Economic Outlook

- The global economy may slow further in early 2019, given lingering trade uncertainty, a continued slowdown in China, and the lagged impact of tighter financial conditions in late 2018.

- However, global growth is likely to bottom later this year due to easing of financial conditions as Central Banks around the globe have turned dovish.

- The Federal Reserve has put rate hikes on hold, and the fed funds futures curve is suggesting a high probability of a rate cut by year end. The European Central Bank has launched a new round of liquidity measures for banks and intends to leave rates unchanged for longer. China is stimulating its economy, and many EM Central Banks are following suit.

- The US economy, while not immune to a global growth slowdown, is decelerating mostly due to fading fiscal stimulus and the effects of the previous interest rate hikes. However, its growth is resilient compared to other regions, thanks to a strong labor market and rising wages which lift consumer spending. The recent inversion of the yield curve, however, raises risks for a downturn in 2020.

- The Eurozone economy remains anemic, with Italy and Germany in or near recession.

- Further, geopolitical risks remain, especially Brexit and the US/China trade standoff. Yet, a “hard Brexit” seems unlikely, and US/China Trade talks appear headed towards an agreement of some kind.

Investment Outlook

- The past two quarters have seen a dramatic mood swing in risky assets. Slowing global growth, Fed hawkishness, continued trade tension between the US and China and a US government shutdown led to sharp market declines in Q4.

- Markets then rebounded sharply in Q1 coincident with an abrupt dovish pivot by the Fed and progress on US/China trade relations.

- While investors’ sentiment has clearly turned, concerns about global growth remain a risk. The drop in business confidence in Europe & China and Brexit uncertainties highlight risks for markets.

- Stocks may need to pull back or consolidate after such a strong start to the year, but we think the general trend should be up near term, underpinned by central bank dovishness, and reasonably attractive valuations.

- Our top equity allocation remains the US market, but we have also become positive on emerging markets, which could benefit from dovish central bank policies, a stable dollar, lower oil prices, a resolution of the trade disputes, and an eventual rebound of the Chinese economy.

- In fixed income, we have also added risk modestly, shifting to higher yielding assets such as US high yield bonds and emerging market hard currency debt.
Economic Outlook: Slower Global Growth but Recession Unlikely

After ending 2018 with weaker momentum, the global economy may slow further in early 2019, given lingering trade uncertainty, a continued slowdown in China, and the lagged impact of tighter financial conditions in late 2018. However, financial conditions turned sharply from headwind to tailwind in the first quarter (Chart 1):

1/ Headwinds Turn to Tailwinds

Developed market central banks turned dovish in Q1, China continued to provide stimulus, and trade tensions eased — as President Trump delayed planned increases in tariffs, and telegraphed his desire for a deal that could remove tariffs that have been recently implemented.

While we expect global growth conditions to deteriorate further in the near term (Chart 2), we think they will bottom later this year, and we still see low odds of a recession. The risk of a policy mistake from overzealous tightening looking forward, has greatly diminished since the Fed put its hawkish stance on hold in January and emphasized patience on interest rate policy and increased flexibility on reducing the size of its balance sheet. At the March meeting, the Fed went further, ruling out additional rate hikes in 2019 and announcing that the balance sheet run-off will slow in May and end in September. The fed funds futures curve is suggesting a high probability of a cut by year end (Chart 3).

2/ Global Growth Conditions: No Signs of a Bottom Yet

OECD Global Leading Indicator vs Global PMI

As of February 2019.
Source: Datastream.

3/ Investors Expecting Rate Cut

Fed Fund Futures Implied Rate

As of 2/21/2019.
Source: QMA, Bloomberg.

Meanwhile, China continues to increase monetary and fiscal stimulus, putting its deleveraging campaign on hold. The European Central Bank (ECB) also pleasantly surprised markets by launching a third round of targeted longer-term refinancing operations (TLTROs) at its March meeting and signaling that it intends to leave rates steady for an even longer period. With inflation in the developed economies remaining low—at or below central bank targets — central banks in these markets can afford to pause on policy normalization and focus instead on stabilizing growth (Chart 4).

4/ Benign Inflation Allows Central Banks to Focus on Growth

CE Estimates & Forecasts for Headline CPI Inflation (%)

As of 3/20/2019.
Source: Capital Economics.
In emerging markets (EM), central banks have moved to an easing bias after having raised rates in 2018 when inflation risks were elevated due to high oil prices and currency weakness. This new dovish stance was made possible by a decline in oil prices from six months ago, an easing in the uptrend in food prices and a rebound in EM currencies. This led to more benign trends in inflation, especially among oil importers. Thanks to these positive developments, EM growth is likely to stabilize and recover in 2019.

After being an island of strong growth in 2018, the US economy is expected to slow this year due to the fading of the fiscal stimulus, the lagged impact of prior rate hikes and the strong dollar, and the effects of weaker growth outside the US. Growth in Q1 may be especially weak for idiosyncratic reasons (such as the government shutdown and winter storms), but it should improve thereafter. The labor market remains strong — despite the March disappointment — with solid wage growth underpinning consumer spending. US business confidence was mixed in February, with the ISM Manufacturing Index falling to a two-year low of 54 but the ISM Services Index rebounding to a red-hot reading of 59.5. The recent inversion of the yield curve, especially if it deepens and/or is sustained, raises risks for a downturn in 2020.

The Eurozone economy remains anemic, eking out a 0.8% annualized growth rate in Q4, led by weak business and consumer confidence and soft exports. The big drags on growth were Italy (-0.8%), which fell into technical recession, and Germany, which barely avoided it, posting annualized growth of 0.1%. However, growth held up in France (1.2%), strengthened in Spain (2.8%) and was solid in the Netherlands (2.0%). In the UK, economic activity slowed to 0.8% due to a big decline in investment spending and a drag on trade due to ongoing Brexit uncertainty and slowing global demand.

Growth in 2019 may be undermined by geopolitical and political risks, especially Brexit and the US/China trade standoff. In the UK, there is still no consensus in Parliament about how to move forward on Brexit. With the March 29 deadline looming, Prime Minister Theresa May was forced to request more time, and the EU has granted a conditional extension to May 22 or April 12. A “hard Brexit” still seems unlikely, but it remains the default option. It would be a nasty shock to Pan-European economies and financial markets if it were to happen, with negative global spillover. A high probability of a US/China trade deal appears to be priced in by financial markets, so they are set up for disappointment if talks collapse. For now, a hard Brexit and a collapse in US/China talks remain risk scenarios and are not our base case.

Investment Outlook: Central Banks Refill the Punchbowl

It has been a wild couple of quarters for risky assets, with Q4 and Q1 shaping up roughly to be mirror images (Chart 5).

5/ A Tale of Two Quarters


When we last wrote, in mid-December, we had been pulling back on risk in our multi-asset portfolios, noting “the underlying trend of slower economic and earnings growth, the uncertainties related to Fed policy, trade tension and a variety of political and geopolitical risks.” Market declines accelerated in the second half of December, leading to a situation in which stocks and other risky assets priced in a too-high probability of a global recession, in our view. The selling reached a climax on Christmas Eve, and equity markets staged a powerful rally that has so far lasted through Q1.

Likely catalysts for the rally were an abrupt shift from hawkish to dovish rhetoric on the part of the Fed and a ratcheting down of trade tensions. The end of the partial government shutdown on January 25 and recent economic data also calmed investors’ fears about a potential US recession. The decline in the Economic Policy Uncertainty Index\(^1\) since the turn of the year (Chart 6) reflects this decline in policy risk. While investors’ sentiment has clearly turned more positive, concerns about slowing global growth remain a risk. The decline in PMI business confidence in Europe and China into contraction territory and fears of a “hard Brexit” are likely to weigh on markets.

We added to stocks and other risky assets in early January, reducing our cash allocation. In our view, the fears were overdone and attractive value had emerged. Within equities, we tilted towards riskier asset classes, such as US small caps and EM stocks, and have participated in the relief rally so far this year.

While markets may need some time to consolidate or pull back after such a robust start of the year, we think stocks should remain in an uptrend near term, driven by dovish central banks and reasonably attractive equity valuations.

Stock valuations have rebounded along with the markets so far this year but are still reasonable (Chart 7), giving scope for further multiple expansion — which is common late in the business cycle. A US/China trade deal and a UK/EU agreement that avoids a “hard Brexit” could also provide further fuel for the rally if all goes as expected. On the flip side, either could be a source of major disappointment and downside risk in the unlikely event that a “hard Brexit” does occur or US/China trade talks collapse.

As for regions, our top equity allocation remains the US market. The US economy shows signs of resilience despite a global malaise. The labor market is healthy, and the Fed’s dovish stance could extend the business cycle. In addition, nascent signs of a rebound in corporate investment spending may boost labor productivity just when the US needs it most and help exceed the growth speed limit stemming from a dwindling labor supply. Valuations are attractive, earnings expectations have turned, and buybacks have made a comeback.

We have grown more positive on emerging markets stocks, shifting from an underweight stance through most of last year. EM equities are likely to be key beneficiaries of more dovish central bank policies, a stable dollar, lower oil prices, potential resolution of the trade disputes, and an eventual rebound of the Chinese economy. Valuations are supportive, and at 12.1x forward PE MSCI, are just above the historical average. Fundamentals are already stabilizing, and the new reduced

especially since it is expensive on a purchasing power parity basis, and US growth is likely to be weaker as the impact of the fiscal stimulus fades.

Investors will likely keep a close eye on the performance of corporate earnings, which have slowed dramatically from last year’s robust pace, and expectations for 2019 continue to decline for all regions. Globally, expected earnings growth has slid to 5%, with more downside possible, due to tougher year-on-year comparisons, tighter financial conditions, weakening GDP growth, lower commodity prices and slowing tech demand.

However, there are early signs that a more dovish monetary policy is starting to work through the system from China to Europe to the US, manifesting itself in an easing of financial conditions and the potential for a trough in global growth. Indeed, 12-month forward earnings expectations for emerging markets and the US are showing signs of bottoming (Chart 8) and are likely to improve in the second half of 2019.

We believe the US dollar has peaked, or at least stabilized. The dovish stance of the US Fed and market expectations of a lower interest rate trajectory do not bode well for the greenback,
earnings growth target of 7% is a low hurdle for an upside surprise.

We are less positive on Non-US developed markets. European stocks have posted solid gains in 2019 year-to-date, but the near-term growth outlook is much weaker than that for the US because given recent disappointing economic data and heightened political uncertainty. The outlook for Japan is mixed. While stocks have been supported by the Bank of Japan continuing QE stimulus and the market’s relatively attractive valuations, GDP growth is likely to slow to trend pace, and earnings expectations have been lowered due to trade tensions and slower global growth. Also, a weaker dollar may translate into a stronger yen, with an adverse effect on exports and earnings.

In fixed income, we also added some risk in Q1, shifting money out of cash to higher yielding assets such as US high yield bonds and emerging market hard currency debt, as these spreads became more attractive in December. These risky assets benefit from an improvement in the investor risk appetite and dissipation of recession fears. The lower trajectory of US rates is a boon for both asset classes since it reduces the interest-rate burden on indebted companies, lowers risks of default and could reignite a “global search for yield.”

QMA’s Tactical Asset Class Views

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>-</th>
<th>Neutral</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commodities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Stocks³     |   |         |   |
| US          |   |         |   |
| EAFE        |   |         |   |
| Emerging Markets |   |         |   |

| Fixed Income³|   |         |   |
| US Core     |   |         |   |
| TIPS        |   |         |   |
| High Yield  |   |         |   |
| Non-US Dev. Sov. Bonds |   |         |   |
| EMD         |   |         |   |

An Update on U.S. Small Cap

After being cautious on small caps since summer of 2018, we shifted toward a more constructive view in January seeking to benefit from a relief rally in cyclical assets. With recession fears easing, a shift to a friendly Fed and a more positive investor sentiment, market conditions for small caps have improved.

Valuations are still supportive even after a year-to-date melt-up, and small caps still trade at a discount to large caps on a forward earnings basis (16.2x vs 16.8x).³ Earnings growth for small caps is expected to be robust over the next 12 months, at 15% compared to 6% for large caps⁴—an attractive value proposition.

The current macroeconomic backdrop is favorable for small caps, even though we are in the late stages of the business cycle. Late in the cycle there is often a concern that rising rates may spur defaults among riskier small caps carrying high amounts of debt and relatively low amounts of cash on their balance sheets. However, at present, the “patient” Fed and well-behaved high yield spreads have relieved the rising costs of servicing debts.

Another late-cycle concern is that small caps razor-thin margins (11% margins for large vs. only 3% for small) may become compressed due to their greater sensitivity to rising input costs and wages (Figure 1). So far, margins are holding up better than expected, thanks to tax reform, strong consumer spending, low costs of raw materials and only a modest increase in labor costs. Undoubtedly, these issues may resurface in the near future, but for now sailing is clear.

Figure 1. Small Cap Margins are Resilient

All in all, small caps offer an attractive risk/return trade-off and are well-positioned to benefit from the continued risk-on environment. Still, we continue to monitor valuations, margins, and yields for any signs of trouble that could argue for a timely exit.

To learn more about QMA's capabilities, please contact
Stephen Brundage, CFA, Managing Director and Client Portfolio Manager, at stephen.brundage@qma.com or 973-367-4591.

NOTES TO DISCLOSURE

Sources: QMA, MSCI, FactSet, Bloomberg, OECD, Thomson Reuters Datastream, Federal Reserve Bank of Atlanta, Federal Reserve Bank of New York, FTSE Russell.

This is intended for Professional Investors only. All investments involve risk, including the possible loss of capital. Past performance is not a guarantee or a reliable indicator of future results.

These materials represent the views, opinions and recommendations of the author(s) regarding economic conditions, asset classes, and strategies. Distribution of this information to any person other than the person to whom it was originally delivered is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgure of any of the contents hereof, without prior consent of Quantitative Management Associates LLC ("QMA") is prohibited. Certain information contained herein has been obtained from sources that QMA believes to be reliable as of the date presented; however, QMA cannot guarantee the accuracy of such information, asserts its completeness, or warrant that such information will not be changed. These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from the use of the information contained in or derived from this report. QMA and its affiliates may make investment decisions that are inconsistent with the views expressed herein, including for proprietary accounts of QMA or its affiliates.

These materials are for informational or educational purposes. In providing these materials, QMA is not acting as your fiduciary.

In Europe, certain regulated activities are carried out by representatives of PGIM Limited, which is authorized and regulated by the Financial Conduct Authority (Registration Number 193418), and duly passported in various jurisdictions in the European Economic Area. Quantitative Management Associates LLC, which is an affiliate to PGIM Limited, is an SEC-registered investment adviser, and a limited liability company; PGIM Limited’s Registered Office, Grand Buildings, 1-3 Strand, Trafalgar Square, London WC2N 5HR. These materials are issued by PGIM Limited limited to persons who are professional clients or eligible counterparties as defined in Directive 2014/65/EU (MiFID II), investing for their own account, for fund of funds, or discretionary clients. In Japan, investment management services are made available by PGIM Japan, Co. Ltd. ("PGIM Japan"), a registered Financial Instruments Business Operator with the Financial Services Agency of Japan. In Hong Kong, information is presented by representatives of PGIM (Hong Kong) Limited, a regulated entity with the Securities and Futures Commission in Hong Kong to professional investors as defined in Part 1 of Schedule 1 of the Securities and Futures Ordinance. In Singapore, information is issued by PGIM (Singapore) Pte. Ltd. ("PGIM Singapore"), a Singapore investment manager that is licensed as a capital markets service license holder by the Monetary Authority of Singapore and an exempt financial adviser. These materials are issued by PGIM Singapore for the general information of “institutional investors” pursuant to Section 304 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”) and “accredited investors” and other relevant persons in accordance with the conditions specified in Sections 305 of the SFA.

In South Korea, information is issued by QMA, which is licensed to provide discretionary investment management services directly to South Korean qualified institutional investors. The opinions expressed herein do not take into account individual client circumstances, objectives, or needs and are therefore are not intended to serve as investment recommendations. No determination has been made regarding the suitability of particular strategies to particular clients or prospects. The financial indices referenced herein is provided for informational purposes only. You cannot invest directly in an index. The statistical data regarding such indices has been obtained from sources believed to be reliable but has not been independently verified.

Certain information contained herein may constitute “forward-looking statements,” (including observations about markets and industry and regulatory trends as of the original date of this document). Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking statements. As a result, you should not rely on such forward-looking statements in making any decisions. No representation or warranty is made as to future performance or such forward-looking statements.

Certain information contained in this product or report is derived by QMA in part from MSCI’s Index Data. However, MSCI has not reviewed this product or report, and MSCI does not endorse or express any opinion regarding this product or report or any analysis. Neither MSCI nor any third party involved in or related to the computing or compiling of the Index Data makes any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event shall MSCI or any third party have any liability for any indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information. Any use of the Index Data requires a direct license from MSCI. None of the Index Data is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

London Stock Exchange Group plc and its group undertakings (collectively, the “LSE Group”). © LSE Group 2019. FTSE Russell is a trading name of certain of the LSE Group companies. © FTSE Russell® is a trade mark of the relevant LSE Group companies and is/are used by any other LSE Group company under license. All rights in the FTSE Russell indexes or data vest in the relevant LSE Group company which owns the index or the data. Neither LSE Group nor its licensors accept any liability for any errors or omissions in the indexes or data and no party may rely on any indexes or data contained in this communication. No further distribution of data from the LSE Group is permitted without the relevant LSE Group company's express written consent. The LSE Group does not promote, sponsor or endorse the content of this communication.

SPECIAL RISKS

Foreign investments may be volatile and involve additional expenses and special risks, including currency fluctuations, foreign taxes and political and economic uncertainties. Emerging and developing markets may be especially volatile. Investments in securities of growth companies may be especially volatile. Due to the recent global economic crisis that caused financial difficulties for many European Union countries, Eurozone investments may be subject to volatility and liquidity issues. Value investing involves the risk that undervalued securities may not appreciate as anticipated. Small and mid-sized company stock is typically more volatile than that of larger, more established businesses, as these stocks tend to be more sensitive to changes in earnings expectations and tend to have lower trading volumes than large-cap securities, creating potential for more erratic price movements. It may take a substantial period of time to realize a gain on an investment in a small or mid-sized company, if any gain is realized at all. Diversification does not guarantee profit or protect against loss.

Emerging markets are countries that are beginning to emerge with increased consumer potential driven by rapid industrial expansion and economic growth. Investing in emerging markets is very risky due to the additional political, economic and currency risks associated with these underdeveloped geographic areas. Fixed-income investments are subject to interest rate risk, and their value will decline as interest rates rise. Unlike other investment vehicles, U.S. government securities and U.S. Treasury bills are backed by the full faith and credit of the U.S. government, are less volatile than equity investments, and provide a guaranteed return of principal at maturity. Treasury Inflation-Protected Securities (TIPS) are inflation-index bonds that may experience greater losses than other fixed income securities with similar durations and are more likely to cause fluctuations in a Portfolio’s income distribution. Investing in real estate poses risks related to an individual property, credit risk and interest rate fluctuations. High yield bonds, commonly known as junk bonds, are subject to a high level of credit and market risks. Investing involves risks. Some investments are riskier than others. The investment return and principal value will fluctuate and when sold may be worth more or less than the original cost.