Morgan Stanley

WEALTH MANAGEMENT

INVESTMENT STRATEGY

Global Investment Committee | April 2025

On the Markets

Everything, Everywhere, All at Once

Lisa Shalett
Chief Investment Officer
Head of the Global Investment Office
Morgan Stanley Wealth Management

Daniel Skelly
Senior Investment Strategist
Morgan Stanley Wealth Management

Whether in their capacity as citizens, consumers or investors, human beings tend to prefer certainty, predictability and simple narratives about the future. Only 71 days into the new administration in Washington, a torrid pace of executive orders, fiscal austerity measures, new geopolitical stances and tariff actions suggests a backdrop that is at best unstable and at worst unforecastable. The implication has been an uncertainty shock on top of what was already a battered bull market thesis that has seen US equity indexes move into technical correction territory. The S&P 500 Index—down approximately 9% from its Feb. 19 all-time high and off nearly 5% for the year to date—has faded below pre-election levels.

To wit, the tailwinds of disinflation, Federal Reserve easing and seemingly unending momentum from a generative AI technology build-out were already diminishing by Inauguration Day. As we enter the second quarter, however, we face the threat of a bout of stagflation, as consumer confidence plummets to multiyear lows while inflation expectations rise. GDP growth estimates have been cut from above 2% to a consensus range closer to 1.7%–1.8%, and ambitious estimates for 13%–14% earnings growth in 2025 are vulnerable to recalibration. At the same time, the US economy's foundation still seems strong enough to avoid recession, as the unemployment rate, at 4.1%, is relatively low and new jobless claims have yet to detach from cycle lows. Gold is materially outperforming, as are rest-of-world (ROW) stocks, especially in Europe, marking a strong rotation. Rarely have crosscurrents been tougher for investors.

With this in mind, our advice has remained focused on maximum diversification and active management. We continue to recommend balanced exposure among stocks, bonds and real assets, and across regions and sectors, rates and credit, and public and private investments. Even if market-cap-weighted equity indexes remain volatile and range-bound, there are good opportunities—including in financials, health care, media and entertainment, domestic industrials, energy infrastructure and software. Success, however, will hinge on patience, realistic expectations and measured risk taking. ■

TABLE OF CONTENTS

US CREDIT

Risk Premium Reset

Vishwas Patkar, Head of US Corporate Credit Strategy, Morgan Stanley & Co. LLC

As detailed in our year-ahead outlook, we came into 2025 constructive on credit through the second quarter. Our view was driven by positive technicals, strong fundamentals and a healthy macro backdrop, accompanied by robust growth and cooling inflation. We expected modest spread tightening through the first half of the year before a tougher back half. After we published our outlook in November, credit performance through January played out largely according to our expectations, as investment grade (IG) and high yield (HY) spreads, respectively, narrowed to tights of approximately 74 and 255 basis points, both close to our midyear targets.

Since mid-February, however, the policy backdrop has shaped up differently than we envisioned. Our public policy team's base case around tariffs was "fast announcements, slow implementation." The team still believes that tariffs are more likely to be sustained on China or European Union (EU) products than on those of Canada and Mexico, but its new base case features more front-loaded and broad-based tariffs, in line with recent trade actions and proposed "reciprocal tariffs."

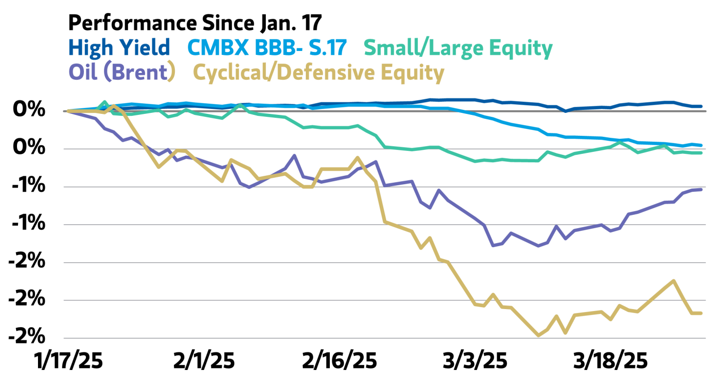
POLICY NOISE. Since the policy noise intensified, we have been waiting for signs that potential tariffs might be temporary or trend toward being more benign in magnitude. We have not found that so far, but we expect that negotiations will continue to drive uncertainty. What's clear is that the direction of travel is toward higher, front-loaded and more sustained tariffs than we expected. Looking ahead, our policy team expects the reciprocal tariffs slated for April 2 to extend policy uncertainty, since the path and its endpoint remain moving targets.

In addition to tariffs, our US economics team notes that immigration trends are tracking past our expectations, and the fiscal impact of actions from the Department of Government Efficiency (DOGE) could also weigh on growth this year. The team has reduced its fourth-quarter-over-fourth-quarter 2025 GDP growth forecast from 1.9% to 1.5%, and its 2026 forecast from 1.3% to 1.2%. This slowdown is likely to happen alongside firmer inflation, as greater tariff intensity and tighter immigration have led to an upward revision in our inflation outlook. Our expectation for core personal consumption expenditures (PCE) by year-end has risen from 2.5% to 2.8%. Put simply, we pulled forward the anticipated effects of restrictive trade and immigration policies and expect "slower growth, firmer inflation."

This puts the Federal Reserve in a tight spot, balancing firmer inflation with softening growth indicators (i.e., "stagflationary" risks). While the most recent Federal Open Market Committee (FOMC) meeting painted a fairly benign picture, we believe the setup will get tougher. Our economists think the Fed will only cut rates once this year, in June, as inflation heads lower in the near term. After that, price pressures would push the central bank to the sidelines. Even if inflation moves sideways, there would still be a high bar for further cuts.

CREDIT MARKET RESILIENCE. So far, credit markets have been impressively resilient in the face of rising uncertainty. Even with recent widening, spreads have remained in their bottom quintile, well off the wides of the August selloff. We think credit's "low beta" (see chart) is a testament to some of the supportive factors for the market that drove our constructive call back in November. In our view, there's clearly still a lot to like about credit.

Credit Has Been Impressively Resilient as Other Measures of Cyclical Risk Have Weakened



Note: Cyclical/Defensive Equity is based on the MSZZCYDE Index. Small/Large Equity is defined as Russell 2000 Index versus S&P 500 Index.
Source: Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of March 28, 2025

Yet, as we think about spread and return forecasts, we would be remiss not to acknowledge that the risk/reward equation has changed meaningfully. Relative to only two months ago, our base case is now for significantly slower growth, firmer inflation, two fewer rate cuts and a flatter US Treasury yield curve through the second half. While credit can do fine in a slow-growth economy, the deteriorating macro backdrop warrants a reset of risk premiums. To borrow from our economists' forecast revision, as the facts change, so should our views. As such, we have adjusted our spread targets to align with the updated macro views of our economists and strategists.

INVESTMENT GRADE FORECAST. Our new base case calls for IG spreads to widen very modestly from recent levels to around 95 basis points, remaining historically narrow (see table). Our bull case reflects our old base case, at 80 basis points, with tariff uncertainty reduced and overall impacts on growth more muted than currently expected, as we revert to the "Goldilocks" environment of 2024. Our bear case, on the other hand, moves to a projected average spread of 150 basis points, which would be consistent with a mild recession.

New Fourth Quarter 2025 Credit Forecasts

	Old Q4 '25 Forecast	New Q4 '25 Forecast		
	Base	Bull	Base	Bear
Index Spread (basis points)				
Investment Grade	**80**	80	**95**	150
High Yield	**300**	275	**350**	500
Loans	**400**	400	**435**	670
Defaults – 12 Months				
High Yield	**2.5%**	1.5%	**3.0%**	5.0%
Loans	**3.5%**	2.5%	**4.0%**	6.0%

Note: US IG, HY and leveraged loan spreads forecast for the Bloomberg US Corporate Bond and PitchBook LSTA Leveraged Loan indexes. Leveraged loan default rates include hard defaults and distressed exchanges from Moody's.
Source: Bloomberg, PitchBook LCD, Morgan Stanley & Co. Research as of March 21, 2025

HIGH YIELD AND LOAN FORECASTS. We see more spread decompression, with HY and leveraged loans underperforming IG. In both HY and loans, we expect spreads to settle wider. Our new base case is 350 basis points for HY and 435 basis points for loans by year-end, up from 300 basis points and 400 basis points previously. Higher carry profiles (reflecting excess yields above the risk-free rate) continue to support loan outperformance over HY in the base case.

The risk/reward in our outlook turns more negative for loans, however, as the economy moves into a new regime with "fast and furious" tariff implementation and heightened policy uncertainty. Rising growth concerns do not bode well for loans, given the concentration of highly levered, rate-sensitive borrower balance sheets. We expect loans to approach recessionary levels, at an average spread of 670 basis points, in the bear case, while better internal dynamics suggest a lower peak in HY, at 500 basis points, compared to recessionary levels in the past. A rapid Fed cutting cycle in the bear case would also challenge loans more from a fund-flow perspective.

On the flip side, we see limited scope for spread compression, as spreads are unlikely to retest year-to-date tights. But in the bull case of lighter tariff implementation and quicker policy resolution, we see HY moving back to 275 basis points and loans to 400 basis points.

DEFAULT UPTICK. We revise our 2025 default forecasts upward to 3.0% for HY and 4.0% for loans. Slower growth and more limited policy easing pose increasing risk for credits down the quality spectrum. We continue to see a sticky default cycle as the distressed cohorts are relatively confined and set to slowly get cleared out of the pipeline. Our economists' updated macro outlook implies a slower pace of default normalization. Meanwhile, the growing number of borrowers with prior credit events face fewer options, increasing the likelihood of having to come to terms with eventual bankruptcy protection filing. ■

This article was excerpted from the March 21 Morgan Stanley & Co. Research report, "Risk Premium Reset." For a copy of the full report, please contact your Financial Advisor.

US ECONOMICS

Who Let the DOGE Out?

Michael T. Gapen, Chief US Economist, Morgan Stanley & Co. LLC

Sentiment shifted fairly quickly from post-election optimism and "animal spirits" to increasingly greater concern about downside risks. That said, we think some of the shift in sentiment has been overdone—we see softness in recent economic data as largely due to payback from strong spending on goods in 2024's fourth quarter, as opposed to a turning point. Instead, our outlook for the US economy assumes the policies that soften growth and firm inflation, such as trade and immigration restrictions, come first. The policies that could boost growth, such as deregulation, come later, or in the case of fiscal policy, not at all.

Our baseline outlook for fiscal policy assumes that the Trump administration extends the Tax Cuts and Jobs Act (TCJA), leaving the stance of fiscal policy largely unchanged, and we factored in little impact from the efforts of the Department of Government Efficiency—better known as DOGE. In that outcome, we saw government spending contributing only 0.1 percentage point to growth this year and next, down from 0.7 and 0.5 percentage points in 2023 and 2024, respectively. We admit that recent events have shifted risks in the direction of a larger drag from fiscal policy.

REDUCE GOVERNMENT SPENDING. We begin with DOGE and its potential to reduce government spending. One emphasis of DOGE has been reducing "waste and fraud." To put this in context, a US Government Accountability Office (GAO) report published last year estimated government losses to fraud of $233 billion to $521 billion annually based on examination of data from fiscal years 2018 through 2022. While sizeable, we think these estimates are overstated and their potential to unlock efficiencies is low.

First, we note that the GAO's report concludes that the upper end of this range is associated with "higher risk" environments like the COVID pandemic. The period under review included pandemic-era programs like COVID-19 relief funding, the Paycheck Protection Program and emergency unemployment benefits. Abuse in these programs was common, and they have long since expired. The upper bound of the estimate range, in our view, reflects government losses that are not present currently. We think it best to focus on the lower end of estimated government losses, at $233 billion.

SMALL-DOLLAR OVERPAYMENTS. Most of the remaining government losses stem from programs like Social Security, Medicare and Medicaid. Losses in these programs tend to stem from a large number of small-dollar overpayments. The evidence suggests that identifying and remedying losses in these programs is time consuming and costly. Put simply, it costs money to recoup money. A 2015 report by the inspector general of the Social Security Administration (SSA) examined the cost-benefit analysis of recovering low-dollar overpayments. It found that the SSA spent $323 million to collect $109 million in overpayments between fiscal years 2008 and 2013, meaning the agency spent about twice what it ultimately collected. Identifying waste is only one side of the coin; whether it is cost effective to recover is the other.

While confidence in our ability to assess the actual reduction in federal spending stemming from DOGE actions to date is low, we have greater confidence in our ability to say what would happen if substantial cuts in federal spending do materialize. The standard way to estimate the effect of changes in fiscal policy on economic output is through the use of fiscal multipliers. These combine the direct effect of changes in spending or transfers on demand with the indirect effects that arise when the direct effects propagate throughout the economy.

FISCAL MULTIPLIERS. In performing this analysis, we note that fiscal multipliers are highest for items DOGE is attempting to cut: purchases of goods and services of the federal government; transfer payments to state and local government for infrastructure and other payments; and transfer payments to individuals. Multipliers for these categories range from 0.4 to 2.5, with an average value of 1.3 (see table).

Potential DOGE Cuts Are Concentrated in Items With High Fiscal Multipliers

Type Of Activity	Estimated Multipliers	
	Low Estimate	High Estimate
Purchases of goods and services by the federal government	0.5	2.5
Transfer payments to state and local governments for infrastructure	0.4	2.2
Transfer payments to state and local governments for other purposes	0.4	1.8
Transfer payments to individuals	0.4	2.1
One-time payments to retirees	0.2	1.0
Two-year tax cuts for lower- and middle-income people	0.3	1.5
One-year tax cut for higher-income people	0.1	0.6
Extension of first-time homebuyer credit	0.2	0.8
Corporate tax provisions primarily affecting cash flow	0.0	0.4

Source: Congressional Budget Office, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of March 28, 2025

Using the $233 billion example, if this amount of spending cuts is spread evenly over four quarters in 2025 and concentrated in high-multiplier budgetary categories, then the drag on growth could range from 0.3 to 1.1 percentage points. If the spending captures a broader range of government expenditures, then the application of standard fiscal multipliers would suggest a hit to GDP growth of 0.2 to 0.8 percentage points. The more successful DOGE is at reducing spending, the greater the drag on activity. This should not be a surprising conclusion, and our estimates here provide reasonable ranges should spending cuts be large.

NEW BORROWING. Last month, Congress passed a budget resolution that extends the TCJA over 10 years and, on net, calls for $3.3 trillion in new borrowing. While the gross deficit increase is $4.8 trillion over 10 years, the reconciliation instructions in the budget resolution specify $1.5 trillion in deficit reduction through spending cuts. Of this, $880 billion is earmarked for the Energy and Commerce Committee, which oversees Medicare and Medicaid.

If enacted, the net multiplier effects of these instructions point to a fairly regressive policy stance, with the negative effect from multipliers on reduced transfer payments likely outweighing any positive effect from extending tax cuts to high-income households and corporations. Whether it is increased effectiveness of DOGE or larger-than-anticipated reductions in personal transfers, downside risks from fiscal restraint have increased. ■

This article was excerpted from the Feb. 28 Morgan Stanley & Co. Research report, "Who Let the DOGE Out?" For a copy of the full report, please contact your Financial Advisor.

US EQUITIES

Opportunities in Midcap Equities

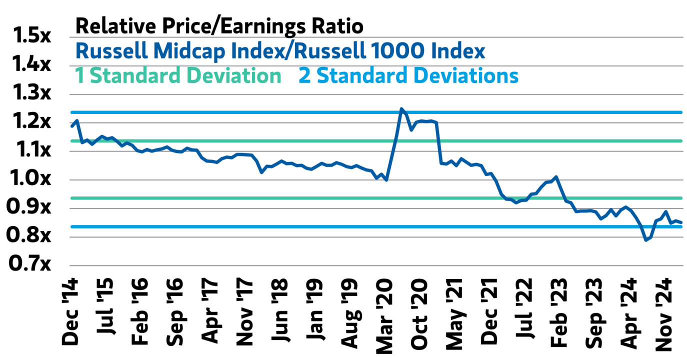
James Ferraioli, Investment Strategist, Morgan Stanley Wealth Management

When a company has grown enough to be considered a "midcap," it has exited the startup phase when viability is being determined, but it typically still has a higher embedded growth profile than more mature companies. At this point, it has already exhibited efficacy and begun to expand into larger and potentially underpenetrated markets. This stage often rewards companies with greater access to capital markets compared to earlier-stage, small-cap peers. Together, these characteristics may create a compelling case for long-term investors.

Since the turn of the millennium, US midcap stocks have generally outperformed their large- and small-cap peers. That said, after several recent years of underperformance, we believe midcap equities look attractive versus larger-cap cohorts. Our conviction is based on several prevailing tailwinds, including valuation and the potential impact of new policies in Washington. A rebound in cyclical economic activity would also be supportive.

VALUATION. From a valuation standpoint, midcap stocks currently look attractive relative to large cap. Despite the cohort's outperformance over most of the past quarter century, the Russell Midcap Index trades at a forward price/earnings (P/E) ratio of 17 times, a 15% discount to the Russell 1000 Index, at 20 times. Midcap equities have not traded at this big of a discount to large caps in more than a decade (see Exhibit 2). Beyond valuation, the consensus forecast is for Russell Midcap earnings to grow by 15% next year, in line with the Russell 1000.

Midcap Stocks Trade at an Attractive Valuation Versus Large Caps



Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office as of Feb. 28, 2025

POLICY. From a policy standpoint, smaller companies benefited during the first Trump administration. Given the current administration's pro-growth, lower-tax, deregulation and reshoring agendas, this could happen again. As noted by Morgan Stanley & Co. Research's US multi-industry analyst, Christopher Snyder, reshoring brings a twofold benefit to the US industrial economy. First, there is the resultant capital expenditures cycle, which involves facilities construction, equipment purchases and broader industrial production as new factories come online. Second, there's the advantage of stronger industrial production as new factories begin to produce. We view this increased US-centric economic activity as a positive for small and midsize domestic businesses. While these businesses could participate as direct manufacturers and operators throughout the supply chain, beyond that, this dynamic could also foster job creation, which would be a tailwind for consumption.

Furthermore, while markets are discounting the inflationary impact of some of the new administration's proposals, which has intermittently contributed to US dollar strength, midcaps ultimately have less international-revenue exposure than large caps, potentially resulting in less of a revenue headwind.

While far from certain, a robust recovery in cyclical economic activity would also likely strengthen the case for US midcaps. Indeed, in recent months, there have been some signs of a potential rebound on that front. The Institute for Supply Management's Manufacturing Purchasing Managers' Index, while down slightly in February, still registered its second reading above 50 this year, having signaled expansion in January for the first time since October 2022.

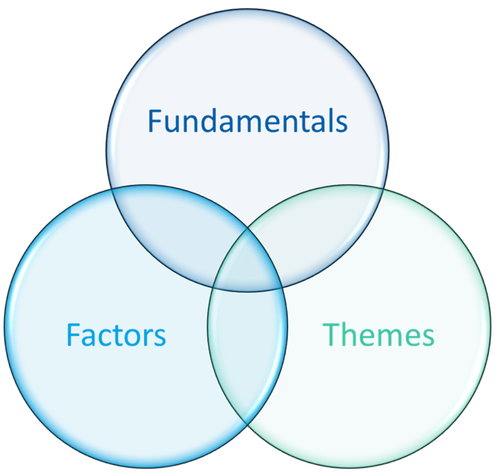
QUANTIFYING THE OPPORTUNITY. In the past, midcaps have frequently been defined as companies with market caps from $2 billion to $10 billion. Given capitalization growth across the overall market, however, we tend to think of midcap companies as those between $5 billion and $30 billion. In fact, the Russell Midcap Index, which contains over 800 constituents, recently had a median market cap of approximately $28 billion. Ultimately, as midcap investors, the aim should be to identify companies that will graduate from midcap indexes to larger-cap indexes. To quantify this opportunity, we looked at the excess return of several equity factors over 10-, 20- and 30-year periods.

Our research shows that the value, profitability and quality factors have generated excess returns over the Russell Midcap Index. In recent years, the value factor's excess return has diminished compared to that of the profitability and quality factors. This may be a result of traditional large-cap companies that have not been able to keep up with the growth of large-cap peers and have been relegated to midcap benchmarks. While these independent factors have generated positive excess returns over 10-, 20- and 30-year periods, according to our analysis, a combination of growth and quality has resulted in the strongest performance.

As fundamental investors, we aim to identify stocks trading at attractive valuations that have catalysts which could potentially manifest into higher earnings growth and a higher P/E multiple. We also seek to identify high-quality stocks of companies we would want to own on a multiyear basis, as opposed to making short-term tactical trades. Key features that make a company attractive, in our opinion, include leading market share, network effects and recurring revenue. The historical outperformance of the quality and growth multifactor offers an attractive pond to fish in when investing in midcap equities.

THEMATIC INVESTING. Companies that lie at the intersection of our fundamental, quantitative and thematic frameworks can often result in high-conviction ideas (see chart).

Compelling Opportunities Can Be Found at the Intersection of our Fundamental, Quantitative and Thematic Frameworks



Source: Morgan Stanley Wealth Management Global Investment Office as of Feb. 28, 2025

In its Feb. 13, 2025 report, "What If…", MS & Co.'s European Thematic Research team noted that since 1990, 2.4% of stocks had generated all net shareholder returns, with these stocks having largely piggybacked on the structural themes of the day—the internet and mobile. Based on the team's findings, investing in secular equity themes may increase our chances of identifying attractive midcap companies that can potentially graduate to larger-cap indexes. In our view, artificial intelligence, tech diffusion and digital assets could be especially compelling themes for midcaps, given the role of some stocks in those areas as industry disruptors.

Midcap equities generally entail greater risk than large-cap peers; however, their higher embedded growth profiles can potentially reward investors willing to take on the additional risk. Given attractive relative valuations, we believe that this potentially higher embedded growth makes for a compelling current opportunity in midcap equities. Due to the wide dispersion of companies in the Russell Midcap Index, investors looking for alpha generation may benefit from investing in companies with strong fundamental characteristics, quality-growth factor biases and exposure to key equity market trends. ■

This article was excerpted from the March 13 Morgan Stanley Wealth Management Global Investment Office report, "Opportunities in Midcap Equities." For a copy of the full report, please contact your Financial Advisor.

GLOBAL MACRO

The Tariff Playbook: Mitigation Strategies

Ariana Salvatore, Strategist, Morgan Stanley & Co. LLC

Tariff plans are complex, myriad and opaque. Over the past two months, many have been floated, and some have already been imposed—across a variety of industries, countries and products. While the precise path toward implementation remains ambiguous, when it comes to both product type and geography, one thing is clear: Tariffs are going higher. That said, companies should be prepared to mitigate the effects.

Mitigating tariff risk is a global effort, as companies based in other regions also have to adjust to changing policies. From a regional perspective, in Europe, mitigation is more prevalent on a top-down basis at this stage, while companies in Mexico don't appear to be contemplating a scenario of material and permanent tariffs. Conversely, in Asia, supply chain diversification has been a focus since 2018, though our strategists see the valuation risk most concentrated in Taiwan equities.

In that vein, we believe managing tariff risk is likely to be an ongoing, dynamic process for the duration of the second Trump administration, as threats continue to linger. Although President Trump has in several instances threatened tariffs then delayed implementation—a pattern we expect to continue—the biggest threat comes from sustained, broad tariffs.

We have identified five key strategies that companies can take to mitigate risks, ordered by time to implementation:

PRICING POWER. Companies can choose to pass on the costs of tariffs to customers, either attempting to pass on 100% of the costs or to share the burden of higher prices while accepting lower profit margins. This assumes companies have a strong degree of pricing power.

FOREIGN EXCHANGE HEDGING. Companies exposed to tariffs and international revenues can mitigate impacts by hedging their foreign currency holdings. Anticipating a stronger US dollar as a key outcome of higher tariffs, treasurers can use a variety of forex options to hedge against currency volatility.

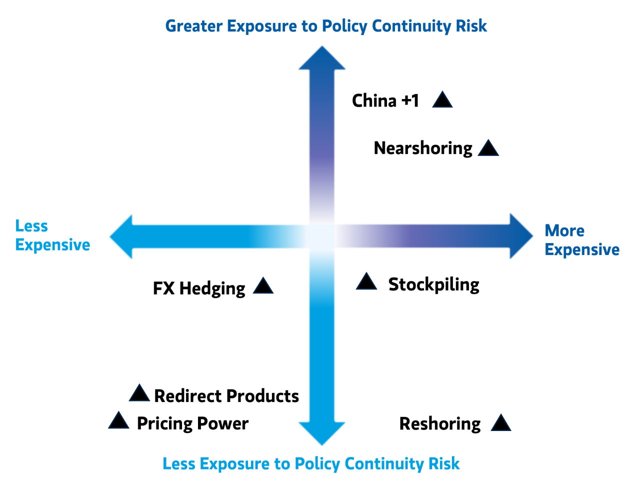
REDIRECT PRODUCTS. Multinational companies can redirect goods produced in countries exposed to tariffs to other end markets that do not have the same tariffs. For example, a US company that manufactures 20% of its products in China and earns 70% of its revenue in the US and 30% in Europe could redirect all goods made in China to Europe, where it would not incur tariffs.

STOCKPILKE INVENTORY. Companies can build inventory ahead of potential tariffs. Given the costs associated with holding excess inventory, we believe that firms would approach this strategy modestly. They may choose to fill existing warehouse space with additional inventory, but we think it is unlikely they would make a long-term commitment to lease additional space. That said, stockpiling is likely to vary by industry.

DIVERSIFY SUPPLY CHAINS. The first Trump administration' tariffs catalyzed a reorganization of supply chains. This could be achieved via nearshoring, reshoring or a "China Plus One" strategy. With the latter approach, companies can move factories from countries under tariffs to other nearby locations with low-cost labor, e.g., from China to alternative countries in Southeast Asia. Others have chosen a nearshoring strategy, moving production to Mexico; this may bring production closer to sources of end-demand while providing additional insulation from supply chain malfunctions. A reshoring strategy bringing production back to the US may also be possible. While this locates production closest to final consumers, it is also the costliest.

Each of these strategies offers a varying degree of insulation from policy risk and cost and has its own trade-offs (see chart). The one that likely insulates companies best from tariff risks is reshoring, but it comes with a very high price tag and time lag, depending on the sector. While relying on pricing power is the cheapest option, it also involves relatively little policy risk, meaning that companies do not have to be sanguine about the tariff outlook to rely on it. China Plus One and nearshoring are both on the more expensive end of the spectrum and feature elevated policy risk in the event that the country to which production is moved is put under subsequent tariffs. Effectively balancing cost, time to adjust to new policies and continuity risk will be key for decision-makers.

Tariff Risk Mitigation Involves a Trade-Off Between Cost and Policy Risk



Source: Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of March 24, 2025

Across our proprietary analysis of mentions of tariff-mitigation plans on company earnings calls, the most frequently discussed is supply chain diversification. Among other takeaways, the share of mentions referencing pricing power by industrials companies has been steadily increasing since the second quarter of 2024. That is in line with our equity strategy team's view that goods-oriented industries characterized by stronger pricing power are better positioned to manage potential tariffs than industries that don't have that advantage, such as those in the consumer discretionary goods area in particular.

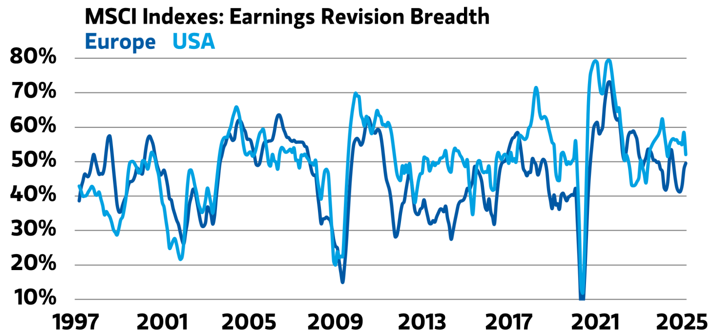
Industries within consumer discretionary and staples had fewer mentions of pricing power in calls that took place in the first quarter of 2025 versus the prior quarter, as the mentions of other strategies (including forex hedging and redirecting products) increased in more recent transcripts. That syncs with the view of our leisure products analysts that passing on price increases will be difficult without significant demand destruction in light of a challenged operating environment. Similarly, our auto industry analysts see original equipment manufacturers (OEMs) facing challenges passing on incremental cost hikes to the consumer. ■

This article was excerpted from the March 20 Morgan Stanley & Co. Research report, "The Tariff Playbook: Mitigation Strategies," incorporating contributions from various MS & Co. teams. For a copy of the full report, please contact your Financial Advisor.

Short Takes

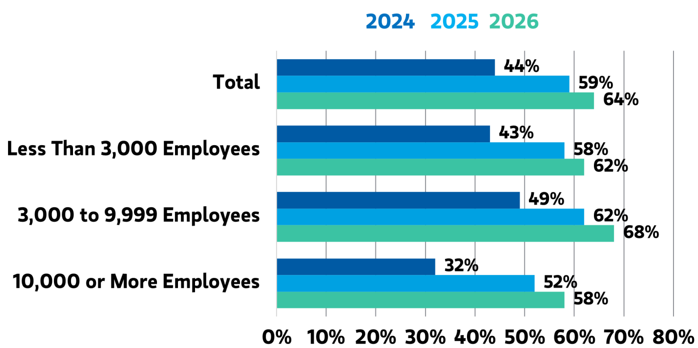
European Earnings Have Room for Positive Revisions

Growth spillovers in Europe from potential fiscal stimulus related to higher defense and infrastructure investment could drive earnings upgrades for the region's public companies. That would constitute a breakthrough from entrenched pessimism that has been a drag on European equities since both the Great Financial Crisis and the European Debt Crisis, with earnings revision breadth having substantially lagged that of US peers. Since the late 1990s, the MSCI Europe Index has returned an average of 5.0% in euro-denominated terms over six-month windows following periods of expanding breadth, evidenced by a greater share of index constituents with positive revisions. That return pattern bested the 1.2% gain averaged across all six-month windows and the -1.7% average in periods of contracting earnings revision breadth.—*Alfredo Pinel and Sonny Mendez*



Note: We display earnings revision breadth as the share of constituents receiving earnings-per-share upgrades over the past three months, smoothed using a three-month moving average.
Source: Morgan Stanley Wealth Management Global Investment Office, FactSet as of March 25, 2025

Employer Coverage of Weight-Loss Drugs Gains Momentum

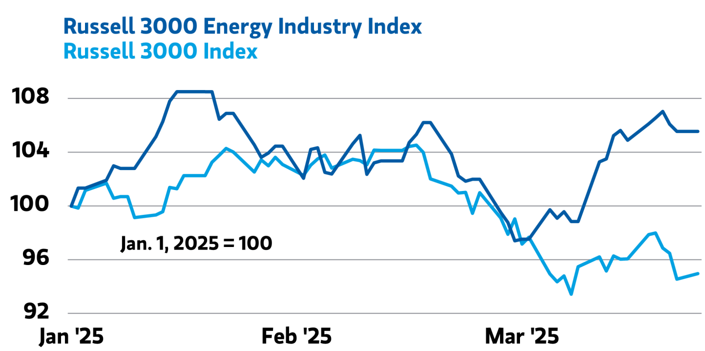


Source: AlphaWise, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of March 6, 2025

Amid debate around the outlook for glucagon-like peptide-1 (GLP-1) drugs, Morgan Stanley & Co. Research surveyed human resources executives at large US companies for insight on employer health insurance coverage of the weight-loss medications. Results showed more employers covering GLP-1s for obesity in 2025 versus 2024 and an expectation for expansion in 2026. Among companies not covering GLP-1 drugs for obesity, price was most commonly cited as the main factor. Beyond price, drivers "likely to broaden coverage" included additional clinical data, supply reliability and increased availability of oral pills—elements that MS & Co. Research analysts say have improved or could in the near future. Survey results overall support their positive view on the class of drugs.—*Jane Yu Sullivan, CFA*

Sharp Performance Dispersion Within the Energy Sector

While Russell 3000 Index energy stocks have outpaced the overall benchmark by 10% for the year to date, results within the sector itself have been mixed. Dispersion has been especially notable between oil and gas exploration & production (E&P) companies and coal producers, with returns of 4.5% and -28.5%, respectively. While both businesses extract commodities from the ground, the similarities seem to end there in 2025. Oil and gas E&Ps have benefited from enhanced technology, improved investor sentiment and ongoing global demand amid the renewables transition. Furthermore, Morgan Stanley & Co. Research notes that oil E&Ps generally messaged capital efficiency gains in their 2025 outlooks, while some gas companies are planning for growth in a tightening market.—*Joe Logan, CFA*



Source: FactSet, Morgan Stanley Wealth Management Global Investment Office as of March 31, 2025

US ECONOMICS

Immigration and the Macroeconomy

Michael T. Gapen, Chief US Economist, Morgan Stanley & Co. LLC

Investors are focused on the twists and turns of tariffs, but we think immigration policy deserves more attention. The macro effects of immigration restriction could be just as consequential, and its potential impact on US economic performance is a risk for financial markets.

The Trump administration has already moved forcefully to further restrict immigration on the heels of the Biden administration's steps to slow it in 2024. The ultimate net effect on immigration is unclear, however, and we think relative to the magnitude of the GDP effects, it is an underappreciated risk. Hence, we think it is appropriate to dig deeper into our assumptions about the effects of less immigration on economic outcomes, and why—together with trade restrictions—it underpins our view for slower US growth and stickier inflation this year.

NEAR ZERO. News reports suggest immigration has slowed to near zero recently. Immigration and Customs Enforcement (ICE) has increased deportations. The parole program for those from Cuba, Haiti, Nicaragua and Venezuela (CHNV) has been halted. Immigration through the CBP One app, which allowed applications for admission by "noncitizens without appropriate documents for admission," has been stopped.

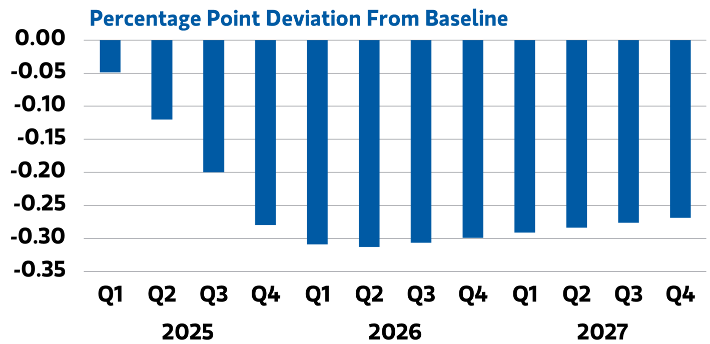
We estimate that immigration will slow to about 1 million this year and 500,000 next year from 2.7 million last year. Unauthorized immigration drives the slowdown, to some 285,000 this year from about 1.5 million in 2024. We assume deportations of those already in the US reach 500,000, while CBP One and CHNV paroles go to zero.

POPULATION GROWTH. If our immigration estimates are correct, the result is 0.4% US population growth in 2025 after 0.9% in 2024. This slowdown is similar to what we assumed in our outlook last November: 0.5% in 2025 after 1.2% in 2024. The difference reflects a sharper slowdown in both the second half of 2024 and in 2025, with the new White House's policies having cut off methods of immigration. This would likely deliver a sharp slowdown in the growth of the labor force. Last year's 210,000 breakeven pace for payrolls would fall to 125,000 in 2025 and 110,000 in 2026.

With some understanding of how immigration flows have evolved—and are likely to—we now turn our attention to the effects of restrictive immigration policies on macroeconomic performance. Reducing immigration has demand-side effects as a result of fewer consuming households, and supply-side effects via lower labor supply. Immigration flows have a strong and direct link to the economic cycle and underlying trend since population is a direct input of gross domestic output.

BELOW BASELINE. Our model finds that a 1-million-person adverse shock to immigration causes real GDP to be about 0.3 percentage points below that in the baseline without restrictive immigration policies (see chart). The peak effect is five and six quarters after the imposition of restrictive policies. By spreading the 1 million decline in the population over four quarters, as opposed to frontloading the entire decline in the first quarter, the effects on real activity are delayed. This is not surprising since the primary driver of the fall in real output versus the baseline comes through private consumption, which is in response to less overall employment. If we frontload the decline in immigration, the effect on GDP will also be brought forward. The same would be true if we extended restricted immigration policies into 2026: Peak cumulative effects would be delayed.

Our Model Projects a Lower GDP Path in the Event of a 1-Million-Person Decline in Immigration Flows



Note: The level of real GDP in the alternative scenario with 1 million less population growth in 2025 versus the baseline without immigration restrictions. Percentage point deviation.
Source: Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of March 28, 2025

We estimate the shock to immigration lowers the level of employment by a little over 300,000 after four quarters and 500,000 after eight quarters. The peak decline in unemployment of about 425,000 is reached after only four quarters, while unemployment is down only 150,000 after eight quarters. There is some recovery in real activity in the outer quarters of our simulation since we assume slower immigration growth rates for one year.

DIRECT AND INDIRECT EFFECTS. These results are a combination of direct and indirect effects. Every prime-working-age man and woman withdrawn from the population affects the size of the labor force (employed plus unemployed) based on respective participation rates—89% for men and 78% for women, as of 2024's fourth quarter—and employment ratios. In addition, changes in real activity produce second-round effects. The fall in employment and, in turn, labor market income relative to the baseline pulls the level of real personal consumption almost 0.4 percentage points lower after four quarters, with more of the decline coming in goods than services.

In contrast to the decline in real activity, we find that restricting immigration by 1 million relative to the baseline pushes the level of nominal GDP higher by 0.2 percentage points. This result is due to a falling unemployment rate that pushes real wage growth higher and also, in turn, the GDP deflator, a measure of inflation. Our simulation shows that the four-quarter change in the GDP deflator rises by 0.5 percentage points after four quarters.

MONETARY POLICY. Federal Reserve Chair Powell recently described the central bank's policy stance as "clearly … restrictive" and "in a good place" to respond to an uncertain outlook. But he also indicated a bias toward easing—a willingness to look through tariff-related inflation and to ease policy if necessary to support activity. We agree this is the right idea but think it will be hard to execute, particularly for a fed that is data dependent. If the unemployment rate drifts lower, along with firming inflation, interest rates are likely to remain higher. We still expect cuts to be back-loaded.

In conclusion, we apply the results of our simulation to a range of immigration assumptions, including our formal outlook for the US economy in 2025 and 2026. These include our baseline assumption that immigration slows to 1 million this year and 500,000 next year, a "benign" scenario and an "adverse" scenario:

- The benign immigration scenario, which assumes the effects of a "hard border" are partially offset by policies that encourage greater formal immigration, leaves net immigration at 1.5 million per year. It reduces the level of real GDP in both the fourth quarter of 2025 and fourth quarter of 2026 by about 0.3 percentage points. This scenario assumes immigration falls back toward more normal levels.
- The Morgan Stanley & Co. baseline outlook, which assumes net immigration flows of about 1 million in 2025 and 500,000 in 2026, implies restrictive immigration reduces real GDP by 0.4 percentage points in the fourth quarter of 2025 and fourth quarter of 2026. We assume the administration restricts immigration flows below long-run averages.
- The adverse scenario, which assumes immigration slows to 500,000 in 2025 and -250,000 in 2026, produces the sharpest decline in the level of real GDP, of about 0.6 percentage points this year and one percentage point next year. This scenario assumes a hard border plus above-normal rates of deportation.

In each of the three immigration assumptions, the level of real GDP this year and next is lower than would be the case if immigration policies were left unchanged. In our view, this is not a surprising result given the historically outsized immigration flows observed between 2022 and 2024. Even returning immigration back to its longer-run average would entail some modest slowing in real economic activity. More stringent policies would reduce growth even further. ■

This article was excerpted from the Feb. 20 Morgan Stanley & Co. report, "Immigration and the Macroeconomy." For a copy of the full report, please contact your Financial Advisor.

US EQUITIES

US Reshoring and Humanoids

Christopher Snyder, CFA, Equity Analyst, Morgan Stanley & Co. LLC

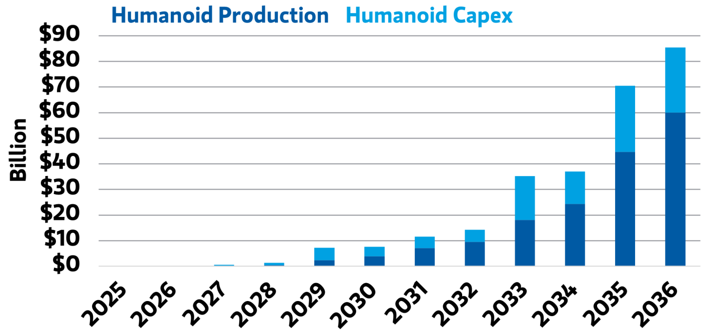
Following two decades of underinvestment and stagnation, we believe the US is in the very early innings of reindustrialization—a multidecade opportunity that we estimate at more than $10 trillion. At its core, we see a structural tailwind in which the latest generative artificial intelligence (GenAI) advancement lowers the cost curve while also fueling the next round of global protectionism. As such, we see no greater catalyst for US reindustrialization than a credible pathway to bringing humanoid robots to market. Ultimately, we believe this will allow the industrial economy to return to growth following 25 years of stagnation in the wake of China joining the World Trade Organization (WTO).

We view reshoring—the transfer of operations that were moved overseas back to the home country—as a clear and significant positive for US industrial equities, raising base market growth for the group while driving a more durable earnings and cash flow stream. At a high level, the reshoring process is simply shifting activity and spending into the region where US industrial companies operate with the best market share and premium margins. Geographic mix challenges have served as a two-percentage-point headwind to multi-industry organic growth during the past 20 years, and as this headwind abates, US industrials are positioned to increase revenues and profits at an accelerated rate relative to history.

CHASING CHEAP LABOR. Over the past 45 years, manufacturing capex dollars have chased low-cost labor—a motivation that has made it difficult for the US to compete against countries with low-cost production. Now, structural technology diffusion is taking hold at an accelerated rate, and companies are focused on building resiliency following a period of unprecedented disruption. Thus, we believe that capital and proximity to end-user will increasingly dictate the regional allocation of capex—parameters in regard to which the US has no equal. The US touches 55% of global investment (25% inward, 30% outward), tops among any nation.

In our analysis, the adoption of humanoid robots would dramatically lower the cost curve of US manufacturers, a structural advantage versus nations with low-cost production. Our research suggests an approximate 85% total cost savings versus a US human worker, and we estimate that 20% humanoid penetration in manufacturing would allow the US to produce at cost parity with China. What's more, between production and capital spending, we see humanoids growing into roughly an $80 billion US market over the next decade (see chart). That's enough to add about 50 basis points of annual growth to the industrial economy.

Given Production and Capex, We See the Humanoid Market Surpassing $80 Billion by 2036



Source: Morgan Stanley & Co. Research, Morgan Stanley Wealth Management Global Investment Office as of March 21, 2025

HIGHER SHARE TARGET. A more competitive cost profile for US manufacturing expands the total addressable market for US reshoring. The $10 trillion opportunity we described in our October 2024 report called for a return to a 20% share of global manufacturing by 2050 versus 16% today and 25% when China joined the WTO in 2000.

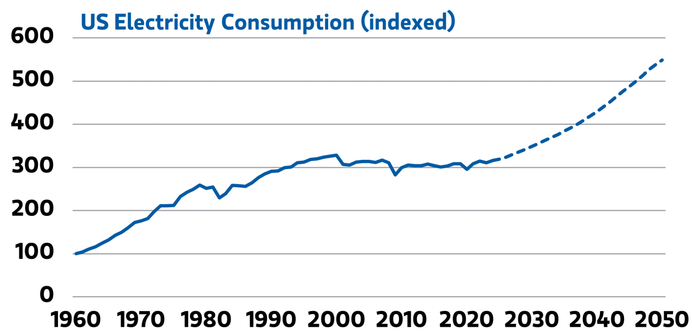
In a more bullish humanoid-adoption scenario, our assumed 20%-share target could prove conservative—note that the US accounts for 24% of global GDP and 30% of global goods consumption.

With all the attention focused on AI and the increased power that will be needed for data centers, it's still only about 4% of US electricity demand. We do not think enough attention is being paid to the manufacturing economy, which accounts for more than a quarter of domestic electricity consumption. US manufacturing electricity consumption declined over the past 25 years as outsourcing took hold and domestic production stagnated.

MORE POWER CONSUMPTION. We believe this is beginning to change. US manufacturing capacity is realizing material year-over-year growth for the first time in more than a decade. This will facilitate higher production rates and, in turn, electricity consumption, as the new facilities begin operations.

Our math suggests US reshoring can add about 200 basis points of incremental growth to US manufacturing production over the next two decades, with humanoid adoption contributing an additional 30 basis points per year. This would result in 2% annual growth of US electricity demand from 2025 to 2050, reversing a quarter century of decline (see chart).

We See a Return to Electricity Consumption Growth on Higher Industrial Production and Powering Humanoids



Source: Morgan Stanley & Co. Research, US Census Bureau, Morgan Stanley Wealth Management Global Investment Office as of March 21, 2025

As humanoid robot penetration takes hold, we see power as a critical bottleneck. Here is where the US holds a competitive advantage, too. The US is the world's largest producer of natural gas, with roughly a 25% global share—60% larger than that of Russia, which is the second-largest producer. The abundant supply of natural gas generally helps keep domestic prices low, leading to lower electricity costs. To this point, US electricity prices are 25% below the European Union median. The US also has a cost advantage versus Asia, with the region paying about $14 per million BTUs to import natural gas from the US, roughly three times the US domestic gas price. ■

This article was excerpted from the Feb. 20 Morgan Stanley & Co. Research report, "US Reshoring on Humanoids." For a copy of the full report, please contact your Financial Advisor.

Q&A

The Present and Future of Retail

Consumer health is at the epicenter of market debate, as confidence readings have declined in the wake of tariff announcements and softer labor market data. For a real-time read on what's signal and what's just noise, we checked in with an expert in the retail industry. To get a sense of the economic outlook, changing retail landscape and innovation around how consumers shop, Morgan Stanley Wealth Management investment strategist Kevin Demers sat down with Morgan Stanley & Co. research analyst Simeon Gutman, who has been covering a variety of retail industries for over 20 years. The following is an edited version of their March 20 conversation.

Kevin Demers (KD): The outlook for consumers has become one of the central debates in the market. We've seen deteriorating consumer confidence surveys. Do you think this will negatively impact the economy?

Simeon Gutman (SG): There is no question that there's been a slowing trend to start 2025. However, when we look at the facts, the ability for consumers to spend hasn't changed materially when you consider employment data, wage growth or savings rates. The change has been more about their willingness to spend and the categories in which they want to spend.

Some of this is due to stubborn services inflation—in areas like travel, health care and insurance—that is putting pressure on consumer wallets. But this year you are seeing other factors at play, including severe weather, a new presidential administration and some giveback after a strong holiday spending season. It feels like there was a pullback and a hit to sentiment, but importantly, sentiment is a "willingness" issue, not an "ability" issue. What this means for consumer spending is that the trend is generally stable, especially in nondurable categories; however, there is more worrying and strain, especially in the lower-income cohort.

KD: Regarding the composition of spending, there has been a large post-pandemic bifurcation between the low-income and high-income consumer. How is that developing this year?

SG: This is a really interesting point at a critical moment. Unequivocally, lower-income consumers are having a tougher time. Mathematically, that customer cohort typically saves less—so there's less cushion and less flexibility when prices go up.

What we haven't seen yet is the high-income consumer overreact to this. The high-income consumer typically reacts to the wealth effect, which is impacted by the stock market. You could get there, but there is a lag, and so far we haven't seen the high-income consumer's spending slow. You can see this in some of the durable categories—like furniture—that have looked somewhat stable.

If you take the anecdotes from some of the biggest companies that we follow, including some of the biggest broadline retailers, you're hearing about higher-income-consumer health and trading down into other formats. But overall it's still this higher-income cohort that's offsetting a little bit of weaker spend from a lower-income consumer. I think the high-income consumer is mostly hanging in.

KD: One part of the economy that remains depressed from an activity standpoint is housing, where new home building and existing home sales are below post-pandemic peaks. How do you see the housing market trending through 2025?

SG: The outlook for housing is somewhat reassuring, but not necessarily confidence inspiring. As analysts, we get excited when industries are bottoming because that means it really can't get any worse. And with that mindset, we've been waiting for housing to turn for almost a year. If it can't get any worse, it can only get better.

We follow the home improvement retailers very closely and are seeing the beginning of an improvement in demand. This is not a green shoot; this is the end of the COVID normalization. The overconsumption phase ended, and now that people are living in their homes, things are breaking. These are high-priced depreciable assets that need maintenance and repair. The maintenance and repair elements are just kicking in, so we have the ingredients to rebuild. The question is, what's the slope of the recovery?

KD: Shifting to retail, the big are getting bigger and taking increasing market share. What does this mean for the future of the industry?

SG: This market-share shift is the biggest micro theme impacting the retail landscape. Think about the confluence of platforms across every industry, not just retail. The retail versions of platforms have manifested themselves with Walmart, Costco and Amazon. These platforms have effectively been garnering almost $0.50 of every new dollar that's spent in the US—daily, monthly, quarterly, annually. It's massive.

And while we see ebbs and flows in this data, what we're finding is that despite these companies' expanding sales bases, they're accumulating share at a faster rate. They're defying what you and I would have called the law of large numbers.

Take a step back and ask, "Why is this happening?" It's very intuitive: Platforms that invest in technology and supply chain create mechanisms to grow faster. If you're the lowest-cost buyer of a good, if you're the lowest-cost seller and if you can get it to me at the lowest price—that's where the share will accumulate.

It's almost impossible to say what will stop this consolidation effect, because once you've created these megaplatforms, as long as they're generating cash flow and reinvesting into themselves, the benefits of technology and supply chain should continue to grow. Their advantages should widen, and unless they do something irresponsible, they probably won't lose that advantage. Other than a new technology coming out that could replace them, which we cannot predict, it's difficult to see how these companies lose share given the supply chain, technology and capital moats they have built.

KD: Related to disruptive technology, how are retailers leveraging generative artificial intelligence (GenAI), and where do you see it going over the next few years?

SG: The initial application of GenAI has been in process-oriented activities, meaning companies need to get a certain task done, like cataloging a certain product category on the web.

Think about staging an e-commerce business in general: You have to list products, show price points, describe what the product is made of, specify the time it will take to get a product to a customer. Imagine being able to tell the computer to do it. That's an example of one of the back-end processes that we've heard.

Now, they're getting into search optimization, and eventually the agentic part of it: suggesting products and solutions to help direct the consumer along the search-and-purchase journey. If a company is using AI to understand product adjacencies—meaning when the customer buys one product, other customers buy related products—then AI can provide targeted search-and-purchase suggestions.

We've had this back-end benefit from AI in which processes and labor hours have been saved, and now it's moving into improving the customer experience and creating conversion for the benefit of both the customer and the retailer.

The question is, how will companies prioritize its best uses? It seems like it has so much potential, but there could be a lot of rabbit holes that companies go down. Some companies will handle this better than others.

KD: How does this accelerate the shift into adjacent markets?

SG: Advertising is a good example. For retailers, you have to think about what their platforms encapsulate. If you think about a physical retail experience at a store, how could AI make your store experience better?

Let's say you're in the sporting goods business and a customer comes in to get fitted for a baseball glove or a golf club. There probably are AI solutions—studying the motion of professional athletes, for instance—that can measure more precisely. There could be other applications in beauty and optical. There could be other store-level applications that AI can use, taking whatever experience existed in that segment or that store before, and then taking it to the next level.

KD: We can't get through a conversation on retail without talking about tariffs. What are you hearing from companies about how they're planning to mitigate the effects?

SG: Looking back to the tariffs in 2018, they weren't large enough in magnitude to be problematic for the consumer or the retailer. Using that as a framework, about half of the cost of those tariffs was absorbed by the supplier and the remaining 50% was shared by the consumer and retailer. We're now in a situation where the proposed tariffs are so great that there's going to be a lot more absorption by retailers, and higher prices for the consumer.

Tariff mitigation, in the purest sense, is geographic diversification. And this process started as the 2018 tariffs were enacted. We're talking exposure to China being cut by 50% almost unilaterally across every retailer we cover. There are a few exceptions, like some toys and electronics, but many companies—especially in furniture, furnishings and flooring—are cutting exposure significantly and fast.

At the end of the day, you can raise prices or absorb it. If you take the guidance of a lot of the companies we follow, there's a lot of absorption this year and there's a lot of uncertainty. For the most part, I think you'll see higher prices for consumers; you're also going to see retailers take hits to their margin and try to find other ways they can lower costs to offset them.

KD: What retail markets are you excited about over the next three to five years?

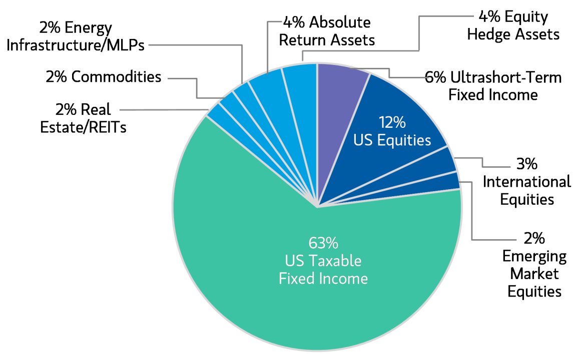
SG: The three sectors with the most tailwinds are sporting goods, pets and beauty. Sporting goods is benefiting from interest in leisure athletics; it is a habit-forming category that fits with the health and wellness themes we are seeing globally. There is strong secular demand, and people want to devote more money there. Pre-COVID, pets was one of the fastest-growing categories, growing at 6% to 7% a year. While there was a major pickup in pet adoption during the pandemic and a retracement afterward, it's now back to that normal cadence. So that's a structural tailwind. Beauty, which has always been a great category, is going through a little bit of a slowdown. But consumer focus toward beauty products—in both the prestige and mass markets—is going to be long-lasting.

Two honorable mentions I would add are home improvement and auto parts. Home improvement is the gift that keeps on giving: We have a growing installed-housing base that's aging, that's getting pricier and that people have to fix and maintain. And despite an electric vehicle threat, we think there's enough volume for the auto parts distributors and retailers to do well for multiple years. ■

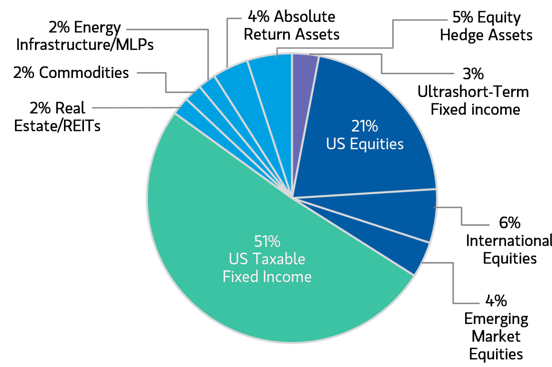
Global Investment Committee Tactical Asset Allocation

The Global Investment Committee provides guidance on asset allocation decisions through its various allocation models. The five models below include allocations to traditional assets, real assets and hedged strategies. They are based on an increasing scale of risk (expected volatility) and expected return.

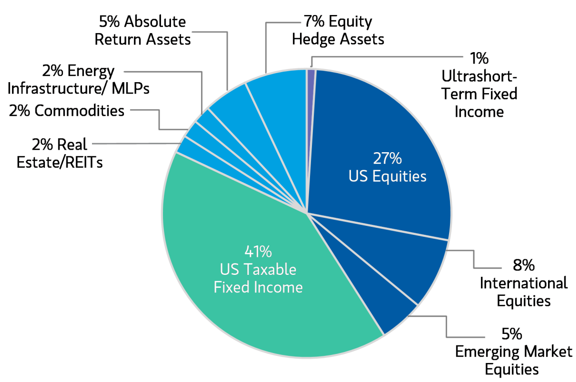
Wealth Conservation



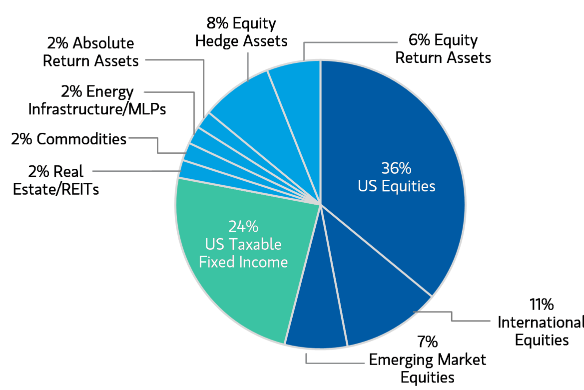
Income



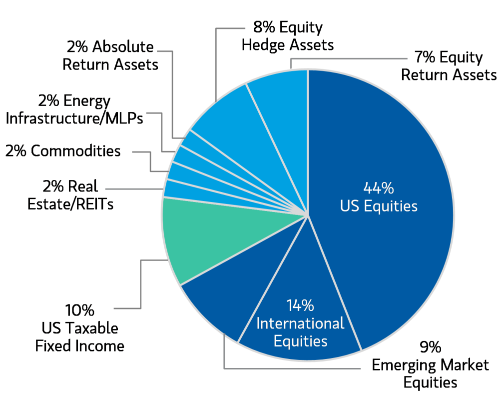
Balanced Growth



Market Growth



Opportunistic Growth



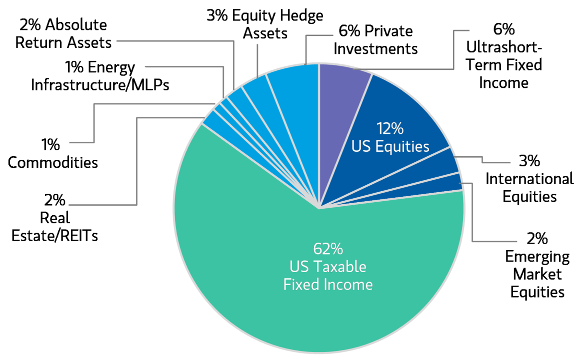
Key

- Ultrashort-Term Fixed Income
- Fixed Income & Preferreds
- Equities
- Alternatives

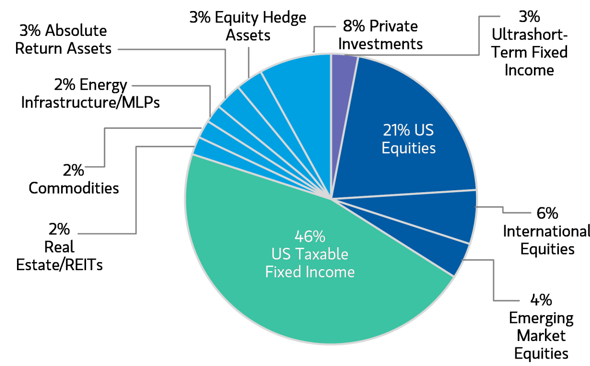
Source: Morgan Stanley Wealth Management GIC as of April 1, 2025

The Global Investment Committee provides guidance on asset allocation decisions through its various allocation models. The five models below include allocations to traditional assets and alternative investments, including privates, and are recommended for investors with over $10 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

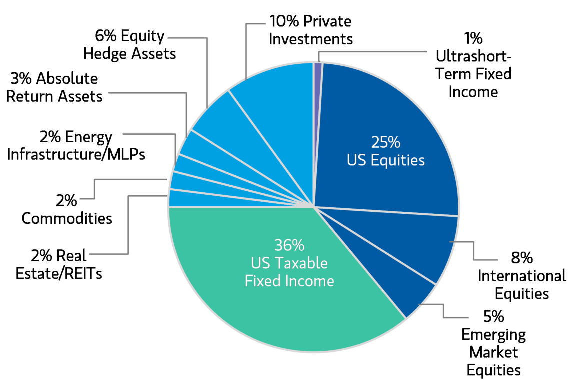
Wealth Conservation



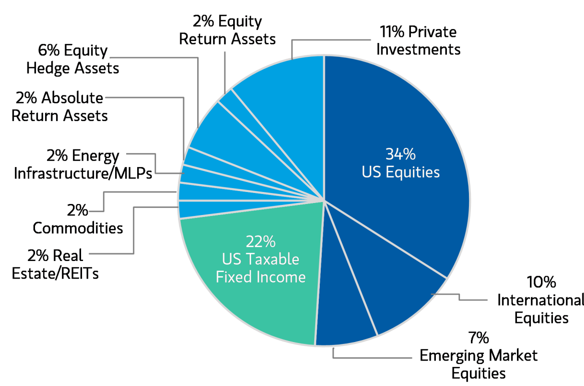
Income



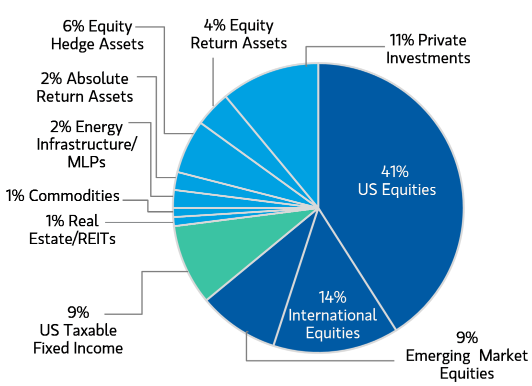
Balanced Growth



Market Growth



Opportunistic Growth



Key

- Ultrashort-Term Fixed Income
- Fixed Income & Preferreds
- Equities
- Alternatives

Source: Morgan Stanley Wealth Management GIC as of April 1, 2025

Tactical Asset Allocation Reasoning

Global Equities	Weight Relative to Model Benchmark	
US	Overweight	The recent correction in both the Nasdaq Composite Index and the S&P 500 Index provides some relief to overstretched valuations, while the Federal Reserve's policy pause and the DeepSeek events have cooled the GenAI fever breaking the bull case. The uncertainty shock to confidence around Trump 2.0's rapid-fire policy agenda is leading to cuts in GDP that should translate through to negative earnings revisions. But a soft landing is still the base case as long as the labor market holds. We are buying equal-weighted indexes, large-cap value and mid-cap growth names.
International Equities (Developed Markets)	Underweight	Recent outperformance has been catalyzed as responses to the "America First" agenda have driven fiscal stimulus and worries about the impact of tariffs is cooling rest-of-world inflation. We view weak currencies as a potential positive for US dollar investors and are likely to upgrade once tariff policy is solidified in Q2.
Emerging Markets	Overweight	China stimulus, while potentially insufficient to address the challenges of the country's secular bear market, is likely enough to help stabilize the downturn in the short term. The US-China trade conflict under President Trump remains a wildcard, and we expect the "bazooka" of China stimulus is being kept waiting in order to see the US' first move on tariffs. Given that valuations in the region are already nondemanding, we are inclined to be patient and wait for recovery.
Global Fixed Income	**Weight Relative to Model Benchmark**	
US Investment Grade	Overweight	Stronger-than-anticipated economic growth is preserving the strength of corporate cash flows. While interest rates have backed up to reflect "higher-for-longer" expectations, yield spreads have remained well behaved. With geopolitical uncertainty high and equity valuations broadly rich, we like coupons of bonds with index-matching durations.
International Investment Grade	Market-Weight*	Yields are decent, central banks have begun to cut rates and there is room for spread tightening as economic growth improves.
Inflation-Protection Securities	Market-Weight*	Real yields have sold off and are now bordering on cheap relative to the past two years. The securities could be a potential buy in a stagflationary environment.
High Yield	Market-Weight*	We have eliminated our exposure to the equity-like asset class to reduce equity beta of portfolios. High yield bonds rallied aggressively after the unprecedented provision of liquidity from the Fed and fiscal stimulus from Washington. However, we believe there is currently limited upside. Ultra-tight spreads may be the result of increasing competition for capital with private credit financial sponsors and general partners and may not fully reflect adequate compensation for default risk.
Alternative Investments	**Weight Relative to Model Benchmark**	
REITs	Market-Weight	We expect higher stock-bond correlations, which places a premium on the diversification benefits of investing in real assets. Nevertheless, with real interest rates positive and services inflation remaining quite sticky, we would need to be selective in adding to this asset class broadly. We are focused on interesting opportunities aimed at solving the residential housing shortage.
Commodities	Market-Weight	Global reflation, tense geopolitics, especially in the Middle East, and ongoing fiscal spending suggest decent upside potential for precious metals and industrial commodities, including energy-related.
MLP/Energy Infrastructure	Overweight	We previously increased exposure to real assets, with a preference for energy infrastructure and MLPs. Competitive yields and expectations for continued capital discipline amid stable oil and gas prices underpin our decision, as does hedging against geopolitical risks.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	We recently added to equity hedged positions noting the pickup in idiosyncratic risk, falling borrowing costs and rising volatility. The current environment appears constructive for hedge fund managers, who are frequently good stock pickers and can use leverage and risk management to potentially amplify returns. We prefer very active and fundamental strategies, especially high quality, low beta, low volatility and absolute return hedge funds

*The GIC asset allocation models' benchmarks do not include any exposure to this asset class.
Source: Morgan Stanley Wealth Management GIC as of April 1, 2025

Disclosure Section

Important Information

The **Global Investment Committee (GIC)** is a group of seasoned investment professionals from Morgan Stanley & Co. and Morgan Stanley Wealth Management who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend asset allocation model weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

This material is primarily authored by, and reflects the opinions of, Morgan Stanley Smith Barney LLC (Member SIPC), as well as identified guest authors. Articles contributed by employees of Morgan Stanley & Co. LLC (Member SIPC) or one of its affiliates are used under license from Morgan Stanley.

Kevin Demers, James Ferraioli, Michael T. Gapen, Simeon Gutman, Joe Logan, Sonny Mendez, Vishwas Patkar, Alfredo Pinel, Ariana Salvatore, Christopher Snyder, and Jane Yu Sullivan are not members of the Global Investment Committee and any implementation strategies suggested have not been reviewed or approved by the Global Investment Committee.

For index, indicator and survey definitions referenced in this report please visit the following: https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions

Important note regarding economic sanctions. *This report may involve the discussion of country/ies which are generally the subject of selective sanctions programs administered or enforced by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the European Union and/or by other countries or multi-national bodies. The content of this presentation is for informational purposes and does not represent Morgan Stanley's view as to whether or not any of the Persons, instruments or investments discussed are or may become subject to sanctions.* ***Any references in this report to entities or instruments that may be covered by such sanctions should not be read as recommending or advising on any investment activities involving such entities or instruments.*** *Users of this report are solely responsible for ensuring that your investment activities in relation to any sanctioned country/ies are carried out in compliance with applicable sanctions.*

Glossary

Alpha is the excess return of an investment relative to the return of a benchmark index.

Earnings revision breadth is defined as the number of positive analyst revisions minus the number of negative analyst revisions divided by the total number of revisions.

Hedged Strategy Definitions

Absolute return: This type of investing describes a category of investment strategies and mutual funds that seek to earn a positive return over time—regardless of whether markets are going up, down, or sideways—and to do so with less volatility than stocks.

Equity Hedge is a hedge fund investment strategy with a typical goal of providing equity-like returns while limiting the impact of downside market movements and volatility on an investor's portfolio. Managers utilize long and short positions, primarily in equity and equity-related instruments, to achieve this goal.

Risk Considerations

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

Alternative Investments

Alternative investments may be either traditional alternative investment vehicles, such as hedge funds, fund of hedge funds, private equity, private real estate and managed futures or, non-traditional products such as mutual funds and exchange-traded funds that also seek alternative-like exposure but have significant differences from traditional alternative investments. Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank.

It is important to note that only eligible investors can invest in alternative investment funds and that in order for an FA/PWA to engage a prospective investor in general discussions about Alternative Investments and specifically with regards to Private Funds, the prospective investor will need to be pre-qualified through the Reg D system.

Managed futures investments are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually appropriate only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Hedge funds may involve a high degree of risk, often engage in leveraging and other speculative investment practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds, often charge high fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager.

Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and delays in distributing important tax information. Categorically, hedge funds and funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns.

Private Real Estate: Risks of private real estate include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage.

An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. Investing in an international ETF also involves certain risks and considerations not typically associated with investing in an ETF that invests in the securities of U.S. issues, such as political, currency, economic and market risks. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics. ETFs investing in physical commodities and commodity or currency futures have special tax considerations. Physical commodities may be treated as collectibles subject to a maximum 28% long-term capital gains rates, while futures are marked-to-market and may be subject to a blended 60% long- and 40% short-term capital gains tax rate. Rolling futures positions may create taxable events. For specifics and a greater explanation of possible risks with ETFs¸ along with the ETF's investment objectives, charges and expenses, please consult a copy of the ETF's prospectus. Investing in sectors may be more volatile than diversifying across many industries. The investment return and principal value of ETF investments will fluctuate, so an investor's ETF shares (Creation Units), if or when sold, may be worth more or less than the original cost. ETFs are redeemable only in Creation Unit size through an Authorized Participant and are not individually redeemable from an ETF.

Investors should carefully consider the investment objectives and risks as well as charges and expenses of an exchange-traded fund or mutual fund before investing. The prospectus contains this and other important information about the mutual fund. To obtain a prospectus, contact your Financial Advisor or visit the mutual fund company's website. Please read the prospectus carefully before investing.

An investment in **a money market fund (MMF)** is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at $1.00 per share, it is possible to lose money by investing in the fund. The price of other MMFs will fluctuate and when you sell shares they may be worth more or less than originally paid. MMFs may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits.

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. MLPs carry interest rate risk and may underperform in a rising interest rate environment.

International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with **emerging**

markets and **frontier markets**, since these countries may have relatively unstable governments and less established markets and economies.

Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Although they are backed by the full faith and credit of the U.S. Government as to timely payment of principal and interest, **Treasury Bills** are subject to interest rate and inflation risk, as well as the opportunity risk of other more potentially lucrative investment opportunities.

Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

The majority of $25 and $1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per $25 or $1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price.

Some $25 or $1000 par **preferred securities** are **QDI (Qualified Dividend Income)** eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long-term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be appropriate for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Principal is returned on a monthly basis over the life of a **mortgage-backed security.** Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

CDs are insured by the FDIC, an independent agency of the U.S. Government, up to a maximum of $250,000 (including principal and accrued interest) for all deposits held in the same insurable capacity (e.g. individual account, joint account, IRA etc.) per CD depository. Investors are responsible for monitoring the total amount held with each CD depository. All deposits at a single depository held in the same insurable capacity will be aggregated for the purposes of the applicable FDIC insurance limit, including deposits (such as bank accounts) maintained directly with the depository and CDs of the depository. For more information visit the FDIC website at www.fdic.gov.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Stocks of medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more-established companies.

Companies paying **dividends** can reduce or cut payouts at any time.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk. **Health care sector stocks** are subject to government regulation, as well as government approval of products and services, which can significantly impact price and availability, and which can also be significantly affected by rapid obsolescence and patent expirations.

Artificial intelligence (AI) is subject to limitations, and you should be aware that any output from an IA-supported tool or service made available by the Firm for your use is subject to such limitations, including but not limited to inaccuracy, incompleteness, or embedded bias. You should always verify the results of any AI-generated output.

Environmental, Social and Governance ("ESG") investments in a portfolio may experience performance that is lower or higher than a portfolio not employing such practices. Portfolios with ESG restrictions and strategies as well as ESG investments may not be able to take advantage of the same opportunities or market trends as portfolios where ESG criteria is not applied. There are inconsistent ESG definitions and criteria within the industry, as well as multiple ESG ratings providers that provide ESG ratings of the same subject companies and/or securities that vary among the providers. Certain issuers of investments may have differing and inconsistent views concerning ESG criteria where the ESG claims made in offering documents or other literature may overstate ESG impact. ESG designations are as of the date of this material, and no assurance is provided that the underlying assets have maintained or will maintain and such designation or any stated ESG compliance. As a result, it is difficult to compare ESG investment products or to evaluate an ESG investment product in comparison to one that does not focus on ESG. Investors should also independently consider whether the ESG investment product meets their own ESG objectives or criteria. There is no assurance that an ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or a dependable measure of future results.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. The indices are not subject to expenses or fees and are often comprised of securities and other investment instruments the liquidity of which is not restricted. A particular investment product may consist of securities significantly different than those in any index referred to herein. Comparing an investment to a particular index may be of limited use.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

Hyperlinks

This material may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the material refers to website material of Morgan Stanley Wealth Management, the firm has not reviewed the linked site. Equally, except to the extent to which the material refers to website material of Morgan Stanley Wealth Management, the firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of Morgan Stanley Wealth Management) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this document. Accessing such website or following such link through the material or the website of the firm shall be at your own risk and we shall have no liability arising out of, or in connection with, any such referenced website.

By providing links to third-party websites or online publication(s) or article(s), Morgan Stanley Smith Barney LLC ("Morgan Stanley") is not implying an affiliation, sponsorship, endorsement, approval, investigation, verification with the third parties or that any monitoring is being done by Morgan Stanley of any information contained within the articles or websites. Morgan Stanley is not responsible for the information contained on the third-party websites or your use of or inability to use such site. Nor do we guarantee their accuracy and completeness. The terms, conditions, and privacy policy of any third-party website may be different from those applicable to your use of any Morgan Stanley website. The information and data provided by the third-party websites or publications are as of the date when they were written and subject to change without notice

Disclosures

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States. This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Past performance is not necessarily a guide to future performance. The author(s) (if any authors are noted) principally responsible for the preparation of this material receive compensation based upon various factors, including quality and accuracy of their work, firm revenues (including trading and capital markets revenues), client feedback and competitive factors. Morgan Stanley Wealth Management is involved in many businesses that may relate to companies, securities or instruments mentioned in this material.

This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security/instrument, or to participate in any trading strategy. Any such offer would be made only after a prospective investor had completed its own independent investigation of the securities, instruments or transactions, and received all information it required to make its own investment decision, including, where applicable, a review of any offering circular or memorandum describing such security or instrument. That information would contain material information not contained herein and to which prospective participants are referred. This material is based on public information as of the specified date, and may be stale thereafter. We have no obligation to tell you when information herein may change. We make no representation or warranty with respect to the accuracy or completeness of this material. Morgan Stanley Wealth Management has no obligation to provide updated information on the securities/instruments mentioned herein.

The summary at the beginning of the report may have been generated with the assistance of artificial intelligence (AI).

The securities/instruments discussed in this material may not be appropriate for all investors. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. Morgan Stanley Wealth Management recommends that investors independently evaluate specific investments and strategies, and encourages investors to seek the advice of a financial advisor. The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies and other issuers or other factors. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley Wealth Management does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein. This material should not be viewed as advice or recommendations with respect to asset allocation or any particular investment. This information is not intended to, and should not, form a primary basis for any investment decisions that you may make. Morgan Stanley Wealth Management is not acting as a fiduciary under either the Employee Retirement Income Security Act of 1974, as amended or under section 4975 of the Internal Revenue Code of 1986 as amended in providing this material except as otherwise provided in writing by Morgan Stanley and/or as described at www.morganstanley.com/disclosures/dol.

Morgan Stanley Smith Barney LLC, its affiliates and Morgan Stanley Financial Advisors do not provide legal or tax advice. Each client should always consult his/her personal tax and/or legal advisor for information concerning his/her individual situation and to learn about any potential tax or other implications that may result from acting on a particular recommendation.

This material is primarily authored by, and reflects the opinions of, Morgan Stanley Smith Barney LLC (Member SIPC), as well as identified guest authors. Articles contributed by employees of Morgan Stanley & Co. LLC (Member SIPC) or one of its affiliates are used under license from Morgan Stanley. This material is disseminated in Australia to "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813).

Morgan Stanley Wealth Management is not incorporated under the People's Republic of China ("PRC") law and the material in relation to this report is conducted outside the PRC. This report will be distributed only upon request of a specific recipient. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors must have the relevant qualifications to invest in such securities and must be responsible for obtaining all relevant approvals, licenses, verifications and or registrations from PRC's relevant governmental authorities.

If your financial adviser is based in Australia, Switzerland or the United Kingdom, then please be aware that this report is being distributed by the Morgan Stanley entity where your financial adviser is located, as follows: Australia: Morgan Stanley Wealth Management Australia Pty Ltd (ABN 19 009 145 555, AFSL No. 240813); Switzerland: Morgan Stanley (Switzerland) AG regulated by the Swiss Financial Market Supervisory Authority; or United Kingdom: Morgan Stanley Private Wealth Management Ltd, authorized and regulated by the Financial Conduct Authority, approves for the purposes of section 21 of the Financial Services and Markets Act 2000 this material for distribution in the United Kingdom. Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.

This material is disseminated in the United States of America by Morgan Stanley Wealth Management. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

RSI1743538669906 04/2025