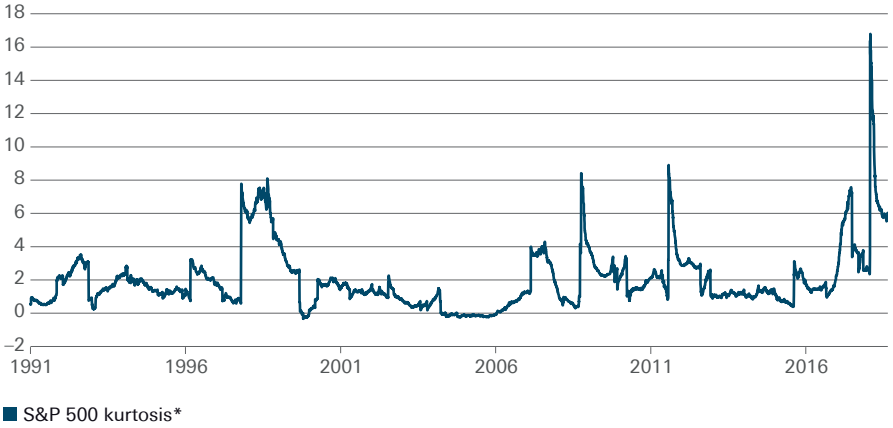
The volatility of the S&P 500 may be at an all-time low, but there is more anxiety in the index than assumed, as evidenced by the VVIX.



Source: Thomson Reuters Datastream as of 10/5/18

THE S&P 500'S KURTOSIS ALSO REVEALS NERVOUSNESS

Kurtosis reveals what the price chart of the S&P 500 does not: unusual times.

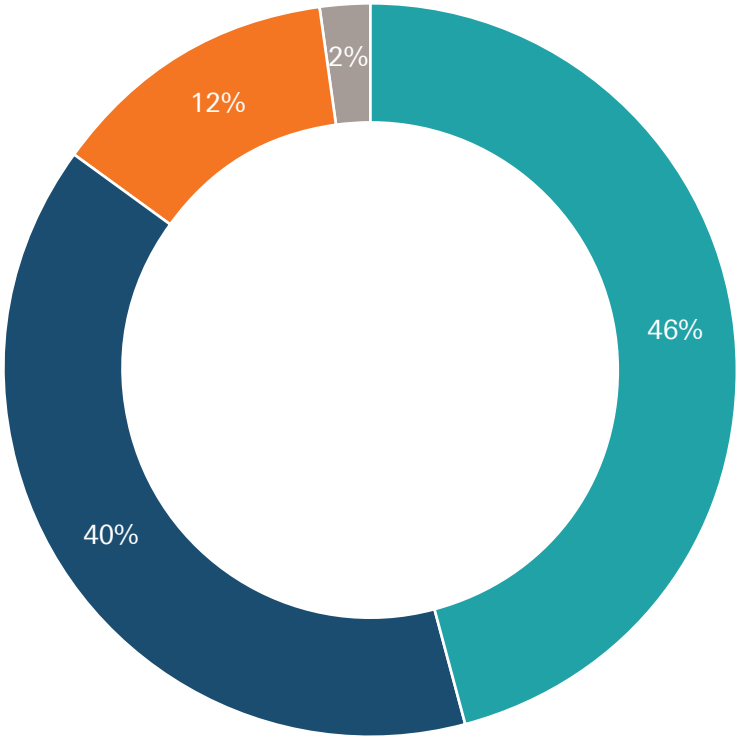


* Kurtosis describes the shape of a probability distribution curve. The higher the number, the more outcomes occur at the tails of the curve.
Source: Bloomberg Finance L.P., DWS Investment GmbH as of 09/2018

ONLY MINOR ADJUSTMENTS NEEDED

» Equity and EM external debt still favored. «

Little has changed over the past quarter. The economy is at an advanced stage of the cycle, which in our view continues to favor higher yielding asset classes, even if volatility might increase. Therefore, we continue to favor equities over corporate bonds. In particular, European and Japanese equities should have catch-up potential due to seasonal factors, while emerging markets may remain vulnerable. For fixed income, however, selected emerging markets with solid fundamentals remain the preferred choice due to their generally higher yield levels. Commodities are more likely to show signs of consolidation following energy-price increases. For the time being, we have no particular preference for any major currency pair.



Equity	**46%**
Equities United States	17%
Equities Europe	10%
Equities emerging markets	8%
Equities Japan	6%
Equities Global Style	5%
Fixed Income	**40%**
Euro investment grade	18%
Emerging-market (hard-currency) bonds	9%
Eurozone sovereigns	5%
U.S. Treasuries	3%
Euro high yield	3%
U.S. high yield	2%
Alternatives	**12%**
Convertibles (euro-hedged)	5%
Alternatives strategies	4%
Commodities	3%
Cash	**2%**

Source: Multi Asset Group, DWS Investment GmbH as of 9/25/18

The chart shows how we would currently design a balanced, euro-denominated portfolio for a European investor taking global exposure. This allocation may not be suitable for all investors and can be changed at any time without notice. Alternative investments involve various risks and are not necessarily suitable for all clients or for every portfolio.

AUTUMN WITH SUNNY SPELLS

» Indicators still point to neutral to positive environment. «

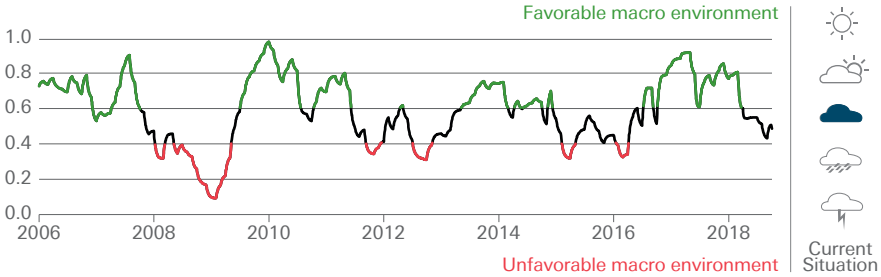
In the third quarter, indicators again mirrored the ups and downs of the markets and the mood swings of investors. As in the first half of the year, the risk indicator was very volatile. Following a recovery in July, global uncertainties led to increased risk aversion, particularly in early August and again in early September. The risk indicator has been signaling a friendly environment again since mid-September, in particular as a result of the stabilization in emerging markets.

On the fundamental side, the signals and changes were less strong. The macro indicator steadily deteriorated from a very high level in the first half of the year but has now stabilized and is neutral. Currently, neither a growth spurt nor an impending recession is indicated. The surprises were also less strong. From mid-August to mid-September, data releases were rather disappointing globally. Apart from that, however, data largely met analysts' expectations and often even surprised positively, especially in September in the United States and recently also in Europe.

All in all, our three indicators paint an optimistic late summer - but they are likely to turn down if autumn storms approach.

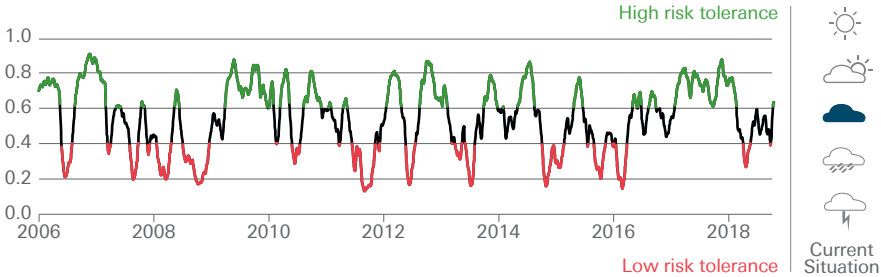
MACRO INDICATOR

Condenses a wide range of economic data



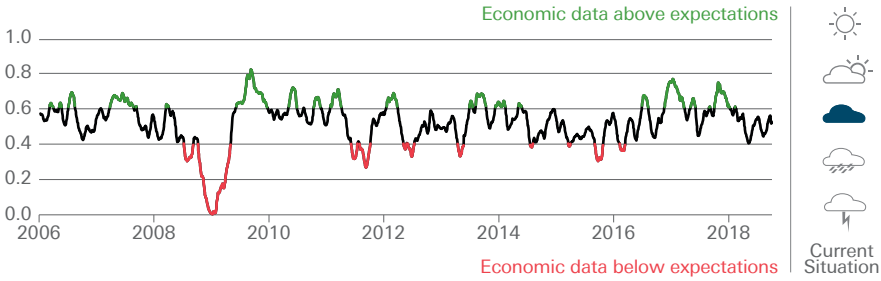
RISK INDICATOR

Reflects investors' current level of risk tolerance in financial markets



SURPRISE INDICATOR

Tracks economic data relative to consensus expectations



Source: DWS Investment GmbH as of 10/4/18

A CHANGING CLIMATE

» What to make of the growing frequency and intensity of extreme weather events. «

Petra Pflaum
CIO for Responsible Investments

IN A NUTSHELL

- Climate change can create opportunities as well as risks.
- Increasingly, investors need to understand the potential financial impact on individual companies and whole portfolios.
- Over the past 12 years, we have adjusted and continuously improved our investment process accordingly.

Well before Hurricane Florence hit the Carolina coastline, The New York Times called 2018 "the year global warming made its menace a reality."[1] Alas, recent heat waves, fires and flooding should have come as no surprise. As the Potsdam Institute for Climate Impact Research recently put it, "More and more people are suffering from increasing and often unprecedented extreme weather, both in terms of casualties and financial losses. (…) as warming continues, (…) our planet also runs a growing risk of crossing critical tipping points where major and largely irreversible changes to the Earth's systems are triggered."[2]

So, how should investors and asset managers react? Well, climate change can create opportunities as well as risks for long-term investors. The transition to an economy with much lower carbon emissions will be shaped not just by the increasingly visible real-world effects of climate change but also by changes in policies, technologies, consumer preferences and market norms. Higher taxes on carbon emissions and litigation, for example, can increase companies' operating costs or change the demand for their products and services. Technology development can make incumbent companies uncompetitive. Of course, there is no guarantee that policies to mitigate climate-related risks are suitable in every country or sector.[3] Essentially, climate-change risks and opportunities may be mispriced or incorrectly assessed by many investors. This suggests that the topic should best be approached with a combination of humility and an open mind. At DWS, this is precisely the approach we have taken for over ten years.

For instance, we recently asked investment professionals throughout our investment platform to assess whether, how and by how much their subsector of coverage will be impacted positively or negatively within one and within five years. Thanks to the assessments of our sector analysts across credit, high yield and equities, we were able to create an interrelationship map on the effects that climate change is having within and across different subsectors of the global economy. Already, this process has helped identify key topics affecting the future performance of many subsectors. These can range from structural changes in energy-generation business models to a reassessment of growth potential in the car industry. Other examples include the ability of utilities to maintain or expand margins and of insurers to sustain asset values and more broadly the impact on capital spending and innovation within and across subsectors.

The real surprises, though, come when you look into the specifics. Take utilities, for example. On the plus side, demand for renewable energy and distributed energy infrastructure looks set to continue to increase, as more and more industries are becoming more aware of their emissions footprint. This should be good news

for electric utilities able to grow their investments in onshore, offshore wind and solar parks. The need to integrate these parks into the energy system is likely to entail a growing role for companies focused on the transmission and distribution networks. This may boost the capacity to capitalize on some of the opportunities offered by structural changes within the broader industry. Since climate change is not just the emission topic, we are likely to see its impacts in other subsectors of the utility space, too. Among water utilities, the growing lack of water availability in several regions looks set to cause more and more companies to invest in areas such as water desalination plants and to demand additional water services being offered by water utilities. Among utilities, there will likely be winners from climate change, as well as losers in areas such as thermal generation. Given the growing frequency and intensity of extreme weather events like flooding, heat waves and droughts, regulatory and technology changes aimed at combatting climate change look set to accelerate further, perhaps more so than markets think. At DWS, we are doing our best to be prepared.

CLIMATE-RELATED RISKS, OPPORTUNITIES AND FINANCIAL IMPACT

Sources: Task Force on Climate-related Financial Disclosures (June 2017). Recommendations of the Task Force on Climate-related Financial Disclosures. Page 16: https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf, DWS Investment GmbH

[1] The New York Times - 10 August 2018, https://www.nytimes.com/2018/08/09/climate/summer-heat-global-warming.html
[2] Potsdam Institute for Climate Impact Research: Stefan Rahmstorf and Anders Levermann, Preface to Mission 2020, April 2017. https://www.mission2020.global/climate-turning-point/
[3] According to Climate Action Tracker no major country is on track to meet its international commitments from the 2015 Paris Agreement. https://www.nytimes.com/interactive/2017/11/06/climate/world-emissions-goals-far-off-course.html

MACRO | Global divergence and faster U.S. growth

GDP growth (in %, year-on-year)

Region	2018F		2019F
United States	2.9	↘	2.4
Eurozone	2.0	↘	1.8
United Kingdom	1.4	↗	1.6
Japan	1.1	↘	1.0
China	6.5	↘	6.0
World	3.8	→	3.8

Fiscal deficit (in % of GDP)

Region	2018F		2019F
United States	4.0	↗	4.6
Eurozone	0.9	↘	0.8
United Kingdom	2.5	↗	2.7
Japan	4.0	↘	3.3
China	3.5	↘	3.2

Consumer price inflation (in %, year-on-year)

Region	2018F		2019F
United States[1]	2.0	↗	2.1
Eurozone	1.7	→	1.7
United Kingdom	2.5	↘	2.0
Japan	1.0	↗	1.4
China	2.0	↗	2.2

Current-account balance (in % of GDP)

Region	2018F		2019F
United States	–2.7	↘	–3.0
Eurozone	3.0	↘	2.9
United Kingdom	–3.8	↘	–4.0
Japan	3.8	→	3.8
China	0.8	↘	0.6

Benchmark rates (in %)

Region	Current*		Sep 2019F
United States	2.00–2.25	↗	2.75–3.00
Eurozone	0.00	→	0.00
United Kingdom	0.75	↗	1.00
Japan	0.00	→	0.00
China	4.35	→	4.35

Commodities (in dollars)

	Current*		Sep 2019F
Crude oil (WTI)	73.3	↘	65
Gold	1,191	→	1,275
Copper (LME)	6,258	↗	6,400

* Source: Bloomberg Finance L.P. as of 9/28/18
[1] core rate, personal consumption expenditure Dec/Dec in % (no average as for the other figures)
F refers to our forecasts as of 9/18/18
WTI = West Texas Intermediate
LME = London Metal Exchange

Legend applies to this and the following page
_ Equity indices, exchange rates and alternative investments: The arrows signal whether we expect to see an upward trend ↗, a sideways trend → or a downward trend ↘ .
_ Fixed Income: For sovereign bonds, ↗ denotes rising yields, → unchanged yields and ↘ falling yields. For corporates, securitized/specialties and emerging-market bonds, the arrows depict the option-adjusted spread over U.S. Treasuries. ↗ depicts a rising spread, → a sideways trend and ↘ a falling spread.
_ The arrows' colors illustrate the return opportunities for long-only investors: ↘ ↗ positive return potential for long-only investors. → limited return opportunity as well as downside risk. ↘ ↗ negative return potential for long-only investors.

EQUITIES | Limited upside potential

	Current*		Sep 2019F Forecast	Total return (expected)[1]	Expected earnings growth	P/E impact	Dividend yield
United States (S&P 500)	2,914	↗	3,000	5.0%	10%	–6%	2.0%
Europe (Stoxx Europe 600)	383	↗	390	5.4%	7%	–6%	3.6%
Eurozone (Euro Stoxx 50)	3,399	↗	3,410	4.2%	7%	–6%	3.9%
Germany (Dax)[2]	12,247	↗	12,800	4.5%	6%	–4%	3.2%
United Kingdom (FTSE 100)	7,510	→	7,400	3.1%	6%	–6%	4.5%
Switzerland (Swiss Market Index)	9,088	↗	9,100	3.6%	13%	–11%	3.5%
Japan (MSCI Japan Index)	1,082	→	1,090	3.0%	7%	–6%	2.2%
MSCI Emerging Markets Index (USD)	1,048	↗	1,070	4.8%	11%	–8%	2.7%
MSCI AC Asia ex Japan Index (USD)	655	↗	680	6.5%	10%	–6%	2.8%
MSCI EM Latin America Index (USD)	2,577	→	2,500	0.5%	10%	–12%	3.4%

* Sources: Bloomberg Finance L.P., FactSet Research Systems Inc. as of 9/28/18
[1] Expected total return includes interest, dividends and capital gains where applicable
[2] Total-return index (includes dividends)

FIXED INCOME | Little change in our targets

United States

	Current*		Sep 2019F
U.S. Treasuries (10-year)	3.06%	↗	3.25%
U.S. municipal bonds	85%	→	85%
U.S. investment-grade corporates	100 bp	↘	95 bp
U.S. high-yield corporates	316 bp	↗	370 bp
Securitized: mortgage-backed securities[1]	78 bp	↗	90 bp

Europe

	Current*		Sep 2019F
German Bunds (10-year)	0.47%	↗	0.80%
UK Gilts (10-year)	1.57%	↗	1.75%
Euro investment-grade corporates[2]	128 bp	↘	100 bp
Euro high-yield corporates[2]	356 bp	↘	325 bp
Securitized: covered bonds[2]	53 bp	↘	40 bp
Italy (10-year)[2]	267 bp	→	250 bp

* Source: Bloomberg Finance L.P. as of 9/28/18
[1] Current-coupon spread vs. 7-year U.S. Treasuries
[2] Spread over German Bunds

F refers to our forecasts as of 9/18/18
bp = basispoints

Asia-Pacific

	Current*		Sep 2019F
Japanese government bonds (10-year)	0.13%	↗	0.20%
Asia credit	253 bp	→	255 bp

Global

	Current*		Sep 2019F
Emerging-market sovereigns	343 bp	→	350 bp
Emerging-market credit	321 bp	↗	350 bp

Currencies

	Current*		Sep 2019F
EUR vs. USD	1.16	→	1.15
USD vs. JPY	113.7	→	111
EUR vs. GBP	0.89	→	0.9
GBP vs. USD	1.3	→	1.28
USD vs. CNY	6.87	→	7

PERFORMANCE | Overview

Performance over the past 5 years (12-month periods)

	09/13 – 09/14	09/14 – 09/15	09/15 – 09/16	09/16 – 09/17	09/17 – 09/18
Dax	10.2%	2.0%	8.8%	22.1%	–4.5%
Euro Stoxx 50	11.5%	–3.9%	–3.2%	19.7%	–5.4%
FTSE 100	2.5%	–8.5%	13.8%	6.9%	1.9%
ICE BofA Merrill Lynch Global High Yield Index	6.2%	–5.3%	12.8%	9.8%	1.2%
ICE BofA Merrill Lynch US High Yield Index	7.2%	–3.6%	12.8%	9.0%	2.9%
J.P. Morgan EMBI Global Diversified High Yield Index	12.2%	–1.8%	18.6%	7.1%	–3.2%
MSCI AC Asia ex Japan Index	5.8%	–14.4%	14.0%	20.0%	–0.9%
MSCI AC Asia ex Japan Information Technology Index	15.0%	–12.5%	30.5%	39.1%	–2.3%
MSCI AC World Index	10.0%	–6.9%	9.1%	15.9%	9.2%
MSCI EM Latin America Index	–4.0%	–40.2%	25.7%	22.5%	–11.7%
MSCI Emerging Market Index	1.8%	–21.2%	14.1%	19.7%	–3.1%
MSCI Europe Information Technology Index	7.6%	5.9%	17.1%	16.2%	10.4%
MSCI Japan Index	10.5%	5.0%	–7.0%	24.6%	9.1%
MSCI Japan Information Technology Index	26.0%	0.9%	–2.7%	44.9%	1.8%
MSCI USA Information Technology Index	26.2%	0.4%	20.2%	26.5%	30.9%
S&P 500	17.3%	–2.6%	12.9%	16.2%	15.7%
Stoxx Europe 600	10.5%	1.4%	–1.4%	13.2%	–1.3%
Swiss Market Index	10.1%	–3.6%	–4.4%	12.5%	–0.8%

	09/13 – 09/14	09/14 – 09/15	09/15 – 09/16	09/16 – 09/17	09/17 – 09/18
Asia credit	8.5%	2.8%	10.5%	2.2%	–1.0%
Emerging-market credit	8.4%	–2.0%	13.3%	5.9%	–1.2%
Emerging-market sovereigns	9.7%	–0.6%	16.2%	4.6%	–1.9%
Euro high-yield corporates	8.6%	–0.4%	9.7%	7.5%	0.8%
Euro investment-grade corporates	7.7%	–0.5%	7.4%	0.5%	0.0%
German Bunds (10-year)	9.0%	3.9%	6.7%	–3.2%	0.8%
Italy (10-year)	20.7%	5.8%	6.8%	–3.3%	–4.5%
Japanese government bonds (10-year)	2.7%	2.4%	3.7%	–1.2%	–0.2%
Securitized: covered bonds	7.8%	1.6%	3.7%	–1.3%	0.1%
Securitized: mortgage-backed securities	3.8%	3.4%	3.6%	0.3%	–0.9%
U.S. high-yield corporates	7.2%	–3.4%	12.7%	8.9%	3.0%
U.S. investment-grade corporates	6.6%	1.5%	8.3%	2.0%	–1.1%
U.S. Treasuries (10-year)	3.5%	6.2%	5.4%	–3.0%	–3.0%
UK Gilts (10-year)	4.5%	7.4%	9.9%	–2.7%	0.2%

Source: Bloomberg Finance L.P. as of 9/28/18

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GLOSSARY

» Here we explain central terms from the CIO | VIEW «

A balance sheet summarizes a company's assets, liabilities and shareholder equity.

One basis point equals 1/100 of a percentage point.

Brexit is a combination of the words "Britain" and "Exit" and describes the exit of the United Kingdom of the European Union.

A bull market is a financial market where prices are rising – usually used in the context of equities markets.

Bunds is a commonly used term for bonds issued by the German federal government with a maturity of 10 years.

Capital expenditure (Capex) are funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment.

The CBOE Volatility Index (Vix) is a trademarked ticker symbol for the Chicago Board Options Exchange Market Volatility Index. It is a popular measure of the volatility of the S&P 500 as implied in the short term option prices on the index.

The CBOE VVIX Index measures the volatility of the CBOE Volatility Index (VIX), which by itself is a popular measure of the volatility of the S&P 500 as implied in the short-term option prices on the index.

The Chinese yuan (CNY) is legal tender on the Chinese mainland and the unit of account of the currency, Renminbi (RMB).

Covered bonds are securities similar to asset-backed securities (ABS) which are covered with public-sector or mortgages loans and remain on the issuer's balance sheet.

The current account includes trade in goods and services, a net-factor-income balance (e.g. earnings on foreign investments and cash transfers from individuals working abroad) and transfers (e.g. foreign aid). It is a part of the balance of payments.

The Dax is a blue-chip stock-market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange.

The default rate refers to the proportion of borrowers who cannot service their loans.

Duration is a measure expressed in years that adds and weights the time periods in which a bond returns cash to its holder. It is used to calculate a bond's sensitivity towards interest-rate changes.

Emerging markets (EM) are economies not yet fully developed in terms of, amongst others, market efficiency and liquidity.

The euro (EUR) is the common currency of states participating in the Economic and Monetary Union and is the second most held reserve currency in the world after the dollar.

The Euro Stoxx 50 is an index that tracks the performance of blue-chip stocks in the Eurozone.

The European Central Bank (ECB) is the central bank for the Eurozone.

The Eurozone is formed of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

The federal funds rate is the interest rate, set by the Fed, at which banks lend money to each other, usually on an overnight basis.

Fiscal policy describes government spending policies that influence macroeconomic conditions. Through fiscal policy, the government attempts to improve unemployment rates, control inflation, stabilize business cycles and influence interest rates in an effort to control the economy.

The FTSE 100 is an index that tracks the performance of the 100 major companies trading on the London Stock Exchange.

A futures contract is a standardized, contractual agreement to trade a financial instrument or commodity at a pre-determined price in the future.

Gilts are bonds that are issued by the British Government.

The gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

A hard currency is any globally traded currency that is considered as historically stable and can be exchanged easily.

High-yield bonds are issued by below-investment-grade-rated issuers and usually offer a relatively high yield.

The ICE BofA Merrill Lynch Global High Yield Index tracks the performance of below-investment-grade corporate debt denominated in U.S. dollars, Canadian dollars, British pounds or euros and publicly issued in the major domestic or Eurobond markets.

The ICE BofA Merrill Lynch US High Yield Index tracks the performance of dollar-denominated below investment grade, including zero-coupon and payment-in-kind (PIK) bonds.

Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

The International Monetary Fund (IMF), created in 1945 and headquartered in Washington, D.C., is an organization of 188 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world.

Investment grade (IG) refers to a credit rating from a rating agency that indicates that a bond has a relatively low risk of default.

The J.P. Morgan EMBI Global Diversified High Yield Index is a market-capitalization-weighted, total-return index tracking various U.S.-dollar-denominated bonds, Eurobonds, as well as traded loans, and local-market debt instruments issued by below-investment-grade-rated emerging-markets sovereign and quasi-sovereign entities.

The Japanese yen (JPY) is the official currency of Japan.

Junk bond is a colloquial term for a high-yield or non-investment-grade bond.

Monetary policy focuses on controlling the supply of money with the ulterior motive of price stability, reducing unemployment, boosting growth, etc. (depending on the central bank's mandate).

A mortgage-backed security (MBS) is a special type of asset-backed security where the holder receives interest and redemption payments from pooled mortgage debtors, secured by the underlying mortgages.

The MSCI AC Asia ex Japan Information Technology Index includes large- and mid-cap securities across 2 of 3 developed-market countries (excluding Japan) and 9 emerging-market countries in Asia. All securities in the index are classified in the Information Technology as per the Global Industry Classification Standard (GICS®).

The MSCI AC World Index captures large- and mid-cap companies across 23 developed- and 24 emerging-market countries.

The MSCI AC Asia ex Japan Index captures large- and mid-cap representation across 2 of 3 developed-market countries (excluding Japan) and 8 emerging-market countries in Asia.

The MSCI Emerging Markets (EM) Latin America Index captures large- and mid-cap representation across five emerging-market countries in Latin America.

The MSCI Emerging Markets Index captures large- and mid-cap representation across 23 emerging-market countries.

The MSCI Europe Information Technology Index captures the large- and mid-cap segments across 15 developed-market countries in Europe. All securities in the index are classified in the Information Technology sector as per the Global Industry Classification Standard (GICS®).

The MSCI Global Infrastructure Asset Index tracks the performance of unlisted infrastructure across the world (excluding currency movements).

The MSCI World Information Technology Index are designed to capture the large- and mid-cap segments of various markets. All securities in the index are classified in the Information Technology sector as per the Global Industry Classification Standard (GICS®).

The MSCI Japan Index is designed to measure the performance of the large- and mid-cap segments of the Japanese market.

The MSCI Japan Information Technology Index captures the large- and mid-cap segments of the Japanese equity universe. All securities in the index are classified in the Information Technology sector as per the Global Industry Classification Standard (GICS®).

The MSCI USA Information Technology Index captures the large- and mid-cap segments of the U.S. equity universe. All securities in the index are classified in the Information Technology sector as per the Global Industry Classification Standard (GICS®).

Municipal bonds (Munis) are debt securities issued by a state, municipality or country.

Periphery countries are less developed than the core countries of a specific region. In the Eurozone, the euro

periphery consists of the economically weaker countries such as Greece, Portugal, Italy, Spain and Ireland.

The pound sterling (GBP), or simply the pound, is the official currency of the United Kingdom and its territories.

The price-to-earnings (P/E) ratio compares a company's current share price to its earnings per share.

Quantitative easing (QE) is an unconventional monetary-policy tool, in which a central bank conducts broad-based asset purchases.

A recession is, technically, when an economy contracts for two successive quarters but is often used in a looser way to indicate declining output.

Renminbi (RMB) is the currency of the People's Republic of China.

The Return on equity (ROE) is the amount of net income returned as a percentage of shareholders' equity.

The S&P 500 is an index that includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

A share buyback involves a company buying back its own shares.

The spread is the difference between the quoted rates of return on two different investments, usually of different credit quality.

The Stoxx Europe 600 is an index representing the performance of 600 listed companies across 18 European countries.

The Swiss Market Index (SMI) is Switzerland's most important equity index, consisting of the 20 largest and most liquid large- and mid-cap stocks.

Treasuries are fixed-interest U.S. government debt securities with different maturities: Treasury bills (1 year maximum), Treasury notes (2 to 10 years), Treasury bonds (20 to 30 years) and Treasury Inflation Protected Securities (TIPS) (5, 10 and 30 years).

The U.S. dollar (USD) is the official currency of the United States and its overseas territories.

The U.S. Federal Reserve Board, often referred to as "the Fed", is the central bank of the United States.

Venture capital is part of the private-equity business. It refers to the temporary provision of money for early-business-stage firms with perceived long-term growth potential in order to potentially achieve above-average returns. It is an important source of funding for startups that have no access to capital markets.

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

Yield is the income return on an investment referring to the interest or dividends received from a security and is usually expressed annually as a percentage based on the investment's cost, its current market value or its face value.

Risk warning

Investments are subject to investment risk, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time.

Investments in Foreign Countries – Such investments may be in countries that prove to be politically or economically unstable. Furthermore, in the case of investments in foreign securities or other assets, any fluctuations in currency exchange rates will affect the value of the investments and any restrictions imposed to prevent capital flight may make it difficult or impossible to exchange or repatriate foreign currency.

Foreign Exchange/Currency – Such transactions involve multiple risks, including currency risk and settlement risk. Economic or financial instability, lack of timely or reliable financial information or unfavorable political or legal developments may substantially and permanently alter the conditions, terms, marketability or price of a foreign currency. Profits and losses in transactions in foreign exchange will also be affected by fluctuations in currency where there is a need to convert the product's denomination(s) to another currency. Time zone differences may cause several hours to elapse between a payment being made in one currency and an offsetting payment in another currency. Relevant movements in currencies during the settlement period may seriously erode potential profits or significantly increase any losses.

High Yield Fixed Income Securities – Investing in high yield bonds, which tend to be more volatile than investment grade fixed income securities, is speculative. These bonds are affected by interest rate changes and the creditworthiness of the issuers, and investing in high yield bonds poses additional credit risk, as well as greater risk of default.

Hedge Funds – An investment in hedge funds is speculative and involves a high degree of risk, and is suitable only for "Qualified Purchasers" as defined by the US Investment Company Act of 1940 and "Accredited Investors" as defined in Regulation D of the 1933 Securities Act. No assurance can be given that a hedge fund’s investment objective will be achieved, or that investors will receive a return of all or part of their investment.

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CRC 061576 (10/2018)