

Capital Market Line

Quarterly Five-Year Forecast of Relative Risk and Return Across Asset Classes



Why a Medium Risk/Lower Return Bull Market Still Lies Ahead

A decade after the global financial crisis, economies have largely healed. Gradually restored growth and pricing power have given central banks the green light to withdraw their extraordinary post-crisis monetary accommodation, a historical oddity that fostered high returns with low risk.

In the US, two forces now at work are replacing the waning monetary stimulus. First is the 2017 tax cut, which was far more balanced in relief given to business than either the Reagan or Bush II cuts, which were overwhelmingly aimed at individuals to stimulate demand. Since corporate tax competitiveness stimulates supply, albeit with a lag, this tax bill should provide a more sustainable economic boost than the “sugar high” of a temporary demand surge.

The second economic driver is growing productivity. Weak investment during the low-confidence post-crisis period was accompanied by weak gains in productivity and wages. Today, business investment is growing, especially in ways related to capability, productivity, and efficiency – not capacity. At the micro level, firms are investing in technology to offset the cost pressures and labor shortages that threaten margins. Given the tipping-point characteristics of artificial intelligence (AI) tools, today’s productivity-enhancing investments also imply a disruptive environment ahead for many current business models. At the macro level, these stepped up investments should reboot the supply side of the economy leading to disinflationary growth, thus lending the Federal Reserve a helping hand in avoiding the need to take rates beyond neutral.

Growth should also help quell rising populism, which historically appears after long periods of economic frustration. It is essential, therefore, that today’s supply side moment be given time to gel, which will likely require a Fed pause in 2019 once rates get to neutral. Despite some recent speeches by Fed presidents to the contrary, we are still encouraged by Chair Powell’s Jackson Hole speech, which touched on the Fed’s mid-late 1990s pause when inflation was decelerating due to the burgeoning new internet economy.

Meanwhile the world remains fragile politically, and 2019 may be remembered as the year when US/China tensions morphed into confrontation, and when Italy reshaped the European Union. If such tectonic shifts do occur, they seem more likely to create winners and losers, not cast darkness over the world. While we have not reflected such potential geopolitical shifts into the CML, they will be a primary focus of our work in the quarters ahead.

September
2018

About This Report

The Capital Market Line (CML) is our proprietary tool for the management of our multi-asset products. It quantifies several key fundamental judgments we make after dialogue with our specialists across the asset classes. In this report, we summarize our view of the global markets, provide insights gathered from the CML, and examine the fundamentals driving the CML today.

Contributors:

Michael J. Kelly, CFA

Global Head of Multi-Asset

Hani Redha, CAIA

Portfolio Manager

Magali Azema-Barac, PhD, CFA

Portfolio Manager

Steven Lin, CFA

Portfolio Manager

Agam Sharma

Portfolio Manager

Peter Hu, CFA, FRM

Portfolio Manager

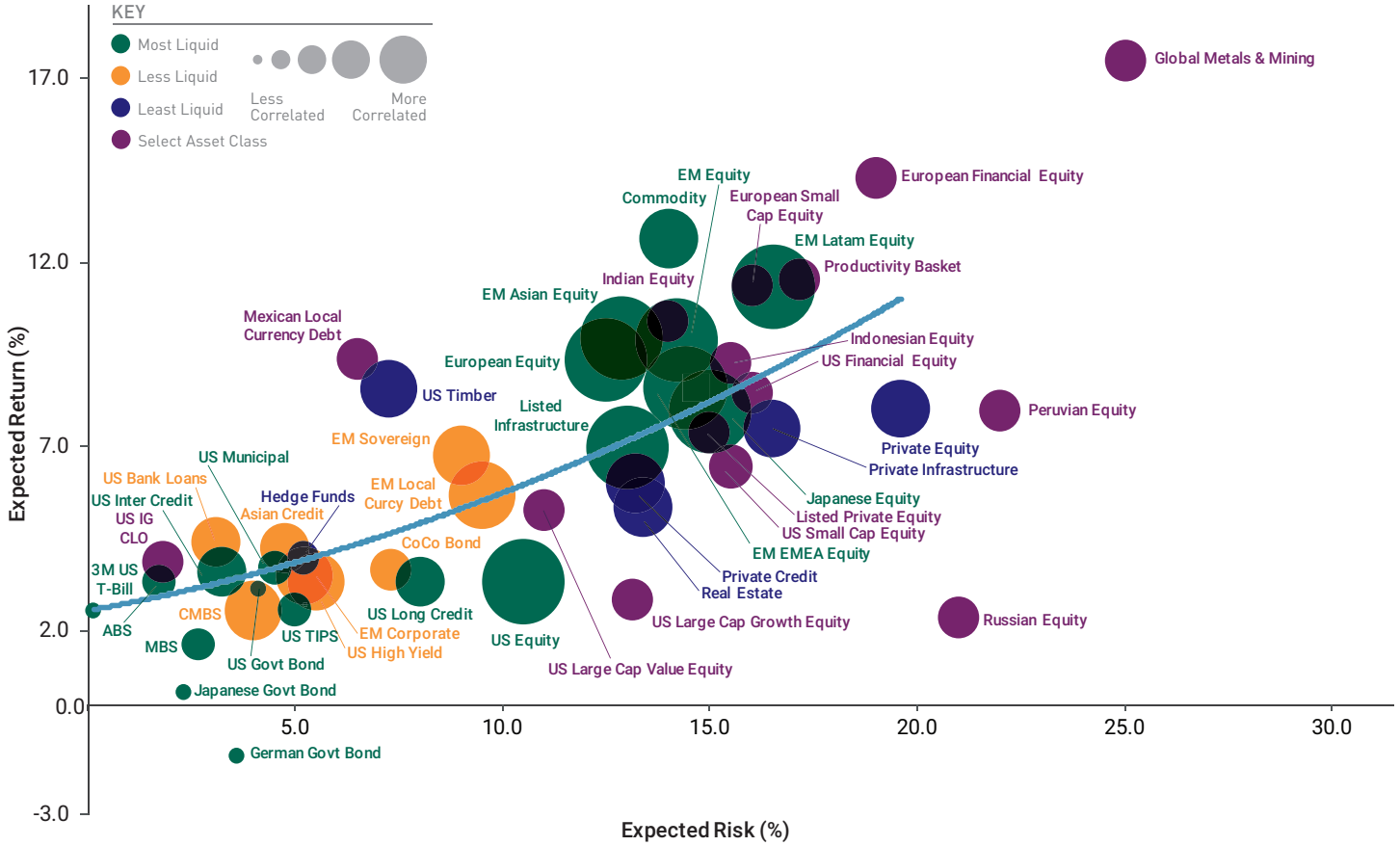
Sunny Ng, CFA

Portfolio Manager

Mikhail Johaadien

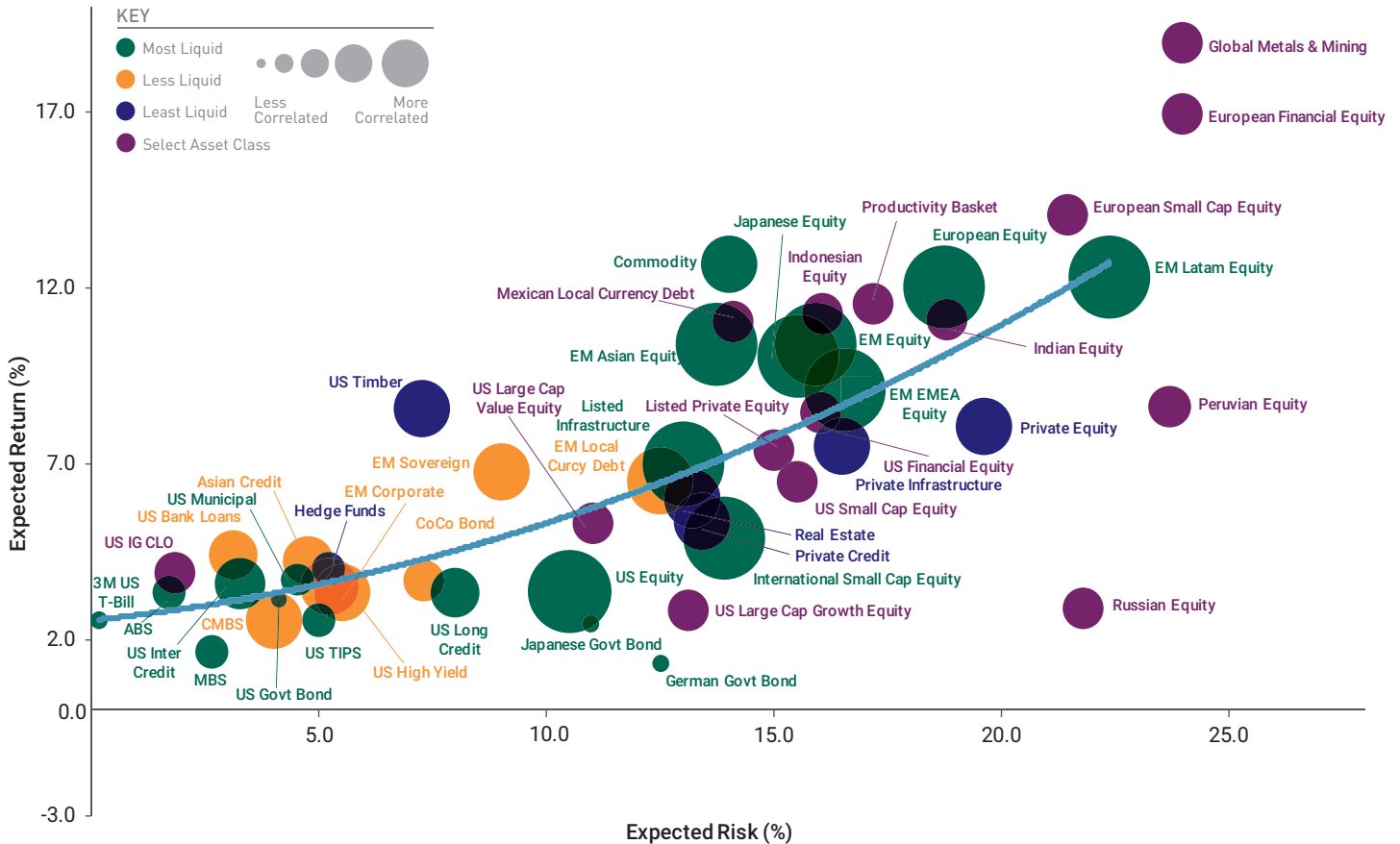
Research Analyst

Capital Market Line as of 30 September 2018 (USD View, Local Currency)



Please see Capital Market Line Endnotes. Note that the CML's shape and positioning were determined based on the larger categories and do not reflect the subset categories of select asset classes, which are shown relative to other asset classes only.

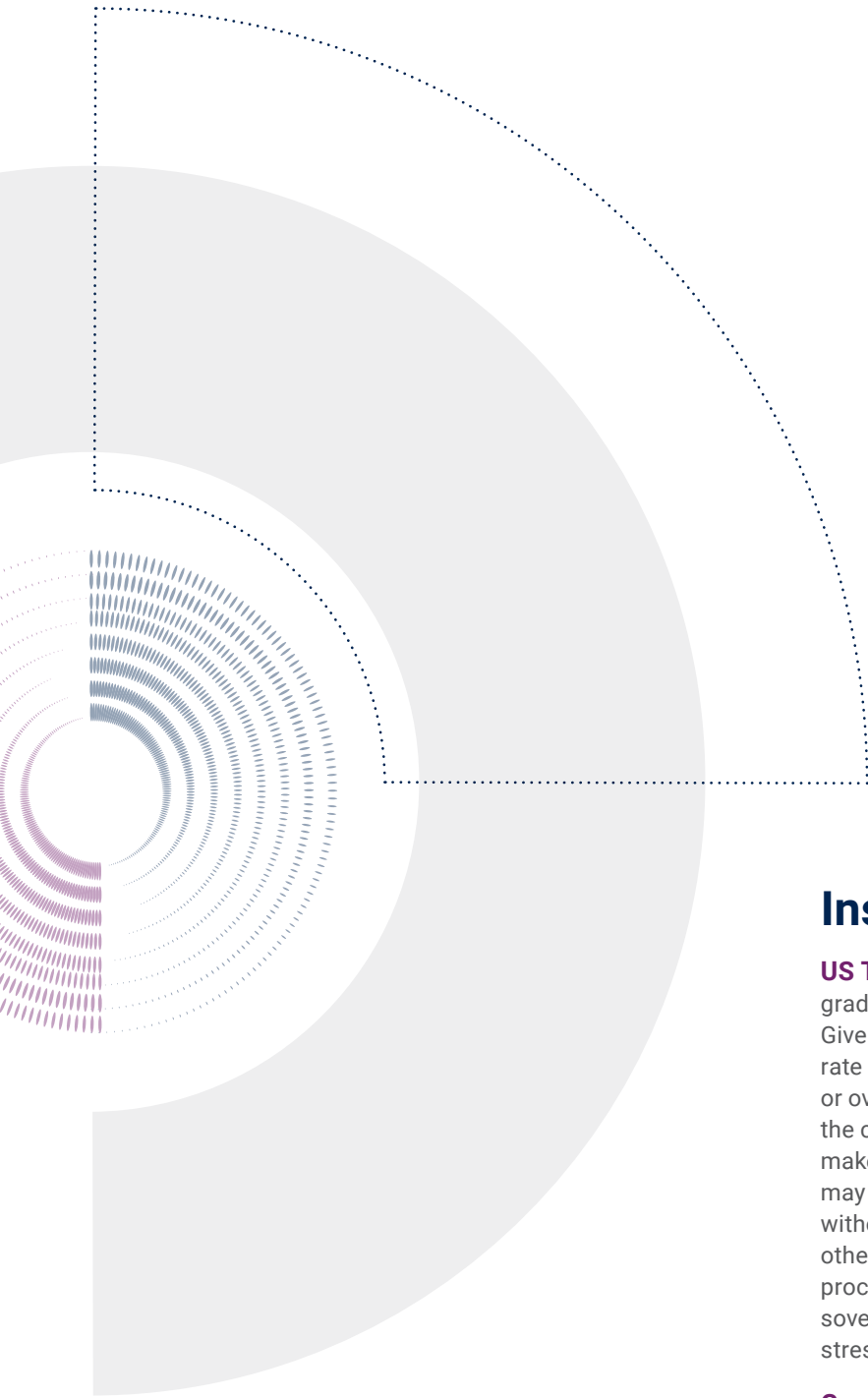
Capital Market Line as of 30 September 2018 (USD View, Unhedged)



Please see Capital Market Line Endnotes. Note that the CML's shape and positioning were determined based on the larger categories and do not reflect the subset categories of select asset classes, which are shown relative to other asset classes only.

Capital Market Line Endnotes

The Capital Market Line (CML) is based on PineBridge Investments' estimates of forward-looking five-year returns and standard deviation. It is not intended to represent the return prospects of any PineBridge products, only the attractiveness of asset class indexes, compared across the capital markets. The CML quantifies several key fundamental judgments made by the Global Multi-Asset Team for each asset class, which, when combined with current pricing, results in our annualized return forecasts for each class over the next five years. The expected return for each asset class, together with our view of the risk for each asset class as defined by volatility, forms our CML. Certain statements contained herein may constitute "projections," "forecasts," and other "forward-looking statements" which do not reflect actual results and are based primarily upon applying retroactively a simulated set of assumptions to certain historical financial information. Any opinions, projections, forecasts, and forward-looking statements presented herein are valid only as of the date of this document and are subject to change. There can be no assurance that the expected returns will be achieved over any particular time horizon. Any views represent the opinion of the investment manager and are subject to change. For illustrative purposes only. We are not soliciting or recommending any action based on this material.



Insights From Today's CML

US Treasuries are no longer unattractive. The Fed's gradual hikes have pushed US risk-free rates to fair levels. Given our expectations for a low but gradually rising "neutral" rate of interest, this yield curve no longer appears dangerous or overvalued. While merely "fair" from a valuation perspective, the conditional value-at-risk characteristics of US Treasuries make current levels of yield somewhat interesting. Portfolios may once again benefit from using it as a hedging instrument without an explicit cost. Unfortunately, this is not the case for other developed market sovereign bonds, as their normalization processes remain largely ahead of them. Most emerging market sovereigns deservedly carry risk premiums that widen under stress.

Growth assets continue to be the place to hover in today's reflationary regime, notwithstanding the improved picture for US safety assets. The nascent investment wave we see developing (see below for further details) is enabling corporations to offset cost pressures

while also benefiting from higher revenue. The result is resilient margins and a higher baseline level of earnings growth. Due to trade frictions, small-cap companies exhibit a higher beta to domestic growth. Although the gradual removal of extraordinary monetary accommodation will be a consistent headwind, stepped up cash flow growth should be an offset. Also, in recognition of the degree to which neutral rates have fallen, we temper the magnitude of rising yield curves, particularly for US equities. Finally, commodity-related equities should benefit from more balanced supply and demand forces as well as capital discipline.

We see clear confirmation of business investment accelerating globally, making exposures linked to those technology investments attractive. Providers of productivity-enhancing technology are attractive to us as intermediate-term investments, and they also drive disinflationary growth at the macro level. Moreover, digitization goes beyond process optimization to a fundamental transformation of business models, which alters value chains and blurs industrial categories. Beyond improving existing business operations, the innovations create new digital products and features, introduce new ways to deliver them, and support the creation of new business models. We continue to see this as the single most underestimated and unrecognized driver shaping the cycle ahead and making the near future fundamentally different from the recent past.

Challenging conditions for credit markets. Credit markets have arguably been the best performing asset class of the previous environment as extraordinary monetary easing encouraged the search for yield and tepid growth supported credit valuation. Today's starting point for credit valuations is curiously out of sync with rapidly deteriorating credit fundamentals. We increasingly see worrying investor behavior in credit markets, encouraging and enabling unsound capital structures to be underwritten. We are beginning to take precautionary measures, as it is most likely that the next downturn materializes first in widening credit spreads years before equities top out. As the investment cycle unfolds, such a decoupling would be led by credit investors focusing on free cash flow as well as the buildup of leverage in corporate balance sheets. Equities should benefit from growth unleashed by the burgeoning investment cycle, at least for the next few years as accrual-based earnings rise.

Industrial metals look well-positioned to benefit from the new regime. We have been negative on commodities throughout the unwinding of the previous cycle, but capital discipline is now top of mind. Over the last few years, for instance, mining companies have become more focused on getting a return on their massive investment before investing anew. Given the recognition that China's commodity-intensive phase of growth is largely over (other than during periods of short-term stimulus), we do not expect to see a rapid rise in supply. The extractive industry is now set up to be in deficit for the next few years. Industrial metals as well as metals and mining stocks appear attractive as we progress over the next several years into the later stages of the business cycle.

Private assets continue to experience unfavorable supply/demand dynamics. The insatiable demand for private assets has abated somewhat this year, although leading alternative asset managers continue to churn out mega funds that are unable to deploy capital fast enough to prevent a growing mountain of dry powder. We favor the segments of private markets that have a truncated J-curve, such as secondaries. Overall, however, we do not believe that investors are being sufficiently compensated for illiquidity, particularly considering the current phase of the business cycle. Private assets are potentially vulnerable to disruptive technologies in a wide range of sectors, warranting a cautious approach, particularly in large cap private credit markets. We recommend "future-proofing" private investments or otherwise maintaining dry powder through a focus on liquid assets until a better entry point is discernable.

The Fundamentals Driving Our CML

Central banks take a pragmatic approach to normalization. After achieving its dual mandate objectives, the Fed will likely be cautious and pragmatic in tightening policy rates further. Fortunately, the Fed will be aided in its efforts to avoid a policy-induced recession by the current balanced economic and financial environment. Should a recession occur, we expect it to be relatively mild and brief. Beyond the US, slower yet above-trend growth will allow the European Central Bank and the Bank of Japan to normalize rates slowly but surely, keeping their sovereign bonds unattractive, in our view.

We expect robust developed-market growth to continue, fueled by household deleveraging, fiscal stimulus, and increased investment. Despite slower non-US growth in 2018, the baseline level of growth has shifted higher as post-crisis drags fade. Chief among these drags are the end of private-sector deleveraging and the end of fiscal austerity, particularly in the US, where fiscal policy will not be the growth inhibitor it was during 2010-2016. In fact, it is now a net stimulus. A virtuous cycle of higher wage growth, higher confidence, and higher consumption growth is also just getting underway. In Europe, the output gap remains negative and domestic demand is broad-based across consumption and investment, supported by falling unemployment and high capacity utilization rates. Notwithstanding gradual policy normalization, growth in Europe should remain above trend, as financial conditions remain highly accommodative.

The capability cycle will fuel a productivity wave. We see clear confirmation from top-down and bottom-up data points that a global investment cycle is firmly underway. Although the current spending includes traditional manufacturing-related capital items, it is predominantly taking the form of technology-focused investments intended to enhance corporate capabilities in order to stave off disruption, become more agile, and gain efficiency in delivering services to end markets. This trend is global, although more prevalent in the US and Japan, with profoundly positive implications for growth and inflation. The result is likely to be a disinflationary rise in growth as technologies conceived 30 years ago are finally fully commercialized and adopted on a global scale. Rising productivity is market pixie dust, generating growth while simultaneously dampening inflationary pressure and improving margins.

Global trade adjusts to the new US/China relationship. The global trading system is in flux, driven by a strategic shift in US/China relations that goes far beyond trade and economics. This profound development has the potential

to create many winners and losers, as well as re-route trade flows and supply chains into US-centric and China-centric blocs. This transformation of the global trading system would likely be disruptive in the near term, but evidence so far indicates that firms are able to adjust relatively quickly to the new rules of the game. We will value assets on the basis of their medium-term earnings potential in new trade configurations should they crystalize, rather than upon the short-term disruption that may be part of the journey to various destinations.

China will continue dynamic management of its economic transformation. While in the midst of deleveraging after the 19th Party Congress, Chinese government officials were surprised by the change in America's China policy. After a challenging initial adjustment period, we expect China to prepare for the worst by carving out its own trading channels via efforts such as its Belt and Road Initiative (also known as One Belt One Road) and the Asian Infrastructure Investment Bank. Although China's growth will likely continue to slow over the longer term, very important changes are occurring below the surface to make its economy less capital intensive and more sustainable. Supply-side reforms continue, with an emphasis on raising environmental standards, which helps to reduce the world's overcapacity problem. The government continues to emphasize financial deleveraging and taking concrete steps in this direction, albeit with continuous fine-tuning along the way. We believe China will retain a willingness to modulate the pace of progress on these fronts, as it transitions to a more consumption- and services-based economy.

Changes in emerging markets growth. Emerging markets' (EM) growth differential vis-à-vis developed markets (DM) is about to widen, shrinking negative output gaps. EM assets have struggled this year as new trade realities dawned and US interest rates rose to levels much closer to their final destination. Nevertheless, many EM nations are in the early stages of recovery after sustaining shocks from the commodity price collapse and China's self-inflicted hard landing in 2015-2016. As a result of healthier commodity prices, strong DM growth, and macroeconomic stability of their external accounts, EMs' growth is likely to reaccelerate. We think countries with wide yet shrinking output gaps, such as Brazil, are best positioned to sustain above-trend growth rates over the next few years. EMs will be most affected by changes in global supply chains. This elevates the importance of selectivity, as the dispersion of performance is likely to be high.

About the Capital Market Line

The Capital Market Line (CML) is a tool developed and maintained by the Global Multi-Asset Team. It has served as the team's key decision support tool in the management of our multi-asset products. In recent years, it has also been introduced to provide a common language for discussion across asset classes as part of our Investment Strategy Insights meeting. It is not intended to represent the return prospects of any PineBridge products, only the attractiveness of asset class indexes compared across the capital markets.

The CML quantifies several key fundamental judgments made by the Global Multi-Asset Team after dialogue with the specialists across the asset classes. We believe that top-down judgments regarding the fundamentals will be the largest determinants of returns over time driving the CML construction. While top-down judgments are the responsibility of the Multi-Asset Team, these judgments are influenced by the interactions and debates with our bottom-up asset class specialists, thus benefiting from PineBridge's multi-asset class, multi-geographic platform. The models themselves are intentionally simple to focus attention and facilitate a transparent and inclusive debate on the key drivers for each asset class. These discussions result in 19 interviews focused on determining five year forecasts for over 100 fundamental metrics. When modelled and combined with current pricing, this results in our annualized expected return forecast for each asset class over the next five years. The expected return for each asset class, together with our view of forward-looking risk for each asset class as defined by volatility, forms our CML.

The slope of the CML indicates the risk/return profile of the capital markets based on how the five-year view is currently priced. In most instances, the CML slopes upward and to the right, indicating a positive expected relationship between return and risk. However, our CML has, at times, become inverted (as it did in 2007), sloping downward from the upper left to the lower right, indicating risk-seeking capital markets that were not adequately compensating investors for risk. We believe that the asset classes that lie near the line are close to fair value. Asset classes well above the line are deemed attractive (over an intermediate-term perspective) and those well below the line are deemed unattractive.

We have been utilizing this approach for over a decade and have learned that, if our judgments are reasonably accurate, asset classes will converge most of the way toward fair value in much sooner than five years. Usually, most of this convergence happens over one to three years. This matches up well with our preferred intermediate-term perspective in making multi-asset decisions.

About PineBridge Investments

pinebridge.com



PineBridge Investments is a private, global asset manager focused on active, high-conviction investing. We draw on the collective power of our experts in each discipline, market, and region of the world through an open culture of collaboration designed to identify the best ideas. Our mission is to exceed clients' expectations on every level, every day. As of 30 June 2018, the firm managed US\$87.0 billion across global asset classes for sophisticated investors around the world.

MULTI-ASSET | FIXED INCOME | EQUITIES | ALTERNATIVES

This information is for educational purposes only and is not intended to serve as investment advice. This is not an offer to sell or solicitation of an offer to purchase any investment product or security. Any opinions provided should not be relied upon for investment decisions. Any opinions, projections, forecasts and forward-looking statements are speculative in nature; valid only as of the date hereof and are subject to change. PineBridge Investments is not soliciting or recommending any action based on this information.

Disclosure Statement

PineBridge Investments is a group of international companies that provides investment advice and markets asset management products and services to clients around the world. PineBridge Investments is a registered trademark proprietary to PineBridge Investments IP Holding Company Limited.

For purposes of complying with the Global Investment Performance Standards (GIPS®), the firm is defined as PineBridge Investments Global. Under the firm definition for the purposes of GIPS, PineBridge Investments Global excludes some alternative asset groups and regional legal entities that may be represented in this presentation, such as the assets of PineBridge Investments.

Readership: This document is intended solely for the addressee(s) and may not be redistributed without the prior permission of PineBridge Investments. Its content may be confidential, proprietary, and/or trade secret information. PineBridge Investments and its subsidiaries are not responsible for any unlawful distribution of this document to any third parties, in whole or in part.

Opinions: Any opinions expressed in this document represent the views of the manager, are valid only as of the date indicated, and are subject to change without notice. There can be no guarantee that any of the opinions expressed in this document or any underlying position will be maintained at the time of this presentation or thereafter. We are not soliciting or recommending any action based on this material.

Risk Warning: All investments involve risk, including possible loss of principal. Past performance is not indicative of future results. If applicable, the offering document should be read for further details including the risk factors. Our investment management services relate to a variety of investments, each of which can fluctuate in value. The investment risks vary between different types of instruments. For example, for investments involving exposure to a currency other than that in which the portfolio is denominated, changes in the rate of exchange may cause the value of investments, and consequently the value of the portfolio, to go up or down. In the case of a higher volatility portfolio, the loss on realization or cancellation may be very high (including total loss of investment), as the value of such an investment may fall suddenly and substantially. In making an investment decision, prospective investors must rely on their own examination of the merits and risks involved.

Performance Notes: Past performance is not indicative of future results. There can be no assurance that any investment objective will be met. PineBridge Investments often uses benchmarks for the purpose of comparison of results. Benchmarks are used for illustrative purposes only, and any such references should not be understood to mean there would necessarily be a correlation between investment returns of any investment and any benchmark. Any referenced benchmark does not reflect fees and expenses associated with the active management of an investment. PineBridge Investments may, from time to time, show the efficacy of its strategies or communicate general industry views via modeling. Such methods are intended to show only an expected range of possible investment outcomes, and should not be viewed as a guide to future performance. There is no assurance that any returns can be achieved, that the strategy will be successful or profitable for any investor, or that any industry views will come to pass. Actual investors may experience different results.

Information is unaudited unless otherwise indicated, and any information from third-party sources is believed to be reliable, but PineBridge Investments cannot guarantee its accuracy or completeness.

PineBridge Investments Europe Limited is authorised and regulated by the Financial Conduct Authority (FCA). In the UK this communication is a financial promotion solely intended for professional clients as defined in the FCA Handbook and has been approved by PineBridge Investments Europe Limited. Should you like to request a different classification, please contact your PineBridge representative.

Approved by PineBridge Investments Ireland Limited. This entity is authorised and regulated by the Central Bank of Ireland.

In Australia, PineBridge Investments LLC is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 (Cth) in respect of the financial services it provides to wholesale clients, and is not licensed to provide financial services to individual investors or retail clients. Nothing herein constitutes an offer or solicitation to anyone in or outside Australia where such offer or solicitation is not authorised or to whom it is unlawful. This information is not directed to any person to whom its publication or availability is restricted.

In Hong Kong, the issuer of this document is PineBridge Investments Asia Limited, licensed and regulated by the Securities and Futures Commission (SFC). This document has not been reviewed by the SFC.

In Dubai, PineBridge Investments Europe Limited is regulated by the Dubai Financial Services Authority as a Representative Office.

PineBridge Investments Singapore Limited is licensed and regulated by the Monetary Authority of Singapore (MAS). In Singapore, this material may not be suitable to a retail investor and is not reviewed or endorsed by the MAS.

Last updated 6 March 2017.