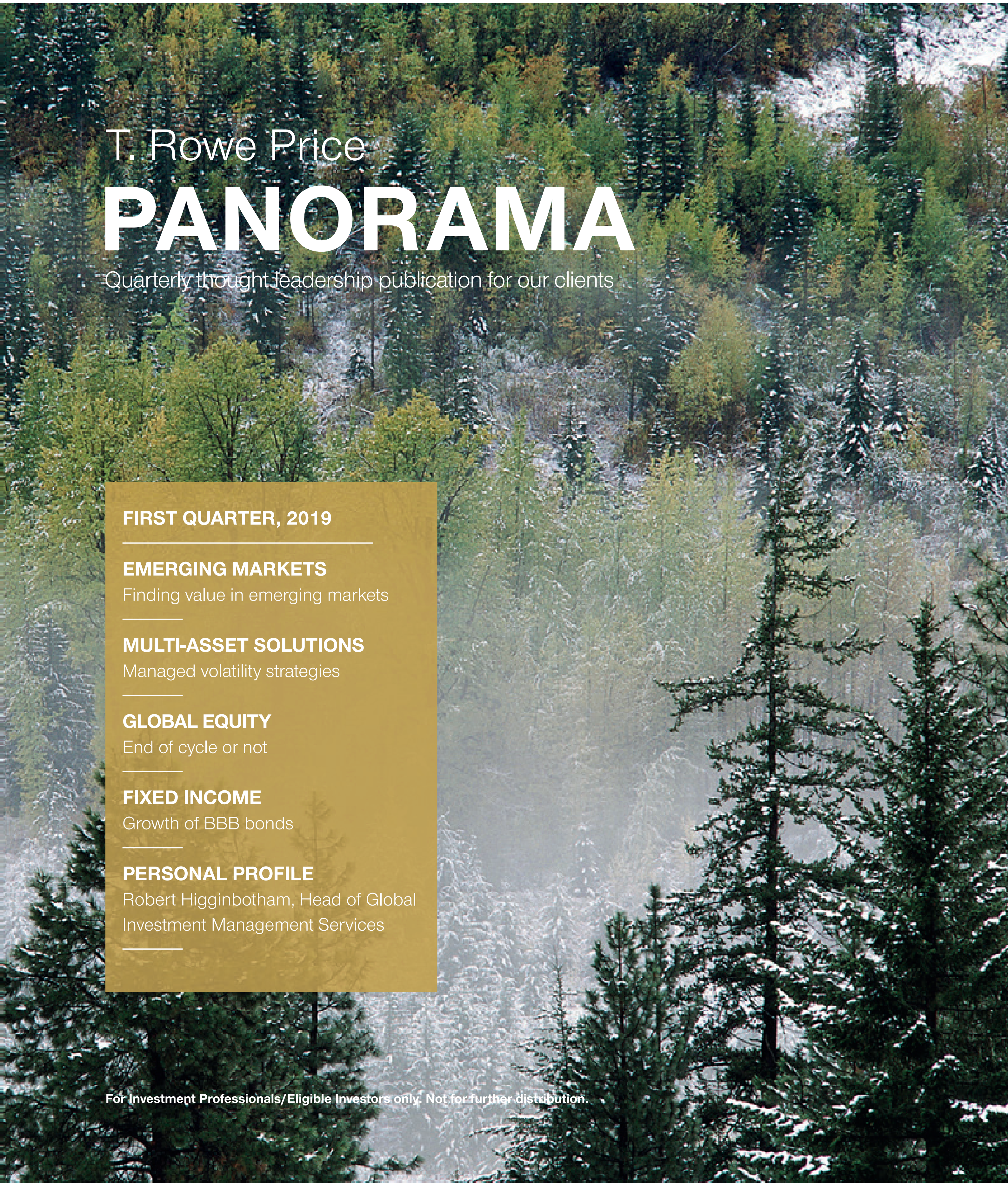
T. Rowe Price

INVEST WITH CONFIDENCE



T. Rowe Price

PANORAMA

Quarterly thought leadership publication for our clients

FIRST QUARTER, 2019

EMERGING MARKETS
Finding value in emerging markets

MULTI-ASSET SOLUTIONS
Managed volatility strategies

GLOBAL EQUITY
End of cycle or not

FIXED INCOME
Growth of BBB bonds

PERSONAL PROFILE
Robert Higginbotham, Head of Global Investment Management Services

WELCOME.....

.........to the latest edition of the T. Rowe Price Panorama magazine – our quarterly publication designed specifically for you and your clients in the Asia-Pacific (APAC) region.

With another year behind us and a new one just beginning, we consider the many value-oriented opportunities within emerging markets that are available in this traditionally growth-associated domain. For those prepared to look beyond the high-profile names, and instead among the many overlooked, forgotten and unwanted companies, there are exciting potential rewards on offer.

In response to a potentially more volatile and challenging market environment in 2019, we consider the appeal of managed volatility strategies. In a more uncertain landscape, managed volatility strategies offer an option for investors to stay in the market: potentially retaining the upside opportunities if expected volatility stays low, but likely providing downside risk management if volatility increases.

We also consider the outlook for global equities in the context of where we are within the current market cycle – are we already at the end of the cycle, or simply in the later stages?

In addition, we delve into the world of credit, looking specifically at the deterioration in the overall credit quality of investment grade credit markets. This is largely the result of an explosion in BBB-rated paper over recent years, but how worried should we actually be?

Finally, we talk at length to Robert Higginbotham, T. Rowe Price's Head of Global Investment Management Services, about building a truly global business. It's not just about being big, it's about building as diverse a business as possible. We want to be there for, and with, our clients, sustainably, throughout their long-term investment journey.

We hope you enjoy this edition of the T. Rowe Price Panorama Magazine. As we begin 2019, we wish all our readers a happy and prosperous new year.

As always, we welcome any comments or feedback you might have, so please get in touch via the contact details on the final page of the magazine.

T. Rowe Price Australia

OVERLOOKED, FORGOTTEN, UNWANTED – FINDING VALUE IN EMERGING MARKETS

EM equity valuations only reached a trough in the first quarter of 2016, meaning we are just over two years into this current EM cycle.

Ernest Yeung
Portfolio Manager, Emerging Markets Value Equity Strategy

In the decade since the end of the global financial crisis, growth stocks have substantially outperformed their value counterparts. However, value stocks are starting to attract attention again, raising the question: are we nearing a potential inflection point in the growth/value relationship? With this in mind, we spoke to Ernest Yeung, portfolio manager of the T. Rowe Price Emerging Markets Value Equity strategy, about where he is currently finding value opportunities and also about some of the common misconceptions surrounding growth and value investing.

Trade wars, slower growth in China and monetary tightening in the U.S., are all taking a toll on investor confidence currently, resulting in increased volatility in emerging markets (EMs). Despite the headwinds, however, market fundamentals remain robust. EM equity valuations only reached a trough in the first quarter of 2016, meaning we are just over two years into the current EM cycle. A cycle within EMs usually lasts between 8–10 years, so we are not even close to the end. Encouragingly, at both the stock level and on the macro front, decisions are being made for positive reasons. Governments have recognized previous mistakes and are taking prudent decisions, while corporates remain focused on shareholders.

This is one of the major differences between developed and emerging markets. Within the former, monetary easing is being withdrawn and interest rates are rising as the cycle is much further progressed and inflationary pressure is building. However, that is not the case for EMs, where inflation remains generally contained. While EMs may temporarily be impacted by U.S. rate hikes and talk of potential trade wars, they are still moving in the right direction. Meanwhile, volatility offers the opportunity to buy good quality companies at potentially lower prices.

There is no question that the current U.S./China trade conflict is important, and that there are significant ramifications for EMs, and we are constantly reviewing the situation. However, markets have already sold off quite considerably on the back of these worries. For example, the China domestic A-Shares market is trading at near five-year lows. Encouragingly, when all the current trade tariffs being discussed are aggregated, it still only represents less than one per cent of China's total GDP. With the economy still growing at 6% every year, we are a little more sanguine. It is also worth bearing in mind that the Chinese renminbi has depreciated by almost 7%[1] year-to-date, which offsets much of the negative effects from trade tariffs.

There are those stocks that have performed well over the last two years and which now look expensive. These stocks have also become a much larger part of the EM index, so investing via an ETF means a greater exposure to these expensive companies.

Considering the EM Landscape in Two Parts

When considering EMs, the landscape needs to be broken into two parts. On the one hand, there are those stocks that have performed well over the last two years and which now look expensive. These stocks have also become a much larger part of the EM index, so investing via an ETF means a greater exposure to these expensive companies. Whereas, outside of areas like technology, biotech and advanced materials, to name a few – the so-called new economy sectors – there are many companies that look cheap in our view. However, few are taking notice of these companies as they are so focused on high growth-oriented stocks, most notably the so-called BAT stocks (Baidu, Alibaba and Tencent).

Elsewhere, in Latin America, political and economic uncertainties have created substantial headwinds for many local markets, such that most in the region are looking like good value, in our view. Overall, Latin America markets have been generally flat over the last five years. In comparison, the S&P 500 has delivered a total return of more than 50%[2]. Currencies are also cheap and that is an important contributor to performance. Conversely, the countries that have been more stable from a macroeconomic perspective, like Chile, look more expensive in our view opinion. This is also the true of Mexico. In both countries, we are selectively focusing on high-quality companies that have the potential to grow into their valuations.

South Africa is another largely forgotten country that nobody really talks about. Even the local entrepreneurs tend to take any profits they make and invest them outside South Africa. However, the country is home to some good quality companies, so this is another market we like currently.

A Large Opportunity Set but Selectivity is Key

More broadly, the EM opportunity set is around 3000 stocks. Many of these are not very attractive, and that

[1] FactSet, as of 30 November 2018.
[2] FactSet, as of 30 November 2018.

is why a passive investment approach makes little sense, in our view. Nevertheless, we are excited about the opportunities we are finding within the EM value universe. For example, many people view state-owned enterprises (SOEs) as toxic investments and, over the past 10 years, this has been true as their general performance has been appalling. However, change is afoot as investors are forcing these companies to make important changes. Many are cleaning up their balance sheets, deleveraging and starting to generate decent free cash flows.

It is important to remember that between 2000 and 2009, Chinese SOEs were the best-performing asset class in EMs. A huge inflection point was reached in 2009, however, when the government stopped all stock-option programmes in China. That caused huge disruption to these companies and, since 2009, they have been a very poor asset class to be invested in, due primarily to a lack of focus on shareholders as there was no incentive for management. Following the recent reversal of that restriction, we believe that we may see a more positive inflection point for these stocks.

Addressing Some Common Misconceptions

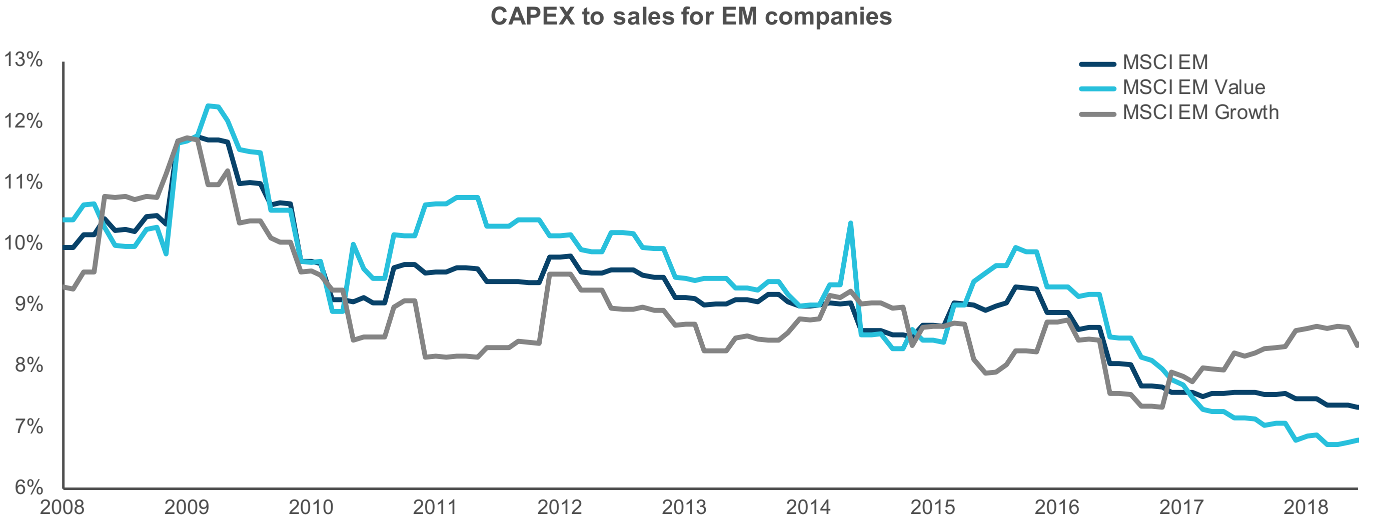
At this point, it is worth addressing some of the common misconceptions associated with growth and value investing. As a value investor and, specifically, an EM value investor, perhaps the biggest misconception is that attractive value opportunities in the EM region are few and far between.

As a value investor and, more specifically, an emerging markets value investor, perhaps the biggest misconception is that attractive value opportunities in the EM region are few and far between.

This is not surprising, given EMs tend to be associated with high growth. Indeed, the majority of all active money flows currently into the EM universe is invested in core and growth portfolios, meaning that only a very small proportion of total EM money flows is value-focused.

Given this large bias towards core/growth investments, there are many areas that are being overlooked or forgotten. This disparity between the two investment styles is perhaps the biggest disconnect between emerging and developed markets, in our view.

FIGURE 1: Strong Capex Discipline Underpins Our Positive View of Emerging Markets
As of 30 September 2018



Sources: FactSet, MSCI.
MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI date may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

For example, we can currently buy what we believe are some of the best franchise banks and best insurance companies within the emerging markets landscape, at historically low prices. The widely held perception is that financials are cheap for a reason. This might be true for developed markets (DM), where financials are struggling due to depressed 10-year bond yields. However, there are 30 different countries in the emerging market universe. And unlike developed markets, the yield curve in China, as well as some central and eastern European countries, has been steepening for two years. Also, capital spending (capex) in EMs is at the lowest level in more than a decade (Figure 1), so we expect this to pick-up going forward. With increased capex comes job creation, rising wages and loan growth, so EM financials look reasonably well positioned currently, in contrast to their developed market counterparts.

Another misconception is that the same rules apply, whether investing in emerging or developed markets. However, value investing in EM is very different from value investing in DM. For example, many DM value investors will focus on buying "falling star" companies as prices decline, and then wait for some catalyst to trigger mean reversion. However, mean reversion often doesn't occur in EMs. Cheap stocks can stay cheap for a very long time for a range of reasons, including opaque ownership structures, weaker governance practices and a prevalence of family and state-owned companies. There are also few takeover stories or leveraged buyouts in EMs. So, there are limited opportunities to buy genuinely cheap companies – on a price/earnings or price-to-book basis – and simply wait for them to pay off.

Finally, as an EM value investor, we also need to consider the potential impact of a peak in the U.S. economy. EM and U.S. stock markets have a historical correlation of around 0.75. So, if the U.S. economy rolls over EMs will not be immune to the slowdown. However, even in the event of such a headwind developing, we would work even harder to find companies with the potential to improve and outperform in a tougher market environment. A crucial point to remember is that, for investors in the EM value space, there remains the luxury of valuation multiples that are at very low levels.

MANAGED VOLATILITY STRATEGIES: DO THEY ACTUALLY DO WHAT IT SAYS ON THE TIN?

Thomas Poullaouec
Head of Multi-Asset Solutions APAC

Wenting Shen
Multi-Asset Solutions Strategist

Global trade wars, central bank tightening, emerging markets currency devaluations, populist elections and a stronger dollar all combined to jolt financial markets for the better part of 2018. In 2019, the investment landscape looks no less challenging to navigate as any number of geo-political and financial uncertainties threaten to trip up a historic but ageing bull market. In this environment, managed volatility strategies offer an option for investors to stay in the market: they will likely retain the upside opportunities if expected volatility stays low but will likely provide downside risk management if volatility increases.

Actively Managing Risk Exposure

The basic premise of a managed volatility strategy is that it aims to forecast future volatility by observing current volatility, both implied and realized, and then adjusts risk exposures accordingly. While asset returns are difficult to forecast, especially over short investment horizons, it is well documented that asset return volatility tends to cluster. In other words, large-magnitude returns tend to be followed by large-magnitude returns, and small-magnitude returns by small-magnitude returns. This pattern strongly suggests that volatility is forecastable and forms the basis for managed volatility strategies.

In addition to well-researched volatility and correlation forecasts, successful management of managed volatility strategies also requires thoughtful portfolio construction and implementation. Portfolio positions need to be adjusted periodically based on the volatility and correlation forecasts in order to keep the strategy aligned with the desired volatility target. This process also must take into account any portfolio constraints.

Supports Portfolio Values in Good Times and Bad

A managed volatility strategy can potentially help preserve portfolio values during periods of uncertainty by changing exposure to risky assets (mainly equities) based on forecast volatility. When forecast risk is high, the strategy reduces exposure to equities. When forecast risk is low, the strategy increases exposure. This is important since it is participation in positive market environments that drives returns, not just cutting risk in bad times.

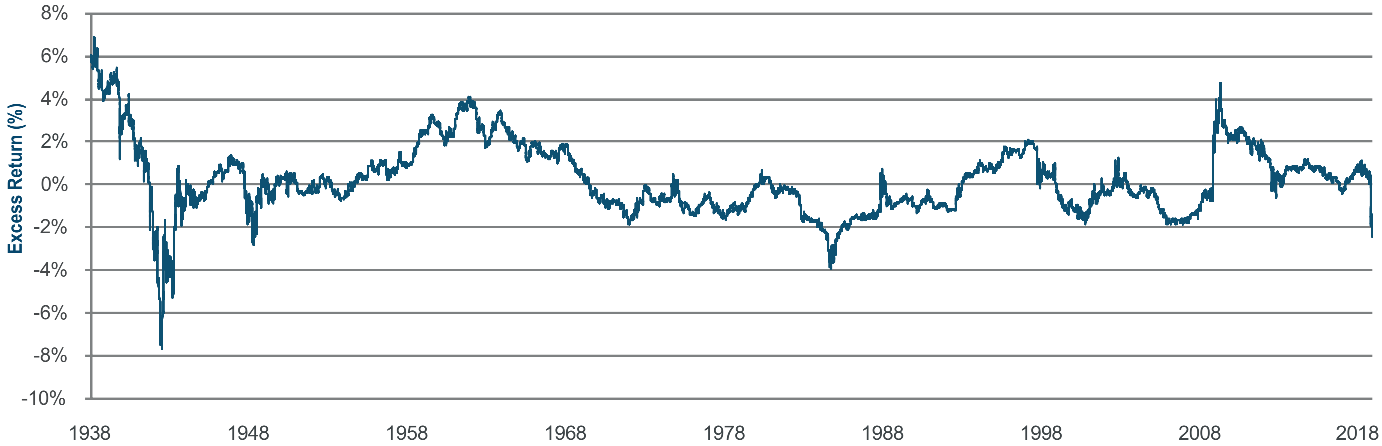
While it is not an approach that necessarily adds value in all market conditions, managed volatility can both help mitigate risks and maintain risk-adjusted returns. Furthermore, its systematic nature to implementing portfolio changes offers an advantage in terms of speed and decisiveness, while avoiding counterproductive investor behavior often seen during periods of extreme market stress.

Impact on Portfolio Performance and Risk

An examination of the long-term performance of a hypothetical managed volatility portfolio helps bring to light whether managed volatility strategies can indeed deliver on their intended investment benefits.

Figures 1 and 2 show the potential impacts on performance and volatility from the implementation of a hypothetical managed volatility strategy over nearly a century of market history ending in September 2018.[1] Figure 2 shows that the strategy's long-term average performance could have been commensurate with that of the underlying asset (in this case, the S&P 500 Index), while long-term volatility could have been

FIGURE 1: Hypothetical Excess Returns for a Managed Volatility Model Versus the S&P 500 Index
Rolling 10-Year Periods, February 1, 1938 through September 30, 2018



Contains hypothetical model results. See appendix for important information regarding model portfolios and for modeling methodology.
Sources: Haver Analytics, S&P, Bloomberg Index Services, Ltd. S&P 500 data include proxy returns prior to formal index inception in 1957 and are sourced directly from Bloomberg Index Services, Ltd. All data analysis by T. Rowe Price . Bloomberg Index Services Ltd. Copyright © 2018, Bloomberg Index Services Ltd. Used with permission.

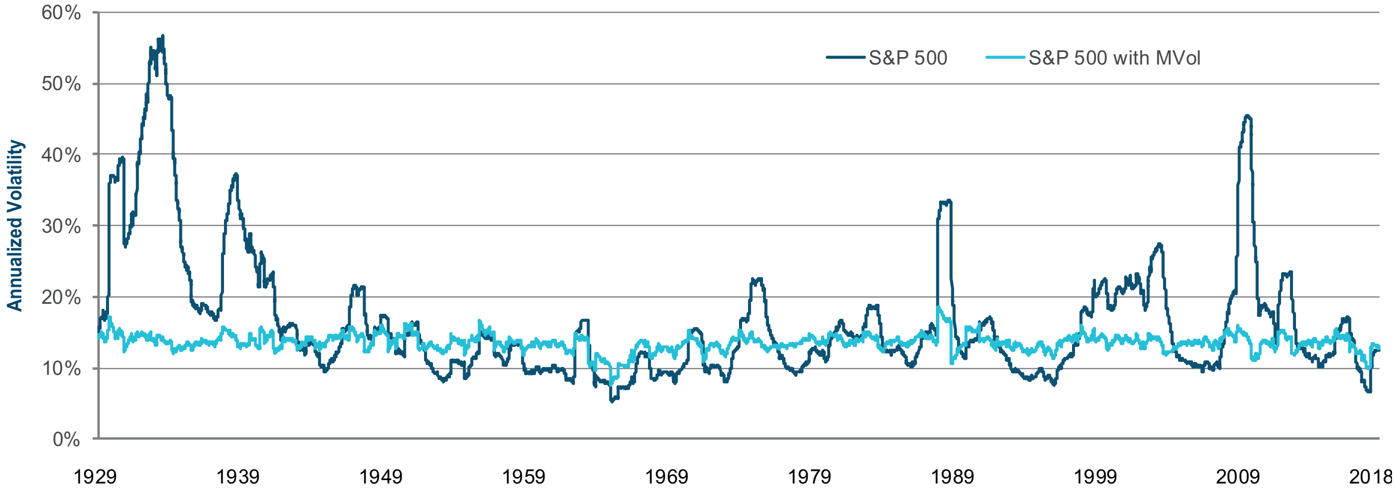
FIGURE 2: Hypothetical Performance Summary for a Managed Volatility Model Versus the S&P 500 Index
February 5, 1928 through September 30, 2018

	Since Inception		10 -year		5 -year	
Performance Summary	**S&P 500**	**S&P 500 with M -Vol Model**	**S&P 500**	**S&P 500 with M -Vol Model**	**S&P 500**	**S&P 500 with M -Vol Model**
Annualized Return	10.9%	10.8%	11.4%	11.6%	14.0%	14.8%
Annualized Volatility	18.8%	14.7%	14.7%	11.2%	9.5%	11.1%
Sharpe Ratio	0.40	0.51	0.76	1.00	1.42	1.30
Maximum Drawdown	86.0%	52.6%	41.8%	15.8%	8.4%	10.1%

Contains hypothetical model results. See appendix for important information regarding model portfolios and for modeling methodology.
Sources: Haver Analytics, S&P, Bloomberg Index Services, Ltd. S&P 500 data include proxy returns prior to formal index inception in 1957 and are sourced directly from Bloomberg Index Services, Ltd. All data analysis by T. Rowe Price . Bloomberg Index Services Ltd. Copyright © 2018, Bloomberg Index Services Ltd. Used with permission.

[1] For more details on our modeling methodology, please see the appendix.

FIGURE 3: Volatility of the S&P 500 Index
Rolling One-Year Periods, February 2, 1928 through September 30, 2018



Contains hypothetical model results. See appendix for important information regarding model portfolios and for modeling methodology.
Sources: Haver Analytics, S&P, Bloomberg Index Services, Ltd. S&P 500 data include proxy returns prior to formal index inception in 1957 and are sourced directly from Bloomberg Index Services, Ltd. All data analysis by T. Rowe Price . Bloomberg Index Services Ltd. Copyright © 2018, Bloomberg Index Services Ltd. Used with permission.

closer to the desired target (decided at 13.5% in that example). Figures 3 and 4 highlight the substantial reduction in volatility that could have been achieved by the strategy compared with the S&P 500.

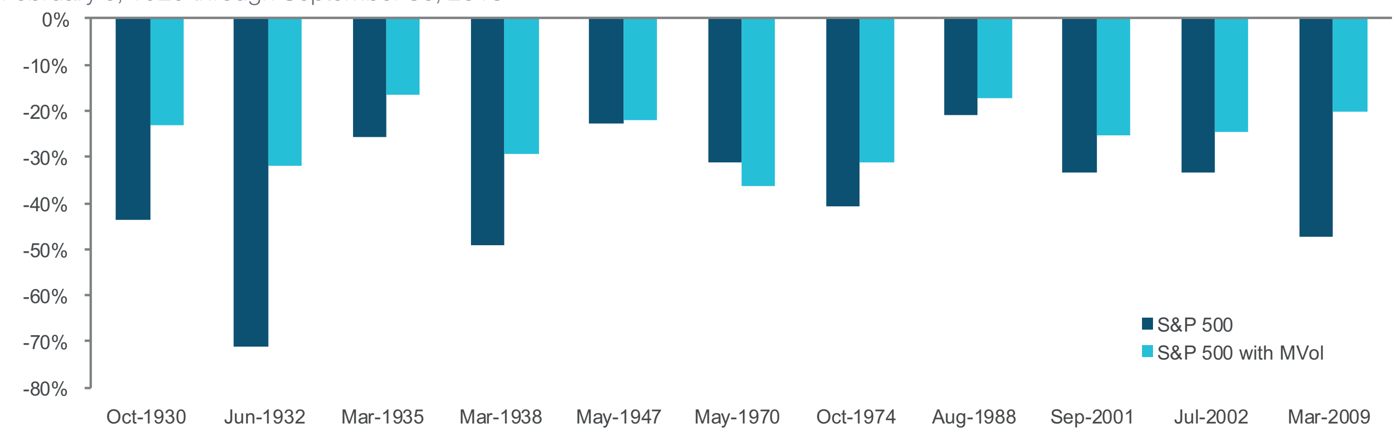
Looking closer at the results, it is also worth noting that a potential benefit of a managed volatility strategy is the absence of a structural performance drag over the long term horizon. An investor concerned about downside risk could systematically purchase put options to protect his or her portfolio, but the drag on portfolio returns imposed by the option costs could create a structural performance deviation from a static benchmark over time.

If structured properly, a managed volatility strategy potentially can maintain average allocations that are similar to those in the underlying portfolio across time, but that still can be altered based on the forecast market environment. Historical empirical analysis suggests that a managed volatility strategy that is implemented with minimal constraints and that targets the long-term volatility of the underlying portfolio potentially could provide relatively stable volatility without degrading long-term average performance.

Suitability in the Current Environment

Whether or not managed volatility strategies can deliver near-term value depends in part on the market environment. For instance, the approach is well suited for trending markets where the volatility environment can persist long enough for the strategy to turn risk on and off depending on the forecasts. By contrast,

FIGURE 4: Maximum Drawdowns for the S&P 500 Index During Significant Market Corrections
February 5, 1929 through September 30, 2018



Contains hypothetical model results. See appendix for important information regarding model portfolios and for modeling methodology.
Sources: Haver Analytics, S&P, Bloomberg Index Services, Ltd. S&P 500 data include proxy returns prior to formal index inception in 1957 and are sourced directly from Bloomberg Index Services, Ltd. All data analysis by T. Rowe Price . Bloomberg Index Services Ltd. Copyright © 2018, Bloomberg Index Services Ltd. Used with permission.

its capacity to adjust risk may be less beneficial in a whipsawed environment where prices react quicker than the volatility forecast.

Even though markets have been characterized by relatively low volatility for the past several years, the large size of price movements that did occur in 2018 shows that investors should still remain vigilant. Adding downside risk management can help withstand the sudden sentiment swings in the current environment and account for potentially higher volatility in the future. Importantly, managed volatility strategies have the potential to mitigate tail risk. Typically, large portfolio drawdowns have been experienced during market dislocations and other periods of heightened volatility. Substantial increases in volatility typically have been accompanied by increases in the probability and potential magnitude of losses.

Managed volatility strategies can be structured to react quickly in volatile environments by reducing expected risk in the portfolio during periods of market stress. While this potential downside risk management may come at the cost of missing the initial market rebound, the trade-off could be worth it though if the drawdowns investors experience in volatile markets are not as severe.

Customization to Meet Investment Objectives

An individual managed volatility strategy can be customized to address specific investor objectives and constraints. For certain investors, such as insurance companies offering variable annuities with benefit guarantees or defined benefit plans nearing wind-down, changes in portfolio volatility may meaningfully impact their ability to fulfill investment requirements. By anchoring volatility irrespective of the market environment, managed volatility strategies can help ensure their portfolios remain within the prescribed bounds of risk tolerance.

The main levers at the investor's disposal include:

- **The underlying strategy:** This can be single- or multi-asset and may be actively managed. Strategies with exposure to higher-volatility assets, such as equities, are most common.

- **The volatility target:** Generally expressed as an annualized percentage, the target level reflects the desired standard deviation of returns for the strategy.

- **Volatility tolerance bands:** To reduce transaction costs, a managed volatility strategy typically will have tolerance bands around the volatility target. If portfolio volatility is forecast to remain within those bands, trading for volatility management purposes is avoided. The bands can be customized to balance trading costs and the investor's tolerance for deviations from the target. Asymmetrical bands may offer an interesting variation on this approach.

- **Volatility management instruments:** Managed volatility strategies typically are implemented as portfolio overlays. A cash allocation within the portfolio is used to collateralize liquid futures contracts, and these instruments are used to implement the desired volatility management positions. This allows the overlay to have minimal impact on the underlying portfolio. For investors who are unwilling or unable to use derivatives (due to regulatory restrictions, for example), a managed volatility strategy could seek to alter expected volatility using exchange-traded funds, cash and Treasury bonds, or the positions in the underlying portfolio could be dynamically reallocated. The choice of implementation will depend on the investor's objectives and constraints, as well as the liquidity of the specific instruments used.

- **Time horizons:** Volatility can be forecast most accurately over shorter time horizons, so a managed volatility strategy with an explicit target is more likely to adjust exposures over a relatively short horizon. However, some investors may prefer longer horizons or may be constrained from frequent trading.

Mitigating Risk During Extreme Market Stress

Historically, the volatility of asset returns has been time-varying but forecastable. Many investors—particularly those with heightened sensitivity to volatility and drawdowns—could benefit from including a managed volatility strategy in their portfolios. These strategies seek to stabilize volatility while minimizing any impact on long-term average performance and retaining the structural characteristics of the underlying actively managed portfolio.

The multitude of market shocks that characterized 2018 highlight the importance of remaining vigilant and adding downside risk management before it is too late. If a managed volatility approach can de-risk a portfolio during times of extreme market stress, even just once or twice over a prospective investment horizon, it can potentially add substantial value.

10

APPENDIX

MODELING METHODOLOGY

Managed Volatility Model Parameters

Dates:	February 2, 1928 through 30 September 2018
Net Notional Exposure:	0-150%
Equity Range:	0-150%
Target Volatility:	13.5% (Daily Annualized)
Underlying Strategy Components:	S&P 500 Index
Overlay Strategy Components:	S&P 500 Index e-mini futures[1] and cash (30-day Treasury Bill) for margin/collateral
Methodology:	Strategy managed to applicable target volatility based on daily analysis of exponentially weighted moving average covariance model with a 1-month half-life

Important Information—Model Results

The information presented herein is hypothetical in nature and is shown for illustrative, informational purposes only. This material is not intended to forecast or predict future events, but rather to demonstrate T. Rowe Price 's capability to manage assets in this style. It does not reflect the actual returns of any portfolio/strategy and does not guarantee future results. Certain assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in modeling analysis presented here have been stated or fully considered. Changes in the assumptions may have a material impact on the information presented. Data shown for the model portfolios are as of the dates shown and represents the manager's analysis of model portfolios as of that date and is subject to change over time. The model portfolios do not reflect the impact that material economic, market or other factors may have on weighting decisions. If the weightings change, results would be different. Management fees, transaction costs, taxes, potential expenses, and the effects of inflation are not considered and would reduce returns. Actual results experienced by clients may vary significantly from the hypothetical illustrations shown. The information is not intended as a recommendation to buy or sell any particular security, and there is no guarantee that results shown will be achieved.

The gross model performance results do not reflect the deduction of investment advisory fees. Returns shown would be lower when reduced by advisory fees and any other expenses incurred in the management of an investment advisory account. For example, an account with an assumed growth rate of 10% would realize a net of fees annualized return of 8.91% after three years, assuming a 1% management fee.

[1] As proxied by the excess return of the S&P 500 Index over 30-day Treasury Bill.

END OF CYCLE OR JUST MORE CRIC CYCLE?

Recent weakness within equity markets has focused investors on whether the aging bull can keep staring down an "end of cycle" bear case—a valid question given the shifts in sentiment we are currently seeing. Our view is that we have now passed "peak growth" in economic and earnings terms and the next few quarters will see a fade from recent highs. While naturally uncomfortable for investors, this fade is somewhat inevitable given the intense period of Chinese and, more recently, U.S. stimulus that is now rolling off.

David Eiswert
Portfolio Manager, Global Focused Growth Equity Strategy

Regime Change — Difficult for Investors

While equity valuations are reasonable and earnings growth is likely to be positive in the near term, this deceleration at the macro level is significant given that investors typically dislike regime change. The deceleration is marking a shift in regime, moving away from the stimulus-driven period that has benefited investors so much. As expectations adjust, this naturally creates uncertainty and volatility but also a refreshed ability to acquire stocks that are misunderstood.

While the latter stage of this equity cycle has been defined by an unusual calm and high returns, our own global economic framework has not changed significantly from more uncertain and volatile times. We have long maintained a belief that we are living in an era defined by:

- Low Dollar GDP growth,
- Excess debt,
- Excess oil, and
- Low inflation driven by technology and automation.

The consequences of this framework are very broad and cut across politics, economics, and corporate earnings power. We call the environment "deflationary progress," and its structural foundations are strong and lasting.

Importantly, a world of relatively low growth and inflation does not imply a world absent of positive change, progress, or opportunity. If anything, it implies a broad dispersion of stock returns and a need to position portfolios actively on the right side of change, as it evolves.

Deflationary progress does create challenges, however, and these include populism stemming from anemic wage growth as well as markedly different market patterns versus previous cycles. A forward-looking approach is essential in such a world of secular change.

Shifting Gears

Within this economic framework, our outlook is that we remain in a CRIC cycle, a cycle defined by ongoing bouts of Crisis, Response, Improvement, Complacency. The world is now moving out of stimulus-driven Complacency and into the Crisis and Response phases.

As we look out, we are focused on three policy responses that will shape the path and slope of growth into 2019–2020. These are:

- China's domestic economic stimulus response,
- The U.S. Federal Reserve slowing the pace of interest rate rises, especially if oil prices continue to weaken as we expect, and
- Some resolution of the U.S.-China trade dispute.

We believe enough policy response tools exist to shepherd the global economy back toward the "new normal" environment (i.e., a low growth, low return world) being reestablished, although the highly unusual political environment is certainly adding to the complexity underlying this opinion. However, our base case remains that politicians will avoid the worst scenarios of economic self-harm when rhetoric ultimately meets reality and defines policy.

Our Approach

So what are the consequences as we manage the Global Focused Growth Equity Strategy?

- Complacency peaked earlier in 2018 and that volatility will be an integral part of equity markets as we move through the next stage of the cycle.
- Do not fear the next stage of the cycle; instead, intensify your search for high-quality companies

FIGURE 1: What Does Deflationary Progress Imply for Investors?

Source: T. Rowe Price.

where you can imagine better corporate fundamentals over the next 12–24 months.

- We remain of a view that the prospect of a broad break out of inflation to the upside is unlikely and that inflation will peak in the next six to nine months. (Technology, demographics, and globalization have subdued inflation over the past decade.)
- Find companies that are beneficiaries of fading growth and inflation expectations, coupled with an idiosyncratic insight about positive change.

In terms of risk management:

- Avoid challenged companies even if valuations look "reasonable," because average/reasonable or even below-average valuations do not protect capital in harder times. Extreme valuations are powerful to future returns, however.
- Acknowledge the reemergence of populist policy and rhetoric, which is inherently uncertain in outcome but important to sentiment at the single stock and aggregate level.
- Stick to our philosophy that embeds the search for improving fundamental returns at the stock level, in part to defend our portfolio against deceleration; we firmly believe that stock-specific insights can be defensive.
- A focused portfolio is important in times of volatility, but any concentration of risk factors is equally important to manage. A strong portfolio construction discipline remains key.

On this basis, we have been defending our favored stock positions amid the volatility, trimming pockets on strength through earnings season, and making sure we are looking around corners for potential portfolio risks.

While economic growth is fading, this remains an environment of change, progress, and opportunity. Importantly, it is still an environment that we can work with as stock pickers searching for fundamental improvement, wherever it may exist.

GROWTH OF BBB BONDS — KEEPING RISKS IN PERSPECTIVE

Steven Boothe
Portfolio Manager, Fixed Income

Are BBB Bonds A Cause for Concern?

It's no secret that investment-grade credit markets have witnessed a deterioration in overall credit quality in recent years due to an explosion of BBB rated paper. In the U.S., BBB rated bonds compose roughly half the entire investment-grade market compared with just over one-third 10 years ago.[1] The surge has been even more pronounced in euro-denominated credit markets.[2] While these trends have yet to have a significant impact on pricing, we think this could change. The question then becomes: What part of the BBB market is most at risk?

To pinpoint this, the key trend to note is that much of the credit deterioration stems from a prolific level of merger and acquisition (M&A) finance over the past three years. This has spurred both an uptick in new issuance by BBB names to fund M&A as well as A rated credits falling into the BBB bracket by levering up to fund acquisitions. We believe such "credit negative" M&A deals could be the first to come under the microscope should corporate profits start to fall as the U.S. economy enters late cycle. Interest rates are projected to continue moving northward into 2020, which would only exacerbate the problem as companies' debt-servicing costs climb.

[1] Bloomberg Barclays U.S. Aggregate Corporate Bond Index.
[2] Bloomberg Barclays Euro Aggregate Corporate Bond Index.

An additional risk is that companies may soon face a maturity wall. While maturing BBB bonds make up only around 2% of the U.S.- and euro-denominated investment-grade markets in 2019, this jumps to 10% or higher for both currencies in 2020 and remains elevated in the years following.

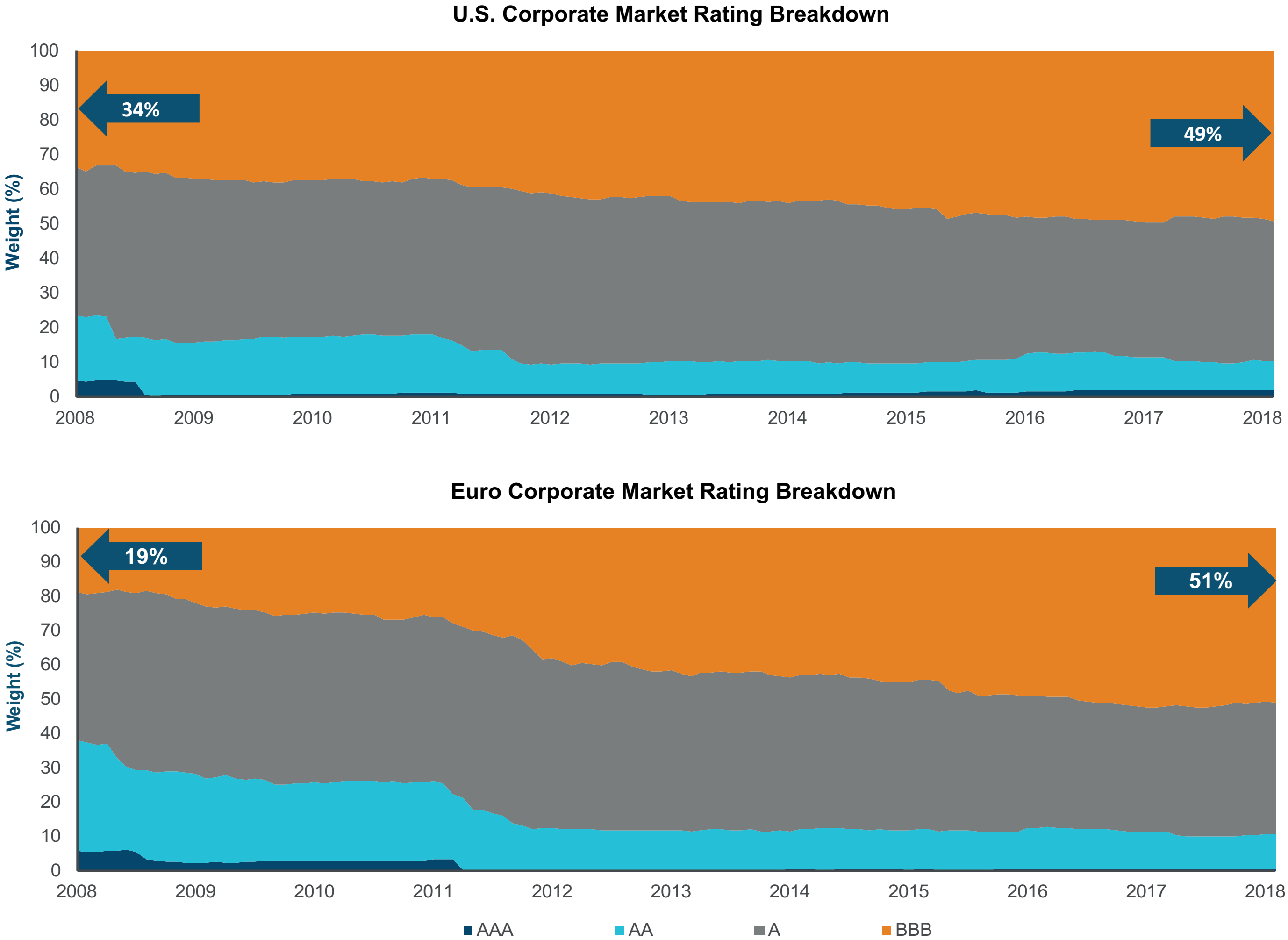
In our view, rating agencies have been slow to recognize the unhealthy levels of M&A leveraging, partly due to the above-potential pace of the U.S. economy. There is growing concern about a potential increase in the number of "fallen angels" (investment-grade credits being downgraded to high yield) as economic downturns typically feature an uptick in rating downgrades. With more of the market concentrated within the BBB rating bracket, an increasing portion of potential downgrades would cross the threshold into high yield. We believe the M&A-driven BBB universe should therefore be assessed cautiously.

Uneven Spread of Risk Favors European Issues

A deeper look at a regional and sector level reveals that the deterioration in credit quality has been disproportionate. The risk is largely contained in certain market sectors rather than constituting a systemic threat to the wider asset class.

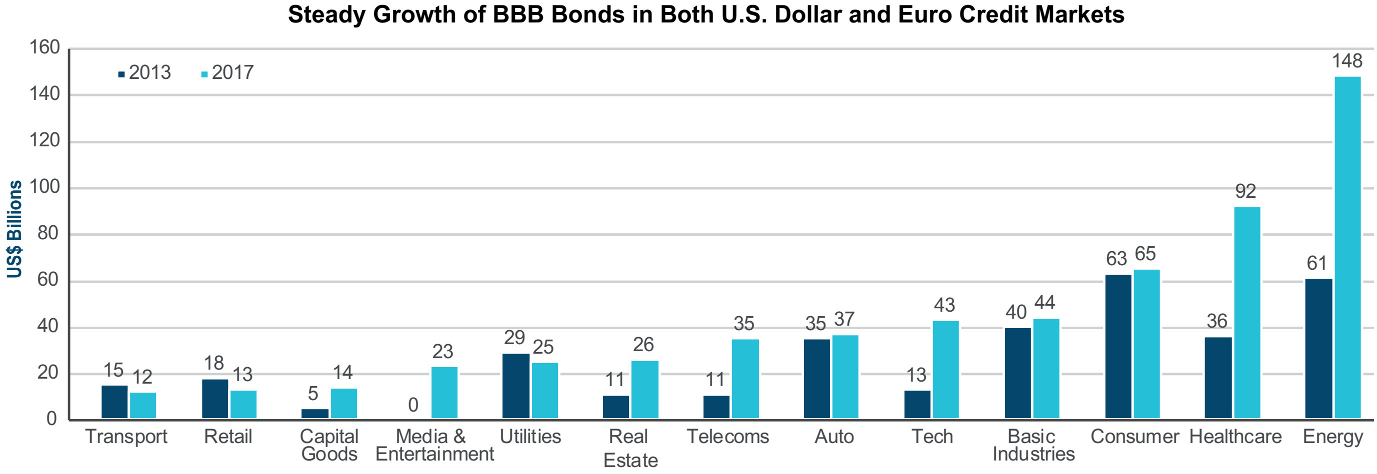
We see BBB growth posing greater concern in the U.S.-denominated market rather than its euro counterpart. While BBB paper composes a similar portion in both markets, reverse-Yankee bonds (U.S. companies issuing in euros) have accounted for more than a quarter of the growth of the euro-denominated BBB market over the past five years and now compose around 20% of the total. These reverse-Yankee issues could be among the first affected should the U.S. credit cycle roll over.

FIGURE 1: Steady Growth of BBB Bonds in Both U.S. Dollar and Euro Credit Markets
As of September 2018



Source: Bloomberg Index Services Ltd. Copyright © 2018, Bloomberg Index Services Ltd. Used with permission.
Bloomberg Barclays U.S. Aggregate Corporate Bond Index, Bloomberg Barclays Euro Aggregate Corporate Bond Index

FIGURE 2: Energy and Health Care Primary Source of BBB Surge
As of December 2017



Source: Information has been obtained from sources believed to be reliable but J.P. Morgan does not warrant its completeness or accuracy. The index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright © 2018, J.P. Morgan Chase & Co. All rights reserved.

We view the investment-grade credit market in Europe, including the BBB rated segment, as the more stable option in the medium term. Although a U.S. slowdown would not just impact U.S.-based companies, Europe may hold opportunities to selectively shift allocation as it also offers more attractive average valuations following underperformance so far in 2018.

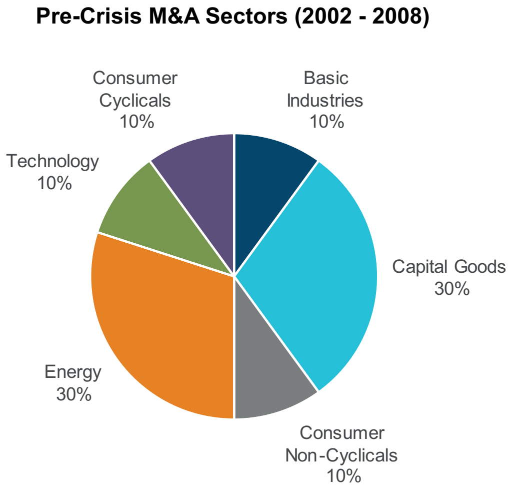
Even within the U.S. market, risk is not spread evenly. The jump in BBB supply has been far more pronounced in some sectors, with health care and energy witnessing the largest spikes. Therefore, focusing on sectors that have seen little change, or even slight drops, in the percentage of BBB names can reveal more low-leveraged investment opportunities.

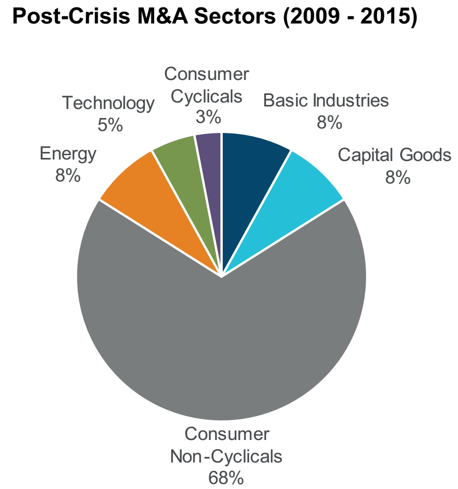
Favorable Trends Help Mitigate the Downside

In addition to diversifying by region or sector, investors should not exaggerate the downsides. While the rise in risk associated with the increase in BBB securities is a concern, a thorough analysis reveals that a number of favorable trends will minimize the systemic risk.

First, the bulk of M&A activity after the financial crisis has come in the consumer noncyclical sector, whereas energy and capital goods dominated in the pre-crisis period. Lower-beta sectors, such as

FIGURE 3: Postcrisis M&A Activity Concentrated in Noncyclical Sectors
As of June 2018





Source: Barclays Capital. © 2018 Barclays. Analysis by T. Rowe Price .

consumer non-cyclicals, are likely to see relatively moderate weakness compared with higher-beta industries in the next downturn.

Furthermore, there are more former A rated credits than former BB rated names within the wider BBB universe. This suggests that further downgrades to high yield status, even in a downturn, may be limited as the negative rating action may have already occurred in many cases.

Another point that may help contain possible downgrades is that, on average, companies with BBB ratings typically tend to reduce their leverage levels more quickly than higher-rated names in the A rating bracket. We believe that strong management teams are more likely to recognize the jump in costs associated with losing an investment-grade rating and address leverage more proactively than an A rated issuer might when the impact of a move within investment grade is less. Many of the BBB rated names are former A rated companies with large capital structures that we see as still having room to manoeuvre to prevent further downgrades to high yield. This underscores the importance of active, bottom-up security selection in both the BBB and the A rated sectors.

We believe investors should not shun BBB rated credits altogether but adopt a disciplined and flexible approach. Focusing on shorter-dated credits while avoiding the long end, particularly in the more highly leveraged market sectors, should also help limit downside to this risk. Overall, corporate fundamentals are more favorable compared with recent history and the previous late-cycle period before the financial crisis. We continue to identify names in the BBB rating bracket that demonstrate positive and stable cash flows alongside sound long-term corporate strategies.

In our view, by prioritizing well-managed companies with long-term business models, investors can minimize their exposure to the corners of the BBB market that could experience the greatest stress in the next downturn.

BUILDING A GLOBAL BUSINESS IS ABOUT BUILDING AS DIVERSE A BUSINESS AS POSSIBLE

Robert Higginbotham
Head of Global Investment Management Services

BIOGRAPHY

Career

2012 - Present

Head of Global Investment Management Services
T. Rowe Price

Member of Management Committee
T. Rowe Price

Prior to 2012

CEO Europe, Middle East and Africa and Latin America regions
Fidelity Worldwide Investment

Global Head of Product
Global Marketing Director
Schroder Investment Management

Began career as graduate marketing trainee
Prudential Plc.

Professional & Education

B.A. (honours)
Sheffield University

Master's degree in business
Imperial College London

The first thing to understand is that, for T. Rowe Price (TRP) as a firm, our aim in building a truly global business is not because we want to be big. Our principal interest is to create a more diversified business. The reason that this is so important is because, as we are seeing today, we cannot predict the cycles in capital markets, or in the macroeconomy, nor can we anticipate regulatory or policy changes – these things are all outside of our control, yet they massively impact our business.

The way that a business copes with these factors hitting them in ways they cannot control, is by building the most diversified and varied business possible. In this way, it is exposed to the positive impact of the cycles, but also, if impacted in a negative way, then there are still parts of the business that are not directly exposed to that negative influence, and so act as a stabilising influence.

Long-term Stability for Our Clients

Ultimately, the reason we want to build the most stable business possible, is because it is in the best interests of our clients. If we truly believe that we have a long-term responsibility to our clients, and if they are trusting us with their investment over 10, 20, 30 years, even longer, then we must do everything in our power to ensure long-term stability in our business. Our clients should not have to worry about whether their investment partner will still be in business in 10 years' time. Furthermore, our clients should also not have to worry that TRP's business is overly exposed to any one region or asset class, such that, if the asset class or region experiences a difficult period, the whole business might suffer. In short, our main priority in building a global, diversified business, is that we need to provide long-term stability for our clients.

The Growth Opportunity is Clear

Another key reason for growing our business globally is that, from an investment point of view, there is an immense growth opportunity, with Asia being a prime example. Therefore, building investment capabilities within the region, both to help develop our domestic businesses in Asia, but also to provide our clients elsewhere in the world with access to those local investment capabilities, is mission-critical for TRP. When you think of the economic growth, the vast populations, and the rising wealth that is evident in the Asia region, it is clear why we want, and need, to have a strong presence. There is significant growth potential for our clients which, in turn, means there is potential for our business.

If we truly believe that we have a long-term responsibility to our clients, and if they are trusting us with their investment over 10, 20, 30 years, even longer, then we must do everything in our power to ensure long-term stability in our business.

A Measured, Long-term Commitment

Looking back over the time that TRP has been present in the APAC region, there are a lot of things that we have done well and that have helped us to establish the strong presence in the region that we have today. First, we have invested in the region over a long period of time. We have been present in Tokyo for almost 40 years and we opened our office in Hong Kong 30 years ago in 1987, with a staff of around 20-30 people. We are now close to 160 people. Our Singapore base is now more than 20 years established and our Australia office has been in place in Sydney since 2004, followed by a second office in Melbourne in 2014. The important point here is that we have built our Asia business through fair weather and foul, taking a measured, long-term approach in the region.

Local People for Local Markets

Broadly speaking, we have also tried to respect local markets by hiring local people. We have local heads of business and investment in Japan and Australia, as well as our head of distribution in our Hong Kong office. Of course, we have also moved talent from other locations into the Asia region. We see Asia as a great opportunity to develop talent, and we have had great success in this. The primary success for us, however, has been to hire and develop local leadership in the region. This not only shows respect to the local culture, but it also allows us to build local client relationships. I really believe that we have got the local coverage right in Asia, and this is something that we have been determined to achieve.

The primary success for us, however, has been to hire and develop local leadership in the region. This not only shows respect to the local culture, but it also allows us to build local client relationships.

Every business, however global, has a main base or hub. Ours is Baltimore, others will be New York or London. As a company begins to expand beyond that main hub, it goes through an interesting transformation, from being a purely domestic business, where everything is serviced from that main hub, to the reality of being a global business, and no longer able to adequately service global clients from the company's main base.

As the business starts to grow beyond the main domestic hub, a far more deliberate approach is necessary, with key questions around what do we need to do at a regional level, and what do we have to do at a local level? During the very early days in Asia, we had one local portfolio manager, a couple of local analysts and some relationship managers. So, most support was still being delivered from Baltimore or London. This was done primarily for efficiency reasons. We didn't have the scale of business at that stage to justify all the operational functions and personnel, locally in Asia.

Getting Closer to Our Clients is Paramount

Now that our Asia business is substantially bigger, we have determined that there is a broader range of functions and services where we must be close to our local clients. At a regional level, but also but locally in Australia or in Tokyo or elsewhere. My view is that, any business, whether it is in asset management or any other field, must operate at the same level as its clients. At TRP, while we have many global clients, most of our clients operate at a local level. Therefore, to ensure that we are matching our clients' needs and fully understanding how they behave, we must similarly think and act as locally as we possibly can. Clearly, this is a long and continuous journey, but we know the scope of the task, and why it is so important to us as a business to get the global/local balance right.

Building Our Capabilities, Locally

We will continue to build out those elements of our business that touch our clients more obviously and directly, as a priority. These are functions such as relationship management, client service, portfolio specialists, client operations, legal and compliance. In Asia, there are parts of the region where we do have ambitions to build further local presence. As an example, we will determine the best approach for our clients and our business with respect to China. We currently have a number of significant relationships in China as well as investing in China for clients from around the world. We will continue to evaluate when and how we might best establish a local office in Shanghai, and/or Beijing. There are also decisions to be made about our approach in Taiwan, Thailand, Malaysia and South Korea, given we have clients in all these countries.

In terms of our investment capabilities in the APAC region, the relocation of Chris Alderson, T. Rowe Price's Co Head of Global Equity, to Hong Kong in 2019 is significant. From an investment perspective, Chris will be working on how we can further set up our investment teams in the region for long-term success.

Strategically, one area that we have started to develop in both EMEA and APAC is our multi-asset business. In APAC, Thomas Poullaouec is our Head of Multi-Asset Solutions. It is important for us to determine how best to continue to develop our multi-asset investment capabilities in the region over the next five or ten years.

There are a number of other key areas that we need to continue to develop to ensure that our APAC business is being fully and appropriately supported. These are teams such as Investment Product Content, client operations, investment operations, portfolio specialists, legal and compliance. These are all areas that we need to have at a local level and in sufficient numbers to meet the needs of our clients.

In summary, T. Rowe Price has almost 40 years' experience in the Asia Pacific region. We have applied our overall business philosophy of building a patient, long term, client focused and investment centric business to the region. We have been fortunate enough to have been able to serve a wide range of clients in many different countries over this time. We remain very committed to continually building our businesses across the region both to service local clients to the best of our abilities and to bring the best of the region to other clients around the world.

ABOUT US

T. Rowe Price is a global independent investment management firm. We are solely focused on long-term results for our clients, managing a full range of investment strategies in multiple asset classes. For over 80 years, our consistent investment approach has helped us focus on promising opportunities while at the same time carefully managing risk.

We established our Tokyo office and Hong Kong office in 1982 and 1987 respectively, and since then we have expanded our business by operating in Australia and Singapore. Today we have more than 200 associates based locally.

INDEPENDENT ASSET MANAGER
Our sole business is managing our clients' interests

ALIGNMENT OF INTERESTS
We are a publicly listed company with substantial employee ownership

FINANCIAL STRENGTH
We carry no outstanding long-term debt and maintain substantial cash reserves

GLOBAL EXPERTISE
Continually growing global team of investment professionals

Founded in
Baltimore, USA in 1937

US$1.08
trillion in assets under management[1, 2]

595
investment professionals worldwide[2]

Local presence in
16
countries[2]

CONTACT US

To learn more about our capabilities, please contact us directly:

MURRAY BREWER
Country Head of Relationship Management
Australia & New Zealand
(02) 8667 5723
murray_brewer@troweprice.com

DARREN HALL
National Sales Manager
Australia & New Zealand
(02) 8667 5704
darren_hall@troweprice.com

DAVID FRAZER
Head of Institutional
Australia and New Zealand
(03) 9653 7402
david_frazer@troweprice.com

[1] Firmwide AUM includes assets managed by T. Rowe Price Associates, Inc. and its investment advisory affiliates.
[2] As at 30 September 2018

IMPORTANT INFORMATION

The specific securities identified and described above are for informational purposes only and do not represent all of the securities purchased, sold or recommended by T. Rowe Price, and no assumptions should be made that the securities were or will be profitable.

This material is being furnished for general informational purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, and prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. **Past performance is not a reliable indicator of future performance.** The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date noted on the material and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

Australia—Issued in Australia by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. For Wholesale Clients only.

Brunei—This material can only be delivered to certain specific institutional investors for informational purpose upon request only. The strategy and/or any products associated with the strategy has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

China—This material is provided to specific qualified domestic institutional investor or sovereign wealth fund on a one-on-one basis. No invitation to offer, or offer for, or sale of, the shares will be made in the People's Republic of China ("PRC") (which, for such purpose, does not include the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the PRC. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the PRC. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the PRC that are expressly authorized under the laws and regulations of the PRC to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the PRC. Potential investors who are resident in the PRC are responsible for obtaining the required approvals from all relevant government authorities in the PRC, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the PRC, or nationals with permanent residence in the PRC, or to any corporation, partnership, or other entity incorporated or established in the PRC.

Hong Kong—Issued in Hong Kong by T. Rowe Price Hong Kong Limited, 21/F, Jardine House, 1 Connaught Place, Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in in any jurisdiction is permitted.

Korea—This material is intended only to Qualified Professional Investors upon specific and unsolicited request and may not be reproduced in whole or in part nor can they be transmitted to any other person in the Republic of Korea.

Malaysia—This material can only be delivered to specific institutional investor upon specific and unsolicited request. The strategy and/or any products associated with the strategy has not been authorised for distribution in Malaysia. This material is solely for institutional use and for informational purposes only. This material does not provide investment advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

New Zealand—Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—THE STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING OFFERED OR SOLD HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Singapore—Issued in Singapore by T. Rowe Price Singapore Private Ltd., No. 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

Taiwan—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

Thailand—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thai laws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision, offer, solicitation, purchase or sale would be unlawful under relevant Thai laws and regulations.

IPC0001322

201901-709213

APAC-PAN-0531_AU