

Morgan Stanley

INVESTMENT MANAGEMENT

THE **BEAT** | Bonds | Equities | Alternatives | Transition

Outlook for 2025



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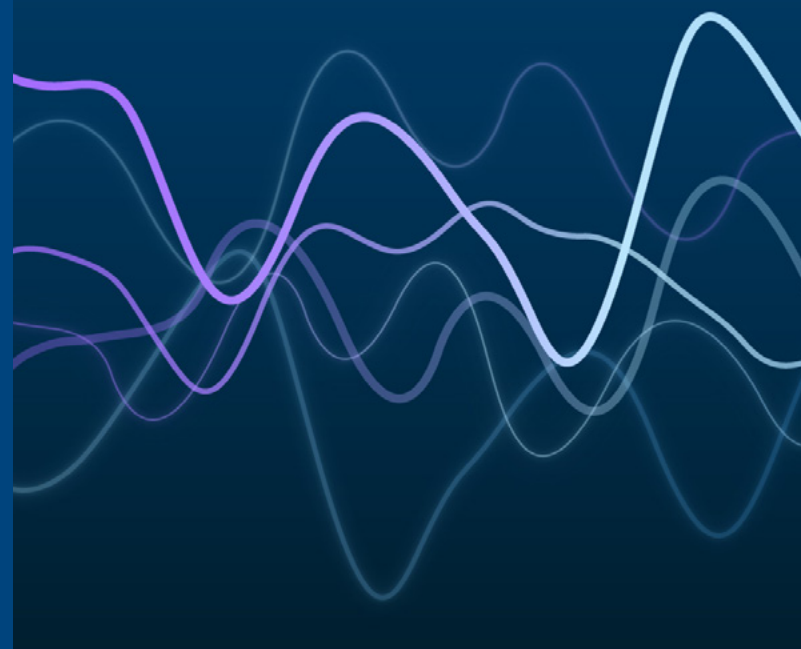
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The BEAT is a monthly publication, formerly known as the Monthly Market Monitor, which provides connectivity between market events and investor portfolios, spanning Bonds, Equities, Alternatives and Transition (i.e. cash and cash equivalents held by investors while deciding other asset classes to “transition” to).

The Portfolio Solutions Group

Our Five Key Themes for 2025

The investment environment to start 2025 is quite interesting. Equity and fixed income markets appear to be fully valued and the Republican sweep in the U.S. could have global ramifications. China continues to struggle to find its footing, while AI might provide significant investment opportunities in alternative investing. The Portfolio Solutions Group looks at five key areas going into 2025.

1 How To Invest in a Fully-Valued Market

by Jim Caron

CIO, Portfolio Solutions Group

Investors rarely agree on any one point; after all, there is a buyer and a seller at every price. But as we enter 2025 most investors do agree on one thing: Market valuations seem to be full and not many think assets are cheap. This is true across both fixed income and equities, the most widely-traded asset classes. The question we then ask about 2025 is: How do you invest in a fully-valued market? The simple answer is to optimize asset and investment selection in portfolios, because their return attributions may make a bigger difference than has been the case over the last several years. Said differently, we must prioritize alpha over beta.

2 The Bull Market Matures on Optimism

by Andrew Slimmon

Head of Applied Equity Advisors

On September 30, 2022 the S&P 500® hit a -25% bear market correction from earlier in the year. But historically, -25% corrections have generated *excellent buying opportunities*. As it turned out, the 12-month return for the S&P 500® at the end of September 2023 was +20% and 2024 has been equally consistent as *the second year* of this bull market. We are now entering what we believe is the “optimism phase” of the bull market, where we expect investors to be even more optimistic than they have been in the past two years. The final leg of a bull market, before the next bear market, is the “euphoric stage” - and that’s the danger zone. But that comes later. Expect to enjoy 2025.

3 In Fixed Income, Securitized Credit Might Be the Sweet Spot

by Vishal Khanduja, CFA

Head of Broad Markets Fixed Income

Our central view heading into 2025 is that we believe monetary policy will outpace current market expectations, driven by moderate growth and a bumpy, yet persistent, disinflationary trend. While the base case remains economic data-dependent, the post-U.S. election environment has made it increasingly policy-dependent as well. If fiscal dovishness materializes amid higher tariffs, we anticipate further upward pressure on yields, steeper yield curves and rising risk premiums, ultimately pushing terminal rates higher. However, we believe markets are currently priced on the hawkish side of our base case. On the other hand, a moderating monetary policy, coupled with a strong consumer, robust corporate balance sheets and healthy investor demand for risk should bode well broadly for fixed income spread sectors. Overall, we believe the best opportunities will be in securitized credit, particularly U.S. MBS.



4 Stimulus Fatigue: China Can't Band-Aid Its Way to Recovery

by Jitania Kandhari

Deputy CIO of the Solutions and Multi-Asset Group, Head of Macro and Thematic Research for the Emerging Markets Equity team, Co-Lead Portfolio Manager, Passport Equity

Since September 2024, Chinese policymakers have focused on delivering a series of stimulus packages to inject new life into their struggling economy and boost share prices. However, high debt levels, overinvestment, an unresolved property bubble, underwhelming domestic consumption and international trade pressures all contribute to the structural weaknesses in China's economy that stimulus packages alone cannot resolve. Lessons from other debt-laden economies suggest the path to stability requires cleaning up bad debt through either write-offs or restructuring, followed by bank recapitalization. This approach is undeniably painful, but without such drastic measures, stimulus packages will continue to provide fleeting relief. Deeper transformation must occur in China for lasting economic health.

5 The Potential Impact of Generative AI on Private Markets

by Steve Turner

Head of Investment Selection for the Portfolio Solutions Group

The potential impact of generative Artificial Intelligence (AI) on private market performance is expected to be a key theme in 2025. While private equity is expected to participate through both investing in "AI-natives" and companies that attempt to expand revenue and profitably through AI applications, we recognize that some of the earliest opportunities are identifiable in private infrastructure. Two key infrastructure-related themes driving this have been the digitization of society and economies, and the global energy transition. These two mega themes meet where data requirements lead to power demand, and this is leading to extensive investment opportunities.



How To Invest in a Fully-Valued Market

Investors rarely agree on any one point; after all, there is a buyer and a seller at every price. But as we enter 2025 most investors do agree on one thing: Market valuations seem to be full and not many think assets are cheap. This is true across both fixed income and equities, the most widely-traded asset classes.

The question we then ask about 2025 is: How do you invest in a fully-valued market? The simple answer is to optimize asset and investment selection in portfolios, because their return attributions may make a bigger difference than has been the case over the last several years. Said differently, we must prioritize alpha over beta. Let's get into it!

BONDS: THE BIGGEST CHALLENGE, YES, BUT PERHAPS THE BEST OPPORTUNITY

Bonds present the biggest challenge because their expected return and valuations are tied to the well-telegraphed path of policy rates. The majority of bond returns stem from duration, i.e. their sensitivity to interest rate movements. In fact, over 80% of bond returns in the Bloomberg Aggregate Bond Index could be historically attributed to duration over the past 40 years. Much of the remaining portion of returns comes from the coupon, with a bit left over from convexity.

Given that the Fed is expected to cut interest rates, much of the return in bonds has already been priced in. In addition, credit spreads are trading near historically tight levels so there is little excess return for passive investors to extract from fixed income.

But here's where the opportunity comes in. While it may be true that there are great challenges for passive bond investors that rely mainly on beta to drive returns, the opposite is true for those who invest in actively-managed fixed income strategies. These active investors rely less on the interest rate cycle, or beta, to drive returns. Instead, they rely more on asset selection and investment selection.

Since the majority of investors in fixed income tend to employ passive strategies, we believe those who engage with active management strategies have a great opportunity to add alpha to their return attributions and differentiate themselves.

EQUITIES: MORE ABOUT FACTORS AND ALPHA THAN BETA

Consistent with our theme for 2025, valuations are the crux of the equity debate. This is often measured in price-to-earnings (P/E) multiples, which are currently high and seem fully valued.

What this means is that it may be difficult for equity return attributions to come mainly from an increase in broad-based multiples, or beta, in equity markets. Of course, it's possible for multiples to expand but it may take some form of "irrational exuberance" for this to occur.

“As a result, we expect alpha, not beta, to become a larger source of return attribution. Perhaps this is fed by the “old” economy value sectors finding gains from the “new” economy technology sectors, as Capex, AI and electrification increases productivity in broader-based cyclical sectors of the economy.”

Jim Caron
CIO, Portfolio Solutions Group



Many believe that 22x earnings is a high hurdle to sustainably exceed under current conditions - and we agree.

Valuations across equity markets typically hinge on three variables: the level of interest rates, the cost of credit and default risks and the composition of the index itself, i.e. if the index is more heavily weighted toward higher or lower P/E stocks. Since the lower interest rate impulse has passed, and the yield curve is steepening, multiple-expansion-based gains in equities may lose a tailwind. Rising equity prices may become more reliant on earnings from the broader market.

As a result, we expect alpha, not beta, to become a larger source of return attribution. Perhaps this is fed by the “old” economy value sectors finding gains from the “new” economy technology sectors, as Capex, AI and electrification increases productivity in broader-based cyclical sectors of the economy.

In Display 1 we illustrate that there is a large gap between the broader market, as represented by the equal-weighted S&P 500 and the market-cap-weighted version. By positioning portfolios, and selecting assets and active investment styles, we believe closing this gap is the key to performance as we move into 2025. The lines may be blurred between growth, value, small, mid and large cap as a result.

Conclusion

We believe it’s time to change the way we think about market performance, from being confined to sectors and narrow breadth, to factors and a widening breadth. We prefer to focus on free-cash-flow yield, earnings growth, pricing power, profitability and strong balance sheets. Selecting investments and managers that can exploit this value intra-sector may rise in importance compared with simply just picking a sector.

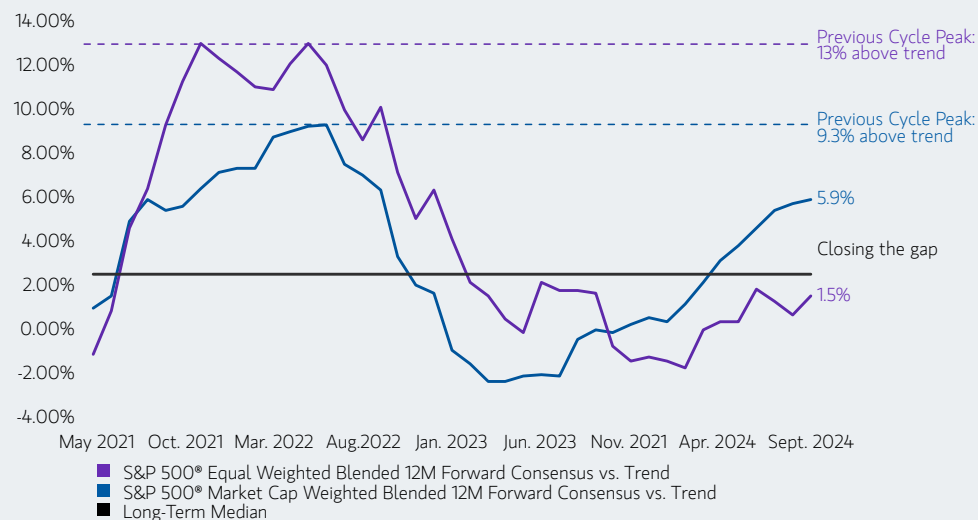
For bonds, we think active management is critical to driving alpha over the beta provided by the interest rate cycle. We also believe that alternatives and private market investments will play a growing role in a balanced and well-diversified portfolio, especially since their valuations are more representative of early-cycle dynamics than public markets that seem later cycle.

DISPLAY 1

Closing the Gap

The S&P 500® Equal-Weighted EPS, currently below median, has scope to rise to levels historically consistent with cyclical peaks

The S&P 500® Market-Cap Weighted and S&P 500® Equal Weighted Indexes – Blended 12-month forward EPS relative to long-term exponential trend (a measure of cyclically adjusted EPS)



Source: Source: Portfolio Solutions Group. As of September 30, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

The Bull Market Matures on Optimism

In retrospect, this bull market and the commensurate actions of investors have followed a consistent pattern we've seen in the past. To me, that sends a **pretty clear signal of what's to come in 2025.**

On October 25, 2022 Applied Equity Advisors hosted our third quarter 2022 webcast. It was a painful time back then. On September 30 of that year the S&P 500® had hit a -25% bear market correction from earlier in the year.¹ Investors were clearly spooked.

One of the charts we used on the webcast showed that historically -25% corrections had generated *excellent buying opportunities*.

The next 12-month S&P 500® return from previous -25% selloffs had produced a **+22%** return on average - **double** the average annual return for equities.²

Fast forward one year and that 2022 low produced a similar result. The 12-month return for the S&P to the end of September 2023 was **+20%** - pretty darn close to the historical average! But did investors get more aggressive toward equities in late 2002/early 2023, knowing that deep corrections create wonderful opportunities? Absolutely not.

Investors came into 2023 extremely bearish.

"BULL MARKETS ARE BORN ON PESSIMISM."³

That was the story of 2023. The S&P 500® rallied, but the level of selling by retail and skeptics on Wall Street was sky high.^{4,5} Nothing was different this time. In my opinion, 2024 has been equally consistent with the second year of a bull market. After a year of selling out of equities, as we saw in 2023, the outflows began to dry up as the bull market raged on. Investors realized they'd made a mistake selling equities and took a pause on their negativity.⁶ As did the Wall Street disbelievers.

“

In my opinion, we are entering the optimism phase of the bull market emotional cycle. Flows will likely turn more aggressively positive, and Wall Street will pivot to become much more bullish in their outlooks.”



Andrew Slimmon
Head of Applied Equity Advisors

¹Bloomberg.

²Bloomberg.

³Sir John Templeton 1966.

⁴Fund flow data. Strategas.

⁵The expected S&P 500® return among the 11 Wall Street U.S. equity strategists for 2023 was only +4.6%.

⁶In Q3 2024 the last 12 months' equity net flows turned from a large negative to neutral - not necessarily positive, just not as negative as 2023. Strategas.

“BULL MARKETS GROW ON SKEPTICISM.”

If 2023 and 2024 have been pretty much textbook for the first two years of a bull market, I see no reason to believe that the third year (2025) won't be consistent as well.

“BULL MARKETS MATURE ON OPTIMISM.”

In my opinion, we are entering the optimism phase of the bull market emotional cycle. I suspect you will hear investors and Wall Street sounding much more optimistic than they have in the past two years.

Flows will likely turn more aggressively positive, and Wall Street will pivot to become much more bullish in their outlooks. This would be good for equities and for investors allocating to equities for 2025.

Of course, the final leg of a bull market before the next bear market is the **“euphoric stage.”**

And that's the danger zone.

Yes, that's out there, but it comes later. We need to get through the optimism phase first.

Enjoy 2025!



In Fixed Income, Securitized Credit Might Be the Sweet Spot

Our central view heading into 2025 is expecting monetary policy to outpace current market expectations, driven by moderate growth and a bumpy, yet persistent, disinflationary trend. While the base case remains economic-data-dependent, the post-U.S. election environment has made it increasingly policy-dependent as well.

If fiscal dovishness materializes amid higher tariffs, we anticipate further upward pressure on yields, steeper yield curves due to inflationary pressures and rising risk premiums, ultimately pushing terminal rates higher. However, we believe markets are currently priced on the hawkish side of our base case.

On the other hand, a moderating monetary policy, coupled with a strong consumer, robust corporate balance sheets and healthy investor demand for risk should bode well broadly for fixed income spread sectors. The challenge heading into 2025 is that index-level valuations have already priced in a substantial amount of fundamental upside.

Given our constructive macro backdrop, stable balance sheet fundamentals and sustained strong demand for fixed income, it comes as no surprise that spreads are pricing in substantial optimism.

In fact, global credit spreads across both investment grade and high yield are hovering near their richest deciles on a longer-term basis.

Amid this environment, the opportunity lies in active sector and security selection as economic and policy outcomes will further increase dispersion in fundamental outcomes and, in turn, interest rates and spread volatility will remain high.

Putting it all together, we believe that the current high starting yields present a compelling case for fixed income allocations, namely delivering on the dual mandate of providing income/total return alongside the negative correlation with risky assets in client portfolios.

Our portfolios are positioned to be overweight credit risk, but being conscious of high valuations and potential policy-related, near-term volatility spikes, we are at the lower end of the risk overweight

spectrum compared to the last three years. Our overweight is primarily within the securitized sector (Mortgage-Backed Securities (MBS), Collateralized Mortgage-Backed Securities (CMBS) and Asset-Backed Securities (ABS)), investment

grade financials, below investment grade floating rate bank loans and selective high yield issuers. Curve steepeners and long USD (U.S. dollar) are our preferred positions as well.

“The best opportunities remain in securitized credit, particularly in U.S. Mortgage-Backed Securities. U.S. households with prime credit ratings have strong balance sheets which should continue to be supportive of consumer credit and ancillary structures, especially as house prices remain firm.”

Vishal Khanduja, CFA
Head of Broad Markets
Fixed Income



MACRO

We are underweight U.S. duration, and we hold U.S. curve steepeners as we expect the curve to continue normalizing on the back of further upward pressure on yields and rising risk premiums. Easier fiscal policy, tighter monetary policy (relative to previous expectations), trade wars and stronger U.S. growth should also bode well for the USD. One caveat to this upbeat narrative is if the U.S. job market worsens substantially.

INVESTMENT GRADE

As valuations look rather full, we are underweight Investment Grade (IG) credit risk but overweight the short-dated bonds with higher yields. Specifically, we favor EUR IG vs U.S. IG given less expensive valuations and are overweight financials, as they look attractive relative to non-financials.

SECURITIZED

The best opportunities remain in securitized credit, particularly in U.S. MBS (both non-agency and agency MBS). U.S. households with prime credit ratings have strong balance sheets which should continue to be supportive of consumer credit and ancillary structures, especially as house prices remain firm. Within ABS and CMBS, we are selective. Regarding ABS, we focus on business-oriented ABS, such as whole business securitizations, and aircraft ABS, as they offer significantly wider spreads and look attractive.

As for CMBS, our focus has been primarily on multi-family housing, single family rentals, logistics, and high-quality hotels, shopping centers and trophy offices. We have been generally moving up in credit quality.

HIGH YIELD AND BANK LOANS

We are moderately long below IG corporates given the historically high absolute/real yields, which should be supportive for returns, ultimately shielding investors from wider credit spreads. We now prefer bank loans versus bonds given the floating rate coupon, seniority in capital structure, higher carry and attractive risk-adjusted profile.

EMERGING MARKETS

Given the policy uncertainty of a Republican sweep, emerging markets (EM) is only a security selection trade for our portfolios, not an asset allocation. Country and security selection remain imperative. Stronger growth, but higher rates and weaker global trade linkages are not usually conducive to strong EM performance. That said, we believe countries with solid economic outlooks, decent growth, falling inflation and a central bank able and willing to cut interest rates despite policy changes in the U.S. are likely to perform well.



Stimulus Fatigue: China Can't Band-Aid Its Way to Recovery

Since September 2024, Chinese policymakers have focused on delivering a series of stimulus packages to inject new life into their struggling economy and boost share prices. However, high debt levels, overinvestment, an unresolved property bubble, underwhelming domestic consumption and international trade pressures are all contributing to the structural weaknesses in China's economy that mere stimulus packages cannot resolve.

STRUCTURAL CONCERNS: DEBT AND OVERINVESTMENT CAUSED PRODUCTIVITY DECLINE AND DEFLATION

At the core of China's challenges lies its staggering debt, with a total debt-to-GDP ratio soaring to around 350%. The state's dependency on debt-fueled expansion has eroded productivity, as each yuan injected into the economy yields diminishing returns. Another major challenge is overinvestment, with nearly 45% of China's GDP funneled into projects that now face dwindling domestic demand. This flood of excess capacity has led to lower utilization rates and deflationary pressures in both producer and consumer prices. The recent dip of nominal GDP below real GDP is troubling, as it directly impacts corporate earnings and, by extension, investor confidence and stock market stability.

PROPERTY BUBBLE: A WEALTH ANCHOR HAS TURNED INTO A LIABILITY

The property market, a pillar of Chinese wealth and economic activity, is under significant strain. With around 60 million empty units and declining property prices, the positive wealth effect real estate once offered is now a drag on the economy. Property represents about 60% of China's net worth, in stark contrast to the United States, where it's closer to 27%. This reliance on property as a store of wealth makes the country vulnerable to downturns in real estate. Any effective economic solution must address challenges within the property sector and its cascading effect on wealth, consumption and financial stability.

CONSUMPTION AND EXPORTS: THE GREAT DIVERGENCE

Efforts to boost domestic consumption have largely fallen short. The effectiveness of loose monetary policy in boosting consumer confidence starkly contrasts with the U.S. In China, as stated, a significant portion of household net worth is tied to real estate. Unlike in the U.S., where lower interest rates encourage consumer spending, Chinese consumers hesitate to boost their spending due to fears surrounding property

market instability and the lack of a social security net. So far, consumption has been overshadowed by ongoing investments in manufacturing, trade and infrastructure. The "Made in China 2025" initiative pushes Beijing to climb the value chain by producing higher-end goods, from electric vehicles to aerospace technology. Yet, as domestic demand remains insufficient to absorb this output, China increasingly relies on exports to sustain growth.

“Lessons from other debt-laden economies suggest the path to stability for China requires cleaning up bad debt through either write-offs or debt restructuring, followed by bank recapitalization.”

Jitania Kandhari

Deputy CIO of the Solutions and Multi-Asset Group, Head of Macro and Thematic Research for the Emerging Markets Equity team, Co-Lead Portfolio Manager, Passport Equity



While household consumption accounts for 72% of global GDP, it accounts for only 53% of China's. A familiar trend in development economics offers some context: As national wealth increases, the share of consumption shifts from goods to services. As China follows in the footsteps of manufacturing giants like Germany and Japan, it faces the same limitations—a large, export-driven manufacturing base without a proportionate domestic market to absorb the production.

Since the 1990s, Germany's manufacturing as a share of GDP has stabilized, yet its limited domestic goods consumption has led to a massive rise in net exports. China's economic trajectory is similarly export-dependent, which accelerates trade surpluses and accentuates tensions with countries like the U.S. and those in Europe.

TRADE PRESSURES: RESILIENCE OR RELUCTANCE?

Despite mounting trade tensions, particularly with the U.S., China has largely retained its global market share, by redirecting exports to the EU and emerging markets. The U.S. may be importing less from China, but other regions have stepped in to fill the void. However, these efforts are not without challenges. Aggressive trade policies have led to international backlash, with foreign direct investment (FDI) trending downward and portfolio investors showing increasing reluctance. If China wants to retain its position in global trade, it must balance its growth ambitions with diplomatic acumen and openness to foreign investment.

THE CYCLICAL NATURE OF STIMULUS: AN ECHO OF JAPAN'S "LOST DECADE"

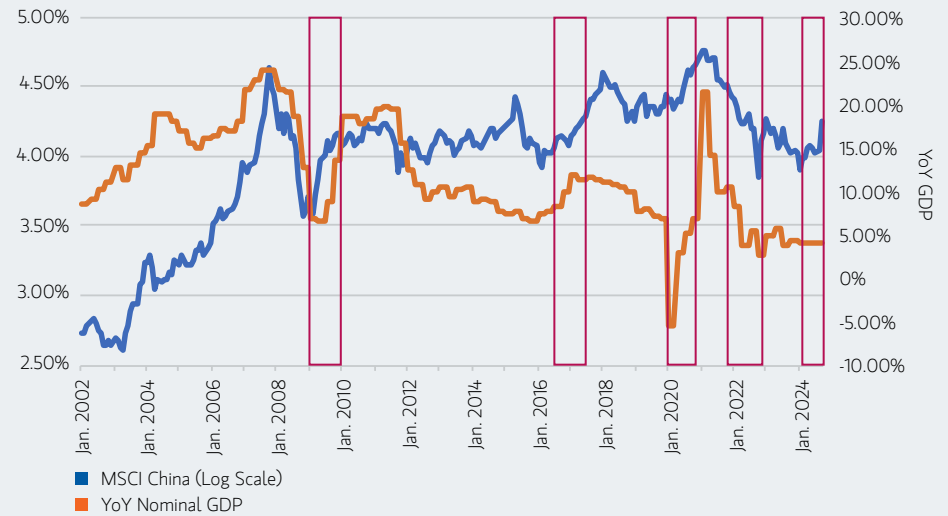
Since the Global Financial Crisis, China has rolled out five major stimulus packages, which have merely postponed an inevitable reckoning. China's latest round of stimulus, its fifth in 15 years, illustrates a recurring pattern of fiscal and monetary intervention that boosts growth temporarily (Display 1). Historically, each stimulus has provided a short-term market lift, but as evidenced in the last cycle of 2022, such effects are beginning to wane. Japan's "Lost Decade" of the 1990s provides a sobering parallel.

In most countries, monetary expansion causes inflationary pressures as it increases demand relative to output. China's current condition bears similarities to Japan's in 1990s, where the opposite occurred primarily in the way credit expansion fuels the supply side of the economy (production) rather than boosting the demand side (consumption). Output increases more than demand causing deflation rather than inflation. In Japan, supply-side policies failed to drive both rebalancing and rapid growth. The consumption share of Japan's GDP bottomed out at 63.3% in 1991 (compared to 53.4% for China in 2023), and it took 17 years for the consumption share to rise by 10 percentage points. In 2008, it had reached 73.8%, still trailing the global average.

DISPLAY 1

China's Five Rounds of Stimulus Led to Five Equity Rallies, but No Breakouts

The impact of China's stimulus packages on nominal GDP and stock markets



Source: MSIM and EME research. As of September 30, 2024. The views and opinions expressed are those of the Emerging Markets Equity Team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is no guarantee of future results.**



During that time, Japan's share of global GDP dropped from 15% to 7.9%. Following its economic peak in the 1980s, Japan experienced long-term stagnation interspersed with brief market rallies that averaged 4.5%. China's market, under the influence of stimulus packages, has similarly rallied five times in recent cycles by about 35%, making lower highs and lower lows (Display 2).

**THE PATH FORWARD:
A PAINFUL BUT NECESSARY RESET**

Until China addresses the root issues—excessive debt and inefficient investment—these stimulus measures will remain mere band-aids. While they may temporarily inflate nominal growth and trigger short-term cyclical market rallies, they will be incapable of providing a sustainable economic recovery or a stock market breakout.

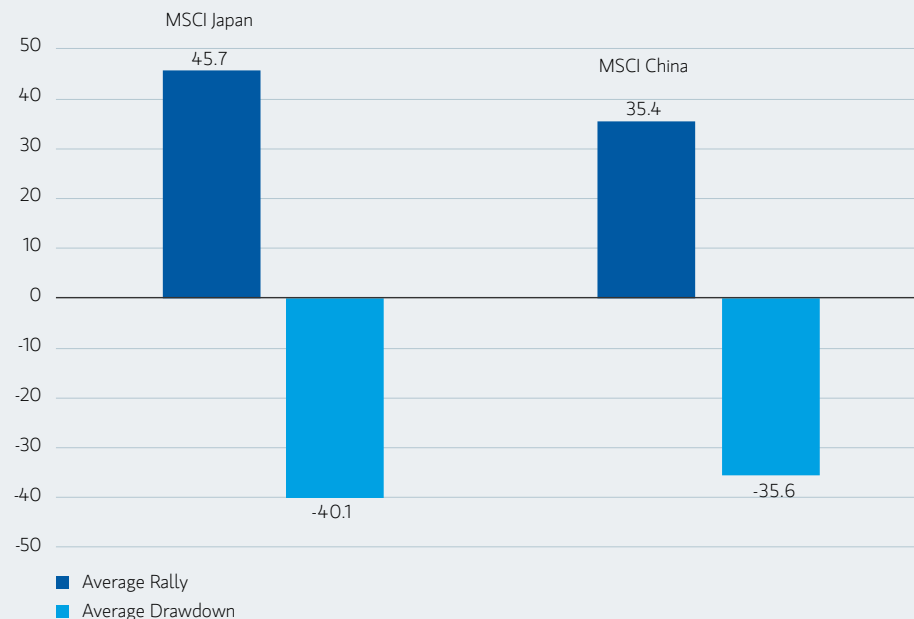
There are no quick fixes to China's economic growth model. Over the years, the imbalances in China's economy have widened, and only a complete debt restructuring and government-led income redistribution will drive positive change.

Lessons from other debt-laden economies suggest the path to stability requires cleaning up bad debt through either write-offs or debt restructuring, followed by bank recapitalization. This approach is undeniably painful, as it acknowledges financial losses, but without such drastic measures, stimulus packages will continue to provide fleeting relief. A deeper transformation must occur for lasting economic health.

DISPLAY 2

China's Market Is Shadowing Japan's in the 1990s

Average rally and drawdown during larger downtrends, MSCI China and Japan



Source: MSIM, EME research, Bloomberg. As of October 16, 2024. The views and opinions expressed are those of the Emerging Markets Equity Team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

The Potential Impact of Generative AI on Private Market

Private markets have experienced a notable valuation disruption, perhaps best evidenced by the seven consecutive negative quarters of total returns in core private real estate between September 30, 2022 and June 30, 2024 (NCREIF Property Index). This has been a prolonged adjustment that was activated in 2022 when strong private markets performance and lower average headroom in investor allocations were met with rising interest rates.

The impact can still be seen today in private markets fundraising, with capital raising continuing to be materially lower and slower than historical activity. The downstream impact is that transaction activity remains suppressed, but has started to show early signs of recovery.

As this regeneration of private markets transaction activity takes place, hedge funds continue to offer an immediate and actionable path to attractive risk-adjusted returns. After experiencing a challenging alpha environment between 2012 and 2022, average alpha produced by multi-PM hedge fund platforms in the most recent one-year period, for example, has significantly outperformed the average long-only public equity strategy.

This is attributable to two factors that are likely to continue into 2025. First, long-short hedge funds benefit from a higher interest rate environment through the “short rebate.” Second, and perhaps more

importantly, higher volatility and dispersion between investable assets offers greater alpha opportunities to hedge funds with flexible implementation.

Private credit was another early beneficiary of the change in market conditions. In 2025 we expect senior corporate loan pricing to be close to long-term averages, with attractive all-in yields and enhanced defensive characteristics through improvements in alignment, leverage and equity contributions.

One component of private credit that we expect to perform particularly well in 2025 is special situations lending. These strategies have the flexibility to target performing but non-conforming borrower opportunities, and they are experiencing greater deal flow and attractive pricing as corporates continue to adjust to higher interest rate expense and other changes to the business environment.

2025 is expected to offer improved equity opportunities in private markets. We are experiencing the first widespread asset repricing in equity investments across private markets since the Global Financial Crisis, gradually being triggered in part

by the maturation of relatively cheap financing, along with increasing confidence in the “soft landing” economic outlook. Lower entry enterprise value multiples are constructive for new investment activity; however, we consider these necessary but

“The potential impact of generative AI in private markets is expected to be a key theme in 2025. We expect companies will attempt to expand revenue and profitability through AI applications, and recognize that some of the earliest opportunities are identifiable in private infrastructure.”

Steve Turner
Head of Investment Selection for
the Portfolio Solutions Group



DISPLAY 1

Buyout Valuation Multiples Are Expected To Converge



Source: Portfolio Solutions Group. As of September 30, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is no guarantee of future results.** EBITDA stands for Earnings Before Interest, Taxes, Depreciation and Amortization, a reflection a firm's short-term operational efficiency. A lower debt/EBITDA ratio generally reflects a healthier company from a financial standpoint, representing a higher level of cash from earnings to cover debt payments, viewed as less risky for an investor.

not sufficient for attractive forward-looking returns. Managers also need a very competitive tool kit to pursue revenue growth initiatives, margin expansion, and a suitable capital structure, potentially with organic growth playing a larger roll relative to inorganic growth within an environment of higher debt service and lower leverage multiples.

We would highlight that the middle market size segment of private equity offers investors the best environment for this activity. Our data suggests middle-market investments can deliver higher earnings growth and rely less on leverage, making us enthusiastic about middle-market investing in the operating environment that we expect for 2025.

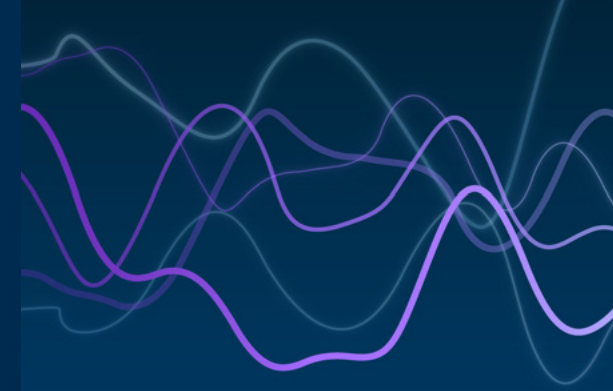
One of the clearest price adjustments in response to the prevailing interest rate regime has been observed in private real estate. We expect transaction activity to expand as existing financing matures and investors are required to recapitalize at higher financing costs. The spread between real estate values and borrowing costs remains tight in certain segments, so heightened selectivity is important while this spread reestablishes itself. The asset class also needs to contend with pockets of positive but moderating demand meeting elevated supply, which puts pressure on rents and vacancies. However, the long-term operating outlook is strong. Supply is set to decrease meaningfully in 2025, and debt markets remain relatively healthy. As such, we believe we have entered an attractive opportunity within private real estate for credit providers, net lease and equity investors.

The potential impact of generative Artificial Intelligence (AI) on private market performance is expected to be a key theme for 2025. While private equity is expected to participate through both investing in “AI-natives” and companies that attempt to expand revenue and profitability through AI applications, we recognize that some of the earliest opportunities are identifiable in private infrastructure. Two key infrastructure-related themes driving this have been the digitization of society and economies, and the global energy transition. These two mega themes meet where data requirements lead to power demand, and this is leading to extensive investment opportunities.

Generative AI is turbocharging this infrastructure opportunity as the power market is considered inadequate to satisfy the volume, density and low tolerance for intermittency that generative AI requires. Private investors can target bottlenecks and invest in the solutions, e.g. powered land such as existing industrial sites or retiring power sites, as well as enable opportunities such as energy storage, water cooling and energy efficiency providers. Of course, large-scale investment in data centers and primary power generation will be equally essential, and participating in the installation of this plumbing for generative AI is likely to be a key theme for 2025.



Capital Markets Investment Framework



Representative Allocations from the Portfolios Solutions Group

ASSET ALLOCATION	OUR VIEW					COMMENTARY
	--	-	=	+	++	
BONDS Duration			➔	■		For the first time in the last few years, we have moved overweight duration in our portfolios. After their recent rise, 10Y U.S. Treasury yields have approached levels at which we believe further upside is limited, making bonds a better hedge to our increased equity exposure and cyclical exposure within the U.S.
BONDS Credit			■	➔		
EQUITIES Risk Level			■			Our base case of a soft landing remains in place, supporting equity fundamentals. In the short term, the outcome of the U.S. election is likely to bring investors who had reduced risk before the vote back into the market and "pull forward" some equity upside from next year. We acknowledge that from a medium-term perspective there is still not enough information to get a more complete picture of the effect of Trump's second term on equities.
ALTERNATIVES Private Markets				■		The outcome of the U.S. election is expected to expand deal-making activity but is likely to have an uneven impact on the growth opportunities and risks within each sector.
ALTERNATIVES Hedge Funds				■		Hedge funds are benefiting from a constructive market environment for skill-based managers. We maintain a preference for market neutral, relative value equity and macro strategies.
ALTERNATIVES Commodities			■			We are neutral on key commodity markets: geopolitical upside risks are balanced by high spare capacity in markets such as crude, which limit upside absent physical disruptions.
TRANSITION Cash / Short Duration		■	➔			In moving to neutral equities and adding duration back to portfolios, we reduce our position in cash and short duration instruments.

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Representative Global Equity Allocations from the Portfolio Solutions Group



■ CURRENT ALLOCATION
■ CHANGE FROM NOV 2024

-- HIGH CONVICTION UNDERWEIGHT
- UNDERWEIGHT
= NEUTRAL
+ OVERWEIGHT
++ HIGH CONVICTION OVERWEIGHT

EQUITY	OUR VIEW					COMMENTARY
	--	-	=	+	++	
REGIONAL Developed Markets			■			<p>We moved to a slight overweight in U.S. equities: Post-election dynamics are positive for U.S. equities and our base case soft landing view remains intact. We have added to U.S. equity exposure through non-mega cap segments of the market, which we believe are better positioned for an expansion in earnings trends and valuations.</p> <p>We move underweight European equities: Tariffs related uncertainty is a headwind for growth and compounds structural headwinds facing European equities. Within Europe we continue to favor Banks, as capital returns remain attractive with current terminal rate expectations and valuations remain cheap.</p> <p>The risk of sharp JPY appreciation and the resulting headwind to Japanese equities are insulated by a renewed USD strength, driven by superior U.S. growth and interest rate differentials vs RoW (Rest of the World). Japan's structural domestic improvements remain intact, while valuations remain relatively undemanding.</p> <p>Trump 2.0 spells uncertainty for export-reliant EM economies through protectionist policies and tariffs. China is at the forefront of facing external headwinds, while the lack of decisive fiscal policies at home dampens the prospects for domestic reflation and recovery.</p>
REGIONAL United States			→	■		
REGIONAL Eurozone		■	←			
REGIONAL Japan				■		
REGIONAL Emerging Markets			■			
STYLE Growth vs. Value			■			<p>Growth style indexes remain disproportionately exposed to Big Tech trends, where we seek to keep our risk exposure close to neutral.</p> <p>Small caps still have a problem with too much "junk" in the index, yet following an earnings recession and the election of Trump, we see a catalyst for non-mega caps to finally perform better.</p> <p>With little excess risk premium in equities and a limit to economic growth acceleration due to inflation risk, we continue to prefer a tilt toward Quality. We balance with selective cyclical exposure.</p> <p>We see balanced risk for Dividend Yield style exposures. Note high dividend yield as an independent style factor does not imply quality, though many dividend focused funds also seek quality factors.</p>
STYLE Large vs. Small Cap				■		
STYLE Quality			■	←		
STYLE Dividend			■			

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Representative Global Fixed Income Allocations from the Portfolio Solutions Group



■ CURRENT ALLOCATION
■ CHANGE FROM NOV 2024

-- HIGH CONVICTION UNDERWEIGHT
- UNDERWEIGHT
= NEUTRAL
+ OVERWEIGHT
++ HIGH CONVICTION OVERWEIGHT

FIXED INCOME	OUR VIEW					COMMENTARY
	--	-	=	+	++	
BONDS U.S. Treasuries			➡	■		We move to a slight overweight duration in portfolios: After the recent rise, yields are at levels that should allow them to act as more effective hedges against our exposure to risky assets.
BONDS Inflation Linked Bonds			■			Breakevens have risen recently and while we see prospects for them to rise further, they are closer to fair value today than they were a month ago.
BONDS Eurozone Govt. Bonds			➡	■		As with USTs, we move duration to a slight overweight: As stated, yields are at levels that should allow them to act as more effective hedges against our exposure to risky assets.
BONDS EM Hard Currency Govt. Bonds				■		EMD spreads have come in a lot since their selloff over the summer. While somewhat expensive, we still see relative value in the asset class versus other very expensive parts of fixed income.
BONDS EM Local Currency Govt. Bonds			■			EM Local appears to offer some value on a relative basis with valuations closer to fair versus history, rather than rich. However, the result of the US elections is likely to keep the USD strong in the short term, dampening returns for the asset class.
PUBLIC CREDIT Municipal Bonds			■			Muni ratios versus Treasuries have tightened and now look closer to "fair value" than cheap. We still like the asset class for taxable investors, but it looks marginally less attractive than it did a month ago.
PUBLIC CREDIT Investment Grade		■				Spreads currently sit at all-time tights, excess return over USTs should be minimal and IG remains sensitive to left-tail outcomes. Our economic outlook prevents this from being a high conviction underweight.
PUBLIC CREDIT MBS/ABS					■	High conviction in asset-backed securities and yield per unit of credit quality remains attractive. US 30Y fixed mortgage rates are higher than BB-rated Corporate yields, a rare occurrence in 25 years.
PUBLIC CREDIT High Yield		■	➡			With spreads at historically low levels across credit ratings, we see little upside left for the asset class, and prefer to allocate to areas of fixed income with less stretched valuations.
PUBLIC CREDIT Bank Loans			➡	■		Bank Loans have not rallied as much as other risky Fixed Income asset classes and excess returns currently look attractive, particularly on a relative basis.

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Representative Alternatives Commentary from the Portfolio Solutions Group



ALTERNATIVE ASSETS

COMMENTARY

<p>PRIVATE MARKETS Private Equity</p>	<p>We expect investor cash flows to recover as a result of increasing market activity, and asset pricing to offer an attractive entry point. While a key discipline in private equity investing is to limit exposure to exogenous risks, the outcome of the U.S. election is expected to expand deal-making activity, but is likely to have an uneven impact on the growth opportunities and risks within each sector. The prospect of deregulation will potentially lead to increased opportunities in financials and healthcare, and reduced anti-trust intervention could spark additional M&A more broadly. However, with growth policies also expected to add to inflation, we continue to focus on middle market strategies that rely less on leverage and are well-placed to deliver asset management initiatives to drive margin expansion and real earnings growth.</p>
<p>PRIVATE MARKETS Private Real Estate</p>	<p>Commercial core real estate ended its run of seven consecutive negative quarters with a positive total return in the third quarter. This protracted adjustment was driven by higher debt costs and pockets of elevated supply. A significant amount of commercial real estate debt matures this year and in 2025, which is expected to drive higher transaction volumes with attractive entry valuations. Long-term demand tailwinds in key sectors remain in place while supply issues are starting to subside. We expect these dynamics to lead to further improved pricing and represent a compelling opportunity.</p> <p>Private infrastructure continues to participate in the investable opportunities relating to the mega trends of digitization and power generation. These themes converge where data services require power, and generative Artificial Intelligence (AI) is highlighting that the current power mix is insufficient in terms of volume, density and reliability. Private investors are playing a key role in suppling this enabling infrastructure with attractive growth prospects. Infrastructure deal volume is also expanding across sectors, with transportation becoming more active as the utilization track records of airports and toll roads recover after the mobility shock caused by COVID-19. In the U.S., we must be selective to ensure investment activity is aligned with forward-looking policy adjustments. While we believe cost competitive onshore wind and solar investment has irreversible momentum, support for earlier stage and subsidized initiatives such as offshore wind and hydrogen is potentially at risk in favor of expanding conventional oil and gas production. To date we have observed bipartisan support for nuclear power generation and expansion in access to broadband, but policy will need to be considered carefully as details emerge.</p>
<p>PRIVATE MARKETS Private Credit</p>	<p>Private loan pricing and terms are now in line with the long-term average but elevated rates and muted defaults are keeping total return expectations elevated. As corporates continue to seek ways to manage cashflow, special situations strategies are able to capitalize on favorable pricing / terms for opportunities that fall in the white space between more rigid mandates.</p>
<p>LIQUID ALTERNATIVES Hedge Funds</p>	<p>Hedge funds are benefiting from a constructive market environment for skill-based managers. We maintain a preference for market neutral, relative value equity and macro strategies. Within macro strategies, we favor discretionary strategies that are tactically oriented given supportive levels of market and fundamental economic dispersion. Within equity strategies, we continue to have conviction in fundamental long/short equity, but also have increasing confidence in quantitative equity strategies that are benefiting from the reduction in asset price correlation at the stock level caused by macroeconomic and geopolitical uncertainty.</p>
<p>LIQUID ALTERNATIVES Commodities</p>	<p>We have closed our position in oil futures: geopolitical risks are more binary at the current juncture and upside outside of major disruptions to supply looks limited, reducing the attractiveness of the position as a hedge in our portfolio.</p>

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Portfolio Solutions Group

The Portfolio Solutions Group provides top-down, macro analysis of equity, fixed income and alternative assets, designed to help clients capitalize on evolving economic dynamics and market dislocations globally.

The team builds custom multi-asset investment solutions across a range of broadly-diversified to hyper-focused portfolios.



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*Chief Investment
Officer,
Managing Director*



**EWA TUREK
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Executive Director



ERIC ZHANG
Executive Director



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Executive Director



GREG WATERMAN
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UMAR MALIK
Vice President



CHRIS CHIA
Vice President



SACHIN RAGHAVAN
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Risk Considerations

RISK CONSIDERATIONS

There is no assurance that a portfolio will achieve its investment objective. Portfolios are subject to market risk, which is the possibility that the market values of securities owned by the portfolio will decline and that the value of portfolio shares may therefore be less than what you paid for them. Market values can change daily due to economic and other events (e.g. natural disasters, health crises, terrorism, conflicts and social unrest) that affect markets, countries, companies or governments. It is difficult to predict the timing, duration, and potential adverse effects (e.g. portfolio liquidity) of events. Accordingly, you can lose money investing in this portfolio. Please be aware that this portfolio may be subject to certain additional risks. **Asset Allocation/Diversification** does not protect you against a loss in a particular market; however it allows you to spread that risk across various asset classes. In general, **equity securities**' values fluctuate in response to activities specific to a company. Investments in foreign markets entail special risks such as currency, political, economic, and market risks. The risks of investing in **emerging market countries** are greater than risks associated with investments in foreign developed countries. **Fixed-income securities** are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest-rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In a **rising interest-rate environment**, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. In a declining interest-rate environment, the portfolio may generate less income. Longer-term securities may be more sensitive to interest rate changes. **Mortgage- and asset-backed securities** (MBS and ABS) are sensitive to early prepayment risk and a higher risk of default and may be hard to value and difficult to sell (liquidity risk). They are also subject to credit, market and interest rate risks. Certain U.S. **government securities**, such as those issued by Fannie Mae and Freddie

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INDEX DEFINITIONS

The **Bloomberg Aggregate Bond Index** is an index comprised of approximately 6,000 publicly traded bonds including United States government, mortgage-backed, corporate and Yankee bonds with an average maturity of approximately 10 years.

The **S&P 500® Index** measures the performance of the large cap segment of the U.S. equities market, covering approximately 75% of the U.S. equities market. The Index includes 500 leading companies in leading industries of the U.S. economy.

The **S&P 500® Equal Weight Index (EWI)** is the equal-weight version of the S&P 500. The index includes the same constituents as the capitalization weighted S&P 500, but each company in the S&P 500 EWI is allocated a fixed weight of 0.2% of the index total at each quarterly rebalance.

The **MSCI China Index** captures large and mid-cap representation across China A-shares, B-shares, H-shares, Red-chips and P-chips. It reflects the Mainland China and Hong Kong opportunity set from an international investor's perspective.

The **MSCI Japan Index** is a free-floated adjusted market capitalization weighted index that is designed to track the equity market performance of Japanese securities listed on the Tokyo Stock Exchange, Osaka Stock Exchange, JASDAQ and Nagoya Stock Exchange. The MSCI Japan Index is constructed based on the MSCI Global Investable Market Indices Methodology, targeting a free-float market capitalization coverage of 85%.

The **MSCI World Index** is a free float adjusted market capitalization weighted index that is designed to measure the global equity market performance of developed markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

The **NCREIF Property Index** is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only.

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