T. ROWE PRICE INSIGHTS

2020 GLOBAL MARKET OUTLOOK



Comfortable With the Uncomfortable

The "reflation trade" appears real, but risks are still elevated.

December 2019

KEY INSIGHTS

- Although the 2020 outlook remains guarded, monetary accommodation by key central banks appears to have put the global economy on a reflationary course.
- Low or negative yields pose duration risks for sovereign bonds. Potential opportunities can still be found in corporate bonds and other credit sectors.
- We expect technology to continue to disrupt global sectors. For example, falling renewable energy costs have been turning many utilities into earnings growers.
- Geopolitical events, including the U.S. presidential election, the trade war, Brexit, and Hong Kong unrest, could be triggers for market volatility in 2020.

eading into 2020, T. Rowe Price investment leaders believe global capital markets should be supported by continued economic growth and low but stable inflation rates. However, they also caution that a number of risks could trigger market volatility, including political uncertainties, slow earnings growth, and potential valuation excesses.

Investors will need to be "comfortable with the uncomfortable" to take advantage of potentially attractive opportunities, says Justin Thomson, chief investment officer (CIO), equity.

David Giroux, CIO, equity and multi-asset, thinks much will depend on whether the economic reacceleration that equity markets appear to expect in 2020 actually happens.

In a time of widespread disruption, careful stock selection backed by fundamental research will remain critical, Giroux adds.

Following a stellar 2019, debt markets could prove more challenging going forward, according to Mark Vaselkiv, CIO, fixed income. Even a modest backup in yields in 2020 could significantly erode returns.

In a low- or even negative-yield environment, Vaselkiv says, "we think the right blend of bank loans, high yield bonds, and emerging markets [EM] corporate bonds still makes sense."

While economic headwinds were strongest in non-U.S. markets in 2019, signs of stabilization are visible there as well, according to Thomson. EM equities appear to be best positioned to benefit from global reflation, Thomson adds. "Emerging markets are a cyclical asset class and should do better in that environment."



David Giroux
Chief Investment Officer, Equity
and Multi-Asset



Justin Thomson
Chief Investment Officer, Equity



Mark Vaselkiv Chief Investment Officer, Fixed Income

10%

Consensus expectations for 2020 earnings growth for the S&P 500 Index, as of late November 2019.

Challenges to Global Growth

Renewed efforts by the U.S. Federal Reserve (Fed) and other key central banks to support the global economy with monetary easing appeared to be working as 2019 drew toward a close, potentially setting the stage for a reacceleration in economic growth in 2020.

"I think we now have a reasonable understanding that growth and inflation expectations are bottoming," Thomson says. Some of the signs:

- As of late November, manufacturing and export indicators appeared to be stabilizing.
- Copper prices—traditionally a key signal of global industrial activity also rebounded.
- The U.S. Treasury yield curve, which briefly inverted across the 2- to 10-year segment in August, returned to a positive slope.

These signals do not mean the global economy is entirely on solid footing, Vaselkiv warns. A major political or financial shock potentially could trigger a renewed downturn. "We may be at an inflection point, where some sort

of catalyst or crisis could tip the world economy into recession."

U.S. Economy

As of late 2019, the U.S. economy remained in an expansion, largely sustained by consumer spending. But the slowdown in capital spending had put the brakes on earnings momentum, with 2019 per-share earnings growth for companies in the S&P 500 Index expected to fall into the low single digits.

As of late November, forward-looking multiples for the S&P 500 appeared somewhat high, although not exceptionally extended in historical terms, Giroux says. However, those valuations were predicated on consensus estimates of 10% earnings growth in 2020. That might be overly optimistic, Giroux cautions.

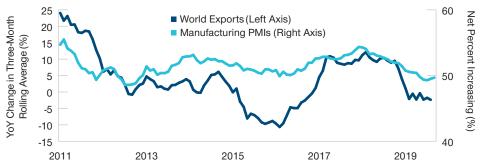
If an economic reacceleration doesn't materialize, or isn't strong enough to produce the expected earnings gains, "I think equity markets have a lot of room for the downside," Giroux warns.

Europe

European economic and earnings growth were weak in 2019, as the slowdown in global trade hurt Germany's

Global Trade and Manufacturing Appear to Be Stabilizing

(Fig. 1) World Exports¹ and Global Manufacturing Purchasing Managers' Indexes (PMIs)² Through September 30, 2019



Sources: J.P. Morgan Chase/Haver Analytics (see Additional Disclosures); all data analysis by T. Rowe Price.

¹YoY = year-over-year. Includes the U.S., China, South Korea, Japan, European Union, Canada, and Mexico.

 $^{2}\,\mathrm{PMI}$ readings below and above 50 typically indicate contraction or expansion, respectively.

On a cyclically adjusted basis, relative price/ earnings ratios favor non-U.S. equities by the widest margin since at least 1995.

export-dependent manufacturing sector. Although European economies started to see "green shoots" of recovery late in the year, longer-term factors—such as declining populations and weak productivity—could limit growth to 1% in 2020, Vaselkiv says, citing recent forecasts from the International Monetary Fund.

The European equity outlook also will depend on earnings in Europe's financials sector, which has a heavy weight in regional indexes. But low interest rates and flat or inverted yield curves are major obstacles. "We need to see banks be able to start making positive spreads on new lending," Thomson says.

Japan

Japanese equities—like Japan's economy—remains vulnerable to the global economic cycle. As a result, Japanese equities lagged other major developed markets in early 2019.

However, by the same token, Japanese equities have benefited disproportionately from an improved global outlook. Whether that relative trend persists in 2020 will depend on a continued global reflation, Thomson says.

China

China's growth slowed sharply in 2019, and is likely to continue decelerating in

2020, Vaselkiv says. This slowdown is only partially due to the trade war. High debt levels and declining demographics also have imposed structural constraints.

Chinese policymakers appear less inclined than in past slowdowns to stimulate credit and spending, as curbing debt growth among highly leveraged financial institutions appears to be a higher priority.

On the positive side, China's consumer market continues to expand, driven by real (after-inflation) gains in wages and household disposable income, Thomson notes.

Emerging Markets

Like Japan, the EM economies as a group are highly leveraged to the global economy. This led to volatile equity returns in 2019.

With currency values adjusted on a purchasing power parity basis, EM equities appear inexpensively priced, particularly compared with the U.S. market, Thomson says. Currency effects could add to their appeal if the dollar weakens in 2020.

Attractive valuations and potential currency gains also could benefit developed non-U.S. equities in 2020, Thomson adds. On a cyclically adjusted basis, relative price/earnings ratios favor non-U.S. equities by the widest margin since at least 1995.

U.S. Equity Valuations Appear High Relative to Rest of World

(Fig. 2) Cyclically Adjusted Price/Earnings Ratios (CAPE) Through September 30, 2019



Sources: MSCI (see Additional Disclosures) and Citigroup. Copyright Citigroup 2005–2019. All Rights Reserved.

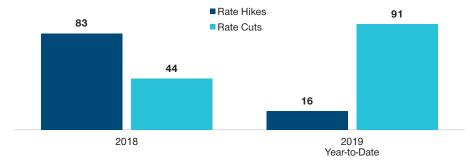
16

Central bank rate hikes in 2019 through September, down from 83 in 2018.

Central Banks and the Search for Yield

Global Central Banks Have Returned to Accommodation

(Fig. 3) Monetary Policy Actions¹ Through September 30, 2019



Sources: International Monetary Fund and CBRates.com; data analysis by T. Rowe Price.

Alarmed by spreading signs of global economic weakness, key central banks changed direction in 2019, cutting interest rates and reviving or expanding quantitative easing programs.

The policy shift has been both widespread and dramatic, Vaselkiv notes. While 2018 saw approximately two interest rate increases globally for every cut, that trend flipped in 2019, with 91 rate cuts worldwide but only 16 rate hikes.

"Clearly, central banks have been making a synchronized effort to expand liquidity to support the global economy," Vaselkiv says.

Vaselkiv does not expect the Fed to cut rates further in the closing weeks of 2019 and says it probably will not cut them in 2020. However, he predicts that global monetary policy will remain supportive as the European Central Bank and the Bank of Japan continue their quantitative easing programs.

A World Gone Negative

For bond investors, the shift to monetary accommodation in 2019 produced an

unanticipated windfall, with virtually all global fixed income sectors delivering strongly positive returns.

- Yields dipped into negative territory across a wide spectrum of sovereign issues, producing sizable capital gains at the long end of the yield curve.
- Corporate bonds—both investment grade and high yield—delivered double-digit returns in 2019, as investors reached to lock in yields before they declined further.
- EM debt markets, including EM corporates, also performed well despite a stronger U.S. dollar, as easing inflationary pressures gave some EM central banks room to cut interest rates.

While the pool of negative-yielding debt shrank somewhat as bond markets recovered from a late-summer flight to quality, it still accounted for over USD 13 trillion in bonds outstanding—24% of total global market value—as of the end of October 2019.

¹ Total number of rate cuts and rate hikes made by central banks globally. For a full list of the central banks or monetary authorities included in the survey, please see Bank for International Settlements, Central Bank Hub, on the web at: https://www.bis.org/cbanks.htm?m=2%7C9

Clearly, central banks have been making a synchronized effort to expand liquidity to support the global economy.

Mark Vaselkiv
 Chief Investment Officer,
 Fixed Income

Reflation Could Create Credit Opportunities

Lingering concerns about the global economy have led many high yield investors to remain cautious about troubled companies and industries, Vaselkiv says. However, if global reflation strengthens in 2020, investors may want to consider selected opportunities in some disfavored sectors, such as energy and autos, where credit spreads remain relatively high.

Likewise, despite widespread concerns about a deterioration in credit quality and lender protections, attractive opportunities can still be found in floating rate bank loans, Vaselkiv argues. "Right now, you have an opportunity to earn more attractive yields in loans than you do in high yield bonds."

Credit quality in the high yield universe has improved since the 2008–2009 global financial crisis, Vaselkiv says, which could provide a cushion if the global economy falters again in 2020. "If we were to go into recession, I think the overall default rate in high yield should be lower than it was 10 years ago," he says.

Duration's Double Edge

The sharp declines in bond yields seen in 2019 have generated downside risks

for 2020, Vaselkiv warns. Duration is a double-edged sword, he notes, and even a modest rise in bond yields from current low levels could negatively impact total returns.

"If the economic data catch up with expectations, you could see the yield on 10-year Treasuries move north of 2%, maybe as high as 2.25% to 2.5%," Vaselkiv says. "That's not enough to cause massive pain, but further out the curve—the 30-year Treasury bond, for example—a move to 3% could cause you to lose a bit of money on a mark-to-market basis."

In such an environment, below investment-grade, short-duration credit instruments are likely to offer the more attractive risk/reward combination in 2020, Vaselkiv says.

For investors who can tolerate price volatility, non-U.S. equities could offer an attractive income alternative in 2020, Thomson adds. As of late November 2019, he notes, MSCI's Europe, Australasia, and the Far East (EAFE) Index offered a 3.5% aggregate dividend yield. "In the context of negative-yielding sovereigns, even some negative-yielding corporate bonds in Europe, that seems like a reasonable bet," Thomson suggests.

The Stock of Negative-Yielding Debt Has Soared Globally

(Fig. 4) Negative-Yielding Debt in the Bloomberg Barclays Global Aggregate Bond Index Through October 31, 2019



Source: Bloomberg Finance L.P.

Companies that are at the epicenter of technological obsolescence continue to be negatively impacted.

David Giroux
 Chief Investment Officer, Equity and Multi-Asset

Disruption 4.0

Innovation, technological change, and automation—particularly the use of artificial intelligence (AI) applications, continues to disrupt a growing number of global industries. T. Rowe Price analysts expect this dynamic to continue in 2020.

"Companies that are at the epicenter of technological obsolescence continue to be negatively impacted," Giroux says. "Whether it's cable television networks, newspapers, retail, legacy tech, or legacy oil, all of these industries are still under pressure."

However, the next stage in this economic revolution, which we call "Disruption 4.0," is not limited to specific sectors but is structurally transforming business models across the entire global economy.

As of year-end 2018, Giroux notes, T. Rowe Price analysts estimated that 31% of S&P 500 market cap was threatened by disruption (although those companies accounted for almost 37% of S&P 500 earnings). As of October 2019, the number of at-risk companies had increased, but their share of S&P 500 market capitalization had declined, to only 29%.

"Even though we've added more names to our list, they're actually a smaller part of the universe today because they've been such underperforming stocks," Giroux says.

Disruption has created a strong fundamental backdrop for its beneficiaries—such as the major technology platform companies—while curbing earnings growth for many incumbent firms trading at lower multiples.

Strategic Deals Miss the Mark

Although a number of challenged, or "incumbent," firms are seeking to meet their challengers head on, the track record for these efforts has been relatively poor, Giroux says.

- Too many boards and management teams are throwing "Hail Mary" passes pushing ambitious acquisition deals to try to fix their fundamental problems.
- Many, if not most, of these deals have resulted in poor financial returns and have failed to achieve their intended strategic objectives.
- Because of bad capital allocation decisions, many challenged companies are likely to be subpar long-term investments almost regardless of their valuations, Giroux predicts.

Disruption Has Created a Strong Fundamental Backdrop for Growth

(Fig. 5) Changes in Forward Revenue and Earnings Measures June 1, 2007, Through October 31, 2019¹



Source: Russell via FactSet (see Additional Disclosures). T. Rowe Price calculations using data from FactSet Research Systems Inc. All rights reserved.

¹ Difference between forward revenue and earnings measures as of October 2019 and forward measures as of June 2007.

4.1%

Compound annual growth rate for earnings in the S&P Utilities Index, 2007–2017.1

However, disruption also is improving the growth characteristics of some traditional sectors, Giroux argues. Utilities, for example, typically have been viewed as defensive yield plays. But Giroux says the sector has evolved in recent years, demonstrating newfound growth potential that may not have been fully rewarded by the market.

Many Utilities Are Growing Earnings

Giroux credits three related trends for transforming at least some utilities into earnings growth engines:

- Regulatory reform: Many states now allow utilities to start earning a return upon breaking ground on new power plants, rather than when the facility comes on line.
- Fracking technology: Natural gas prices have dropped dramatically in many U.S. service areas. While much of those savings are being passed along to consumers, utilities also have been able to retain part, boosting return on equity.
- Low-cost renewables: Solar and wind generation is now cheaper than coal-fired power in some regions and

at certain times of the day. Operating costs for renewable installations also tend to be significantly lower than for conventional power stations.

The impact on earnings has been dramatic, Giroux says. The utility industry saw virtually zero earnings growth from 1986 through 1998, he notes, while S&P 500 earnings rose 150% over that same period. However, the gap has narrowed substantially over the past two decades.

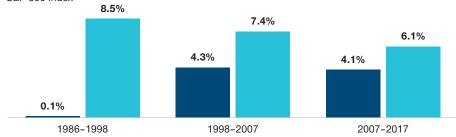
Continued declines in renewable costs and improvements in storage capacity could fuel a sustained, multi-decade period of above-trend earnings growth for utilities, Giroux argues. Yet, valuations today reflect only a small premium over the broad U.S. market.

Careful stock selection is needed to avoid troubled utilities and/or those with significant markets in poorly regulated states, Giroux adds. "But I think a utility that potentially can grow earnings at 6% per year, with a dividend that is 1.5 times the yield on the 10-year Treasury note, should trade for a higher multiple than it does today," he concludes.

Earnings Growth Has Improved for U.S. Utilities

(Fig. 6) Earnings per Share (EPS) Compound Annual Growth Rates Through 2017¹





Source: S&P via FactSet (see Additional Disclosures). T. Rowe Price calculations using data from FactSet Research Systems Inc. All rights reserved.

¹ Earnings data is shown through December 31, 2017, to avoid distortions caused by the 2017 U.S. tax reform law, which included major cuts in corporate income tax rates. These changes greatly increased per share earnings for both the S&P Utilities index and the S&P 500 Index. However, because utilities as a sector generate large amounts of taxable income, they benefited disproportionately from the law. Thus, including 2018 earnings here would have created an unfair comparison to the broader S&P 500 Index.

China will not back down on its goals in areas such as Al, robotics, electric vehicles, and domestic semiconductor production.

Justin ThomsonChief Investment Officer, Equity

Politics, Populism, and Policy

The U.S. presidential election is likely to be the most significant political event of 2020, but a variety of other geopolitical risks, including the trade war, Brexit, and the protests in Hong Kong also are likely to impact global markets.

The Trade War

The U.S.-China trade dispute was a key driver of market volatility in 2019, as seen in the fluctuating fortunes of the companies most directly exposed to the Chinese market.

After stumbling sharply in August, following a U.S. announcement that it would raise tariffs on an additional USD 300 billion in imports, China-related stocks subsequently rallied along with the broader market as hopes rose for an interim trade agreement.

While there are signs that the U.S. and China could finalize a short-term deal—in essence, a truce—that boosts sales of U.S. agricultural goods and rolls back some tariffs, the underlying conflict is unlikely to be resolved in 2020, Thomson says. On some core

issues, such as technology subsidies, compromise may not be possible at all.

"China will not back down on its goals in areas such as Al, robotics, electric vehicles, and domestic semiconductor production," Thomson predicts. "They will never reach an agreement on Chinese state support for these key industries."

Brexit

The uncertainty generated by the UK's divorce from the European Union (EU) appears likely to continue into 2020. Repeatedly extended, the Brexit deadline was set for January 31, 2020; however, that date could be moved again depending on whether the British parliament approved the necessary exit legislation after the country's December general election.

Although post-Brexit arrangements—such as the UK-EU trade relationship—could be negative for growth and earnings, passage of exit legislation would likely be positive for UK equities and the British pound, Thomson says, if only because it would reduce uncertainty.

The U.S.-China Trade War Has Contributed to Market Volatility

(Fig. 7) Performance of S&P 500 Companies With Highest Exposure to China¹ Relative to the S&P 500 Index, Through October 31, 2019



Past performance is not a reliable indicator of future performance.

 $Sources: S\&P \ (see \ Additional \ Disclosures), \ Strategas \ Research \ Partners, \ and \ T. \ Rowe \ Price.$

¹The S&P 500 companies with the highest exposure to China are composed of the 30 companies within the S&P 500 Index that have the highest China revenues and/or the largest China trade lobbying efforts according to Strategas Research Partners. The basket of companies was created in March 2019, and its performance was calculated back to December 31, 2017. The basket was reconstituted on June 19, 2019 and again on August 24, 2019. All performance results were based on the companies in the basket following each reconstitution, i.e., historical performance was not rerun to reflect the changes in the basket.

It's fascinating to me that the market is not more concerned about the U.S. election. We think it has the potential to be very disruptive for many sectors.

David Giroux

Chief Investment Officer, Equity and Multi-Asset

"To a certain extent, because Brexit has dragged on for so long, the economic damage—deferred investment, higher inflation—already has been done," he says.

Hong Kong

The mass protests in China's special administrative region began in reaction to a proposed extradition law allowing residents to be tried on the mainland but have evolved into a movement demanding democratic political reforms.

While the disturbances clearly have had a negative effect on Hong Kong's economy, the impact on China as a whole has been difficult to distinguish from the trade-related and structural issues slowing growth.

It also remains unclear what steps, if any, Beijing might take to restore order. "I don't know what a reasonable outcome in Hong Kong would look like," Thomson says.

U.S. Election

Equity markets may be underestimating the potential impact of the 2020 presidential race on tax rates, regulation, and companies in the health care, energy, and financial services sectors, Giroux says. "It's fascinating to me that the

market is not more concerned about the U.S. election. We think it has the potential to be very disruptive for many sectors."

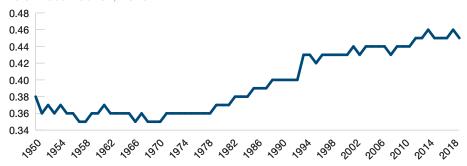
Part of the political backdrop to the 2020 election is the debate over the rise in income inequality that has accompanied the free market reforms of the past four decades. Although these structural changes have boosted growth and lowered inflation, the benefits have not always translated into rising wages and living standards.

While economic anxiety has helped fuel populism, the political appeal of candidates promoting tighter regulation and income and wealth redistribution poses the more immediate risk to markets, Giroux argues.

The odds are about even that such a candidate will win the Democratic nomination, Giroux contends. If elected, a Democratic president probably would find it difficult to push a left-leaning legislative agenda through the U.S. Senate, he notes. But potential regulatory changes by such an administration—such as a stricter limits on oil and gas fracking—are not being priced into the market at all. "It gives me reason to be a little bit more cautious."

Increasing Income Inequality Has Helped Fuel Economic Anxiety

(Fig. 8) Gini Coefficient for the United States¹ As of December 31, 2018



Sources: Strategas Research Partners and U.S. Census Bureau.

¹ The Gini coefficient is a summary measure of income inequality that indicates the dispersion of income across the entire income distribution. The coefficient ranges from 0, indicating perfect equality, to 1, perfect inequality. A higher coefficient indicates higher-income individuals are receiving larger percentages of total national income. It is not an absolute measure of income or wealth.

I don't think you want to stand in the way of the three major central banks when they are expanding their balance sheets.

Justin ThomsonChief Investment Officer, Equity

Conclusions

With monetary policy worldwide largely committed to ensuring market liquidity and supporting economic growth, the market outlook for 2020 appears considerably brighter than it did at the midpoint of 2019. Or, as Thomson puts it: "I don't think you want to stand in the way of the three major central banks when they are expanding their balance sheets."

However, considerable downside risks—both political and economic—remain. Although equity valuations overall do not appear extended relative to historical averages, forward-looking multiples in the U.S. market may reflect overly optimistic forecasts for 2020 earnings.

Global credit markets are unlikely to deliver the double-digit returns seen in 2019, but attractive opportunities can still be found in EM debt, high yield, and bank loans—assuming the economic data confirm that the reflation expected in 2020 is actually underway.

By contrast, low or negative yields on many sovereign bonds create the risk of subpar returns or even capital losses if a strengthening global economy causes interest rates to rise. However, sovereigns potentially can still be a useful hedge against extreme political or economic shocks.

Non-U.S. equities, and EM equities in particular, appear attractive based on relative valuations, raising the possibility that they could break their long streak of underperformance relative to the U.S. market. However, stronger global growth—and, in Europe, improved banking margins—will be essential.

In an uncertain market environment, with a wide dispersion of returns both in and among sectors and industries, in-depth fundamental research will be particularly critical for identifying potential opportunities and risks.

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