

ETF IMPACT REPORT

2025-2026

New Trails, New Horizons,
Fit for the Future



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To the Valued ETF Investor Community



Yie-Hsin Hung

President and CEO
State Street Investment Management

Looking back on 2024, it often felt like flying through a relentless storm with the promise of the sun still shining — periods of turbulence and sudden headwinds, quickly followed by long-awaited breaks in the clouds. Despite the odds, markets kept a record pace en route to new highs. And ETFs were there every step of the way, as flows surged to all-time records — a clear sign of investor confidence.

This year volatility has returned in force, and many are navigating this environment with a sharper eye. Still, ETFs continue to stand out as investors use them to lean in, lean out, hedge, or hold steady. They're turning to ETFs to add resiliency and optionality to their portfolios, preparing for whatever the future may bring.

If adaptability is what's needed now and in the future, ETFs can answer that call.

Since their humble beginnings as a low-cost, passive way to track equity indexes, ETFs have evolved into one of the most versatile tools in modern investing. They offer liquidity, efficiency, and flexibility — helping investors manage portfolios across asset classes, strategies, and market conditions. From active and alternative ETFs to outcome-oriented and multi-asset strategies, the walls of the ETF sandbox continue to expand.

The ETF Impact Report 2025-2026 explores the power of this versatility. Our research highlights the latest adoption trends, key drivers of ETF flows, and how investors are using ETFs to fine-tune exposures, manage risk, and capitalize on opportunities as quickly as they emerge.

Whatever your investment goals, we're here — by your side, in step with markets, and committed to helping you move forward with confidence. Because while uncertainty may be part of the landscape, so too is opportunity. And we believe ETFs are uniquely positioned to help you capture it.

Thanks for reading and for playing such an important role in the ETF story. We're here to help you navigate the road ahead, wherever it may lead.

With warm regards,

Yie-Hsin Hung

A stylized, handwritten signature in black ink, consisting of several loops and a long, sweeping tail that curves upwards and to the right.

The Next ETF Frontier

Pushing the Boundaries of Financial Markets



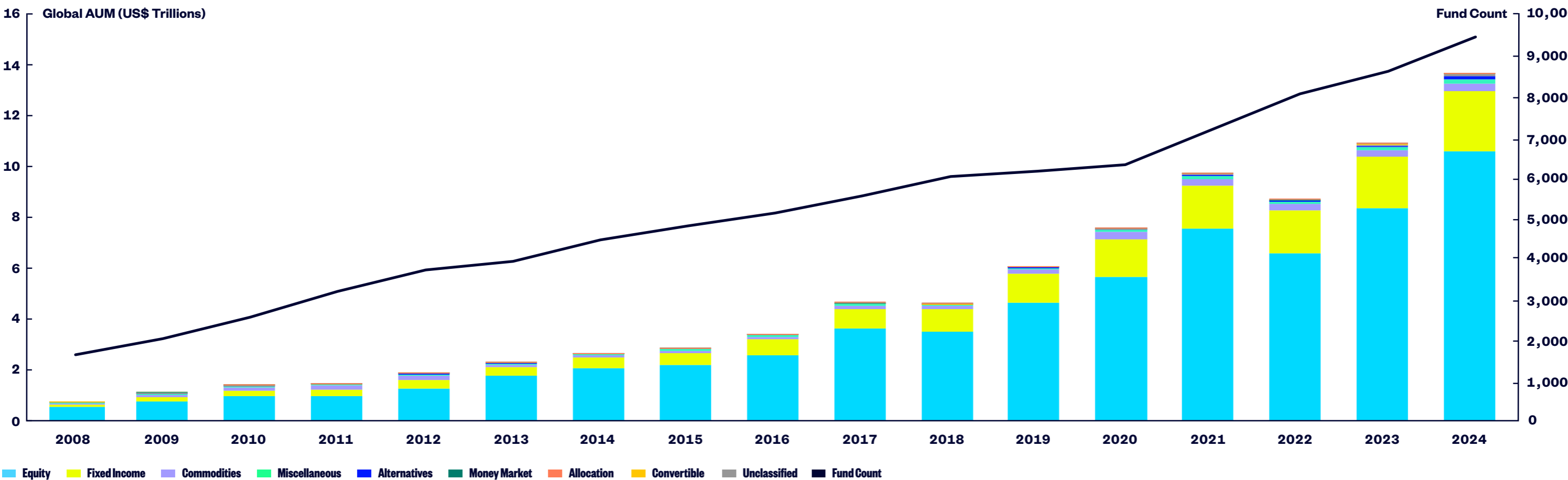
ETFs have come a long way — from simple index trackers to versatile tools for building more flexible, resilient **portfolios**. They’ve earned a place in investors’ toolkits, not just for what they track but for what they make possible. Today those possibilities stretch further than ever.

Resilient, Adaptive, and Still on the Rise

No matter the economic environment, ETFs have consistently showcased their growth and resilience. Since the launch of the SPDR® S&P 500® ETF Trust over 30 years ago¹, the global ETF market has expanded across investor demographics, strategies, and asset classes. Today, ETFs are the backbone of many portfolios.

With a cumulative annualized growth rate (CAGR) of 20.1% since 2008, ETFs reached US\$13.8 trillion assets under management (AUM) at the end of 2024.² And the number of ETFs globally has risen to 9,541 worldwide (Figure 1).³

Figure 1
The Impressive Growth of the ETF, 2008-2024



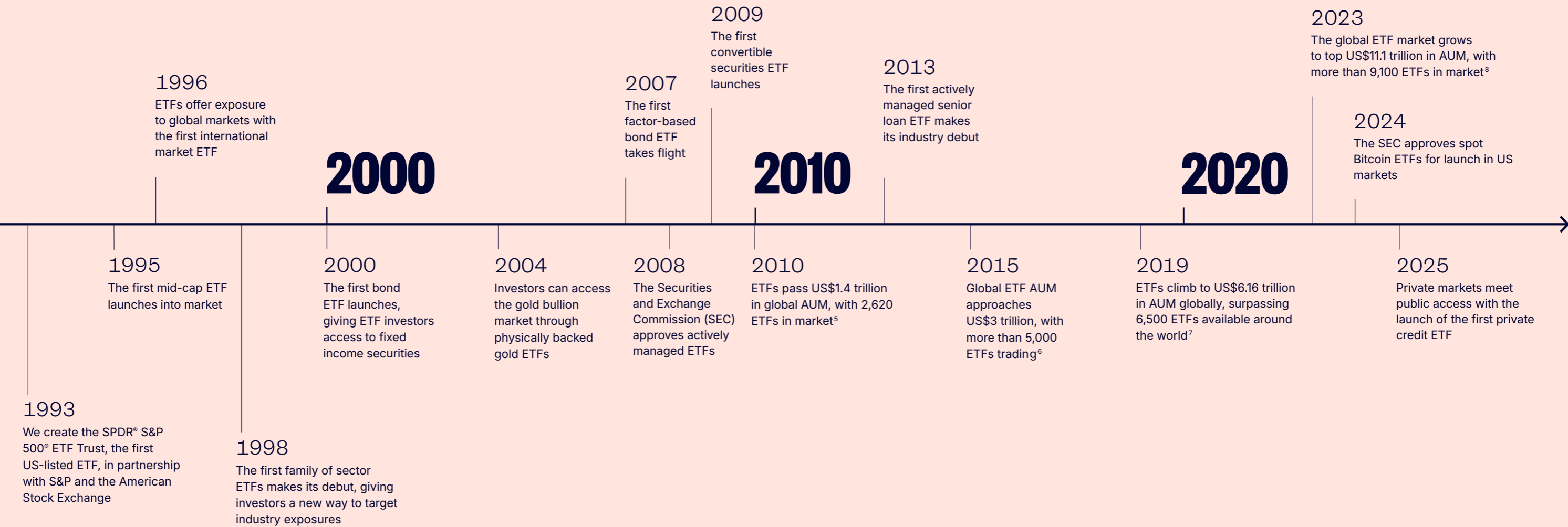
Source: Morningstar Direct, as of December 31, 2024. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. Past performance is not a reliable indicator of future performance.

Innovation Deepens: A Timeline of the ETF's History

The booming US\$13.8 trillion global ETF market has come a long way since the SPDR® S&P 500® ETF Trust was its sole offering, and the path is marked by key industry milestones, revolutionary developments, and inflection points (Figure 2).⁴

Over time, the ways investors use ETFs have evolved significantly. Once synonymous with passive index tracking, ETFs now span equity, fixed income, international, alternatives, and even active strategies — helping investors manage risk and optimize portfolio construction with precision and efficiency.

Figure 2
Key Events in the ETF Industry Boom



Evolution Across the Board: A Snapshot of Today’s ETF Market

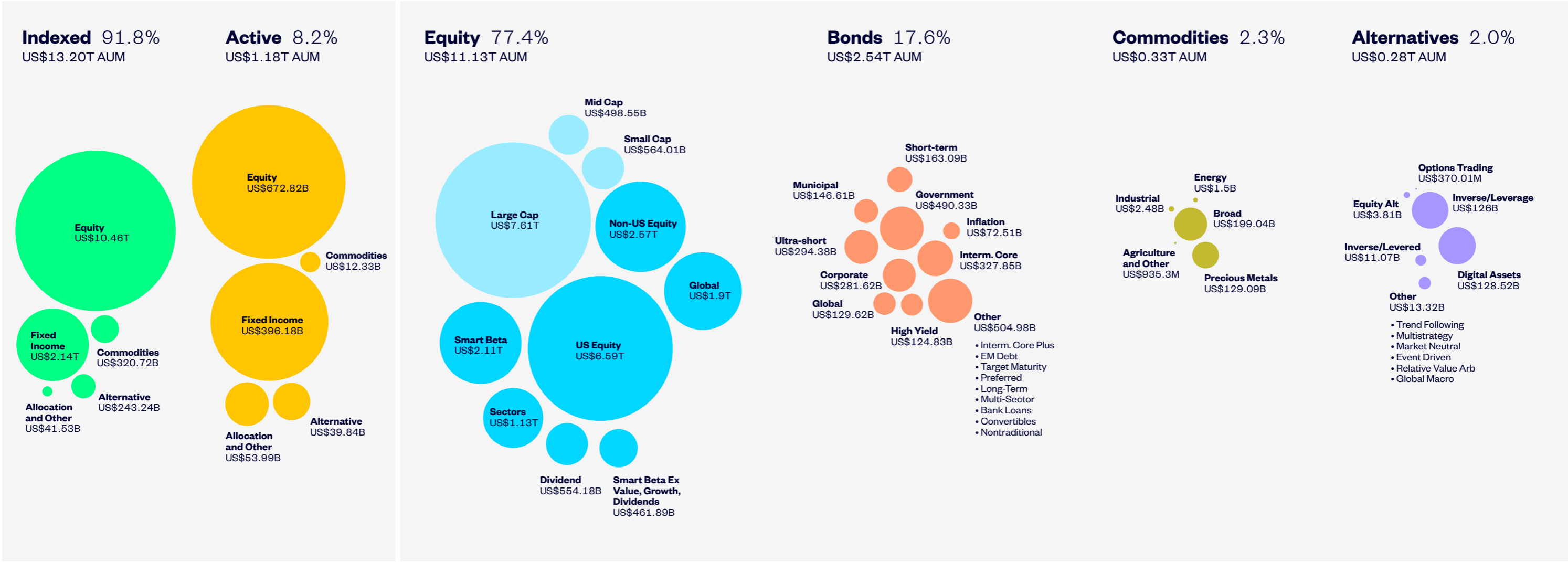
Today, ETFs are reliable portfolio building blocks, adapting to the ever-changing needs of investors across all markets and economic environments.

There's an ETF for just about everything, from traditional asset classes to cutting-edge themes like AI and Future Security.

The catalyst for this innovation and growth? Demand. Investors continue to seek out ETFs for their transparency, liquidity, and efficiency across all traditional market segments. But they're also seeking more specialized solutions that help them achieve specific financial objectives or outcomes.

As a result, ETFs continue to support the democratization of investing, allowing retail and institutional investors alike to pursue return opportunities, enhance diversification, mitigate risks, and fine-tune portfolios with flexibility.

Figure 3
ETFs Have a Wide Investment Reach Globally



Source: Morningstar, as of February 28, 2025, based on SPDR Americas Research calculations. The information contained above is for illustrative purposes only. Percentages may not total 100% due to rounding. **Past performance is not a reliable indicator of future performance.**

Paths to Innovation and Performance: How Investors View ETFs Today

Since 2022, our research has tracked how investors use ETFs to build portfolios, manage risk, and respond to market shifts. This provides a front-row view into evolving behaviors, deepening our understanding of where ETF trends are headed.

Our research uncovers how investors perceive risk and how they’re using ETFs to stay liquid, diversified, and agile in any environment — especially when uncertainty is heightened.

ETFs Continue to Receive Rave Reviews

US Investors see ETFs as essential portfolio building blocks. And that sentiment is strongest among US individual investors with US\$250k+ in investable assets.

This rising confidence (Figure 4) underscores why ETFs are the on-ramp to what’s next — offering adaptability, access, and a fast track to the asset classes, themes, and strategies investors care about most.

Where demand goes, innovation follows. Nowhere is this more evident than in the rise of alternatives.

Figure 4
ETFs Get High Marks From US Individual Investors With US\$250k+ in Investable Assets

“ETFs have improved the overall performance of my portfolio.”

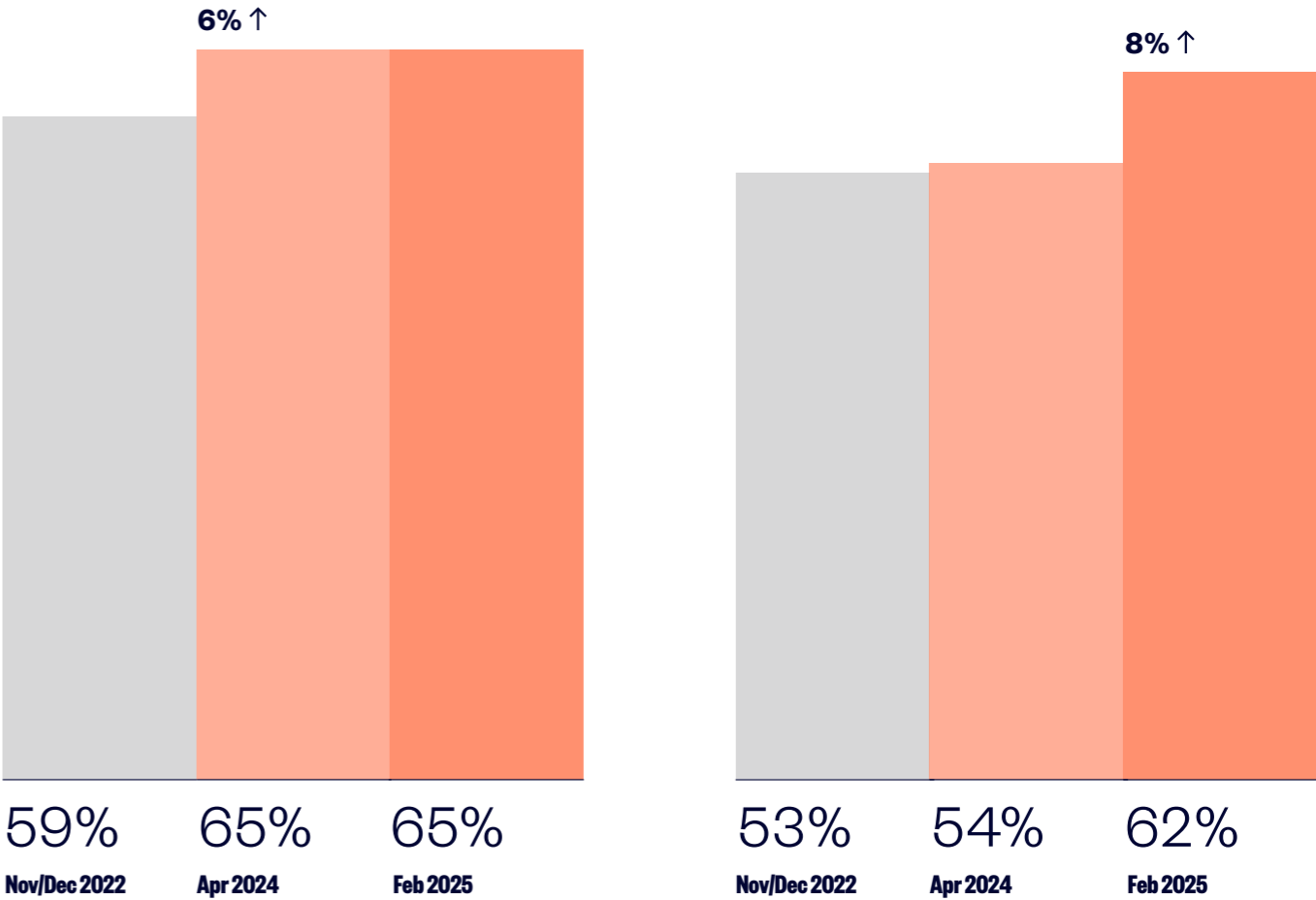
65%

agree — a significant jump from 2022’s 59%.⁹

“ETFs have made me a better investor.”

62%

agree — a notable uptick from 54% last year.¹⁰



Source: State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following statements? (5-point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Currently Have ETFs in Portfolio

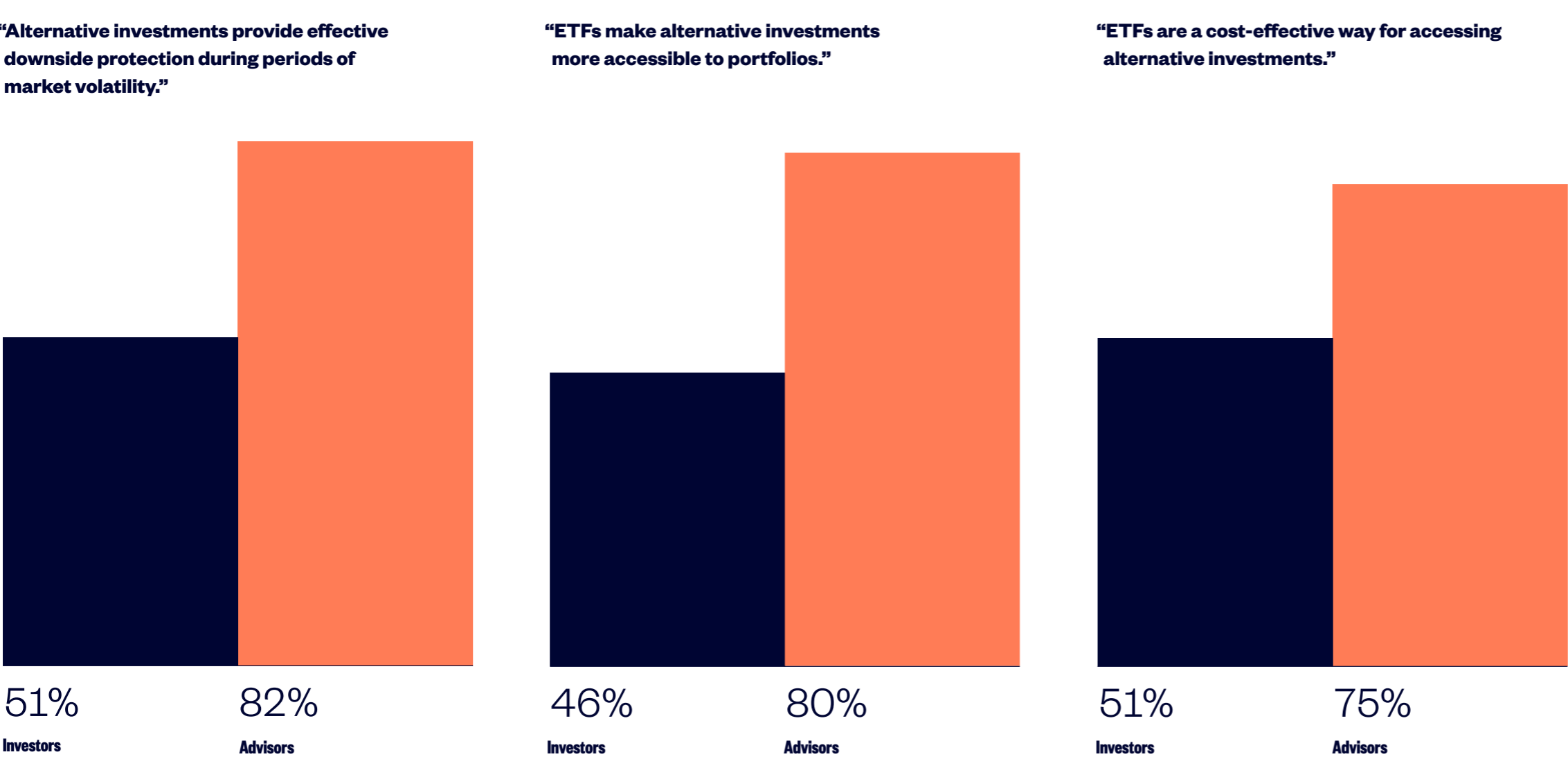
ETFs Open the Door to Alternative Investments

As investors seek both new return drivers and different ways to diversify risk, many are turning to alternatives in search of performance, but also protection. In fact, 51% of US investors agree that alternative investments provide effective downside protection during periods of market volatility.¹¹

And ETFs are expanding access to these once-exclusive strategies. More than half of US investors familiar with ETFs (51%) say ETFs provide an efficient, cost-effective way to invest in alternatives,¹² and 46% say ETFs make alternatives more accessible to their portfolios.¹³

US investors with more than US\$250k in assets are especially receptive to using ETFs for alternative exposure.

Figure 5
US Investor and Advisor Perceptions of Alternative ETFs: Percentage Who Agree with the Following Statements



79%

of US advisors plan to increase their allocation to alternative ETF strategies to some degree over the next 12–18 months.¹⁴

Source: State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025.

ETFs Unfiltered Straight Talk on the Future of Investing with Anna Paglia



Chief Business Officer Anna Paglia has had a front-row seat to the exponential growth of ETFs during her 27-year career in asset management. In this candid interview, **Anna shares her view on the power of ETFs to deliver optionality and diversification in a single trade.** Don't miss her take on how that's reshaping portfolios and redefining investing for the future.

Today's Risks, Tomorrow's Opportunities

An Interview with Anna Paglia Executive Vice President and Chief Business Officer

In this exclusive interview, Anna Paglia shares her take on the power of ETFs to help investors better adapt in today's dynamic markets. She covers everything from alternatives, ecosystem innovation, and retirement to artificial intelligence (AI), tokenization, and optionality.

Read on to find out what role she thinks ETFs will play in shaping the future for investors.

Q: In today's rapidly evolving ETF market, what are the most pressing risks investors face?

I'd say there are two primary risks for retail investors:

1. Misalignment between investors' goals and their portfolios. The market is changing quickly — not every strategy is appropriate to achieve certain investment objectives. I worry investors may be disappointed in the long run if their expectations and goals don't align with what they're buying.

2. The abundance of information. There's too much information out there and it's getting harder to know what's reliable.

For example, social media plays a big role in today's investing environment. And there's an interesting paradox there — those with credible, verifiable information have constraints or regulatory requirements within which they need to operate, but some of the loudest voices on social media who may lack this same information are often unconstrained.

I believe asset managers like State Street Investment Management can provide timely, accurate, and balanced information, and we have a compliance framework within which we have to operate. We can't use certain language or words — we have to play by the rules.

In the US, those not FINRA registered — influencers, for example — can start a Reddit thread and say whatever they want about securities without consequence unless they engage in fraud, flat out lie, or mislead investors. And so, I think it's critical for investors to be discerning about the source of the information they're getting before making an investment decision.

Over-proliferation of products and ever-increasing product complexity are the biggest risks for more sophisticated investors. Understanding the ins and outs of products is paramount.

Right now, there's a big movement around customization of scale. Clients want to work with their advisors to ultra-customize their portfolios. They want their own S&P 500® with customization and tax alpha. Advancements in technology make this possible, and I think it's a great tool, especially for smaller investors. But investors need to

understand the tradeoffs and be comfortable asking questions like, "How much can I customize my portfolio before it departs too far from the S&P 500?" and "Am I okay with that?"

Another example is buffered ETFs. When you buy a structured or buffered ETF, you may know you're capping the downside — but do you also understand the extent to which you may be limiting the upside? If you do, it can be a great tool to have in your toolkit.

I believe access to more products — including more *complex* products — is a huge benefit because it provides optionality to investors. But it also means you really have to understand what you're buying before you invest.

“...more complex products in market is a huge benefit because it provides optionality to clients. But it means you have to understand what you're buying before you invest.”

Q: How should investors be thinking about managing risk now?

The most important thing is for investors to understand the timeframe for their goals. Participation in financial markets is not the key to getting rich fast. And those investors who want to get rich fast...a few may get lucky, but many more will end up disappointed. That's because investing in financial markets is a long game — it's about building wealth consistently over time, not getting rich overnight.

Q: What innovative risk management strategies have you seen emerge in the ETF space? And how do you think these strategies could disrupt investing over the next five to 10 years?

We've already seen technology play a big role in building solutions for clients. Right now, technology integrated with investment management capabilities allows asset managers like us to offer robust model portfolios to advisors. All advisors have to do is match the characteristics of those portfolios to the needs of their clients.

That's a powerful, simple, and relatively quick way to allocate clients' assets to specific investment strategies that align with their goals.

“Investing in financial markets is a long game — it's about building wealth consistently over time, not getting rich overnight.”

Direct, customized investing is another tool that can be used to pinpoint investors' objectives. Tax alpha is one of the main drivers of direct indexing and customization scale. And, I think it's becoming clear to clients that it's not just what you make but what you keep that matters.

If there's a smarter, technology-enabled way to manage your portfolio and generate tax alpha that's going to help you save more and build more wealth, why wouldn't you do that?

Digital trading is another technological advancement eliminating barriers to entry and taking the global industry by force. Now, people can trade without having to pay significant trading or transaction fees, which I see as helping to further democratize access to investing for everyone.

There are also some significant regulatory changes that, when mixed with technology and access, help investors save more. In certain jurisdictions, for example, electronic trading and the ability to make small monthly contributions to your brokerage account are incentivizing people to get into financial markets.

It's testament to the fact that innovation isn't just about building new products. You have to think about the entire ecosystem. And the truth is, innovation is only real if the entire ecosystem is moving forward — everything has to work together seamlessly.

Q: Alternative ETFs have been a laser focus for State Street Investment Management this year. What's driving the growing interest in alternative investments among institutional and retail investors?

Everybody is talking about alternative investments. At the end of the day, they're another chapter in the ETF story of democratization.

An industry colleague once compared the ETF market to something we've all experienced as kids: attending a birthday party at the local pool. Everybody's excited and you're having a great time. But then you look behind the

“ Innovation isn’t just about building new products. You have to think about the entire ecosystem... innovation is only real if the entire ecosystem is moving forward — everything has to come together seamlessly.”

pool to where there’s a group of cool kids in a VIP section and — surprise — you’re not invited. The “cool kids” are like private assets and other segments of the market, or hedge funds and other strategies, reserved for only qualified investors. But now, everyone has VIP access.

Bringing this exposure to the everyday investor through the ETF wrapper is the next frontier of democratization.

And so, I see our job as twofold. First, we have to keep doing what we’re doing — build for today so that we can give clients what they need to create long-lasting portfolio building blocks. But we also have to build for tomorrow.

We need to keep asking ourselves what strategies will benefit our clients in five, 10 or 20 years from now and reverse engineer from those solutions. We need to have the courage *and the commitment* to build products designed for long-term resilience, even if they may not be immediately successful.

Building for today is easy — it’s informed by data and client demand. Building for tomorrow is more difficult. Nobody has a crystal ball that can predict future market movements or upcoming trends.

But this is where seasoned asset managers like ourselves can make a difference. We study the trends, we analyze the data, we engage with our clients (better yet, we’re obsessed with our clients), we form beliefs, and we’re willing to invest in innovation to make sure that we can always offer financial tools and services that are timely, effective, and compelling.

“ We need to have the courage *and the commitment* to build products designed for long-term resilience, even if they may not be immediately successful.”

Q: Do you think alternatives are becoming a more permanent part of strategic asset allocation or is this trend cyclical?

I think they will become a more permanent allocation. We’ve discovered the 60/40 portfolio is no longer a conservative way to manage equity and fixed income assets, because assets can behave in ways we don’t anticipate. When this happened in 2022, everyone was shocked.

What will the 60/40 become? How much of an allocation will alternatives get? I’m not sure yet. I’ve heard two opposing positions from advisors and I believe each holds merit for now:

- One advisor said that he’d never allocate his clients’ portfolios to alternatives. The reason? For as little as he’d allocate to alts (2–3%, and no more than 5%), that’s the 2–3% that would get him fired. Sure, it’s the portion of the portfolio that may generate the best returns, but it could also record the biggest losses. So he was adamant that he’d never do that.
- Another advisor said she’d always allocate 2–3% to alternatives. Why? Because it was the way she added value. Her clients, she said, could go anywhere to get a 60/40 portfolio. But this was a way to differentiate her value with clients, by helping them find better, more creative ways to generate returns.

There’s not a right or wrong answer. I think both are perfectly reasonable ways to address alternatives in a portfolio right now. That said, I do believe alternative allocations will continue to grow.

Q: Speaking of financial advisors, what do you think their role is right now in the potential growth of alternatives?

Well, the alternatives definition is so broad currently. In a sense, I think part of the reason we’re getting such differing opinions on alts is because there isn’t a clear definition. Where some advisors see and use alts expressly for the purpose of alpha, others are using alts squarely for risk mitigation or hedging.

They’re two sides of the same coin, so the divergent reactions of the advisors I mentioned don’t surprise me. As we start to see alts categories crystalize and become more niche in their descriptions, I think we’ll see advisors’ perspectives continue to take shape.

But it matters who our audience is. And, at the end of the day, I think advisors are wondering the same thing as investors — what’s in it for me? What does this do for me as an advisor and fiduciary? How does this allow me to demonstrate my value in a better way?

We have to consider the entire value chain and make sure we’re connecting the dots for all players in the ecosystem.

Q: Let’s switch gears and talk disruptive technologies for a moment. How are AI, blockchain, and big data enhancing ETFs, risk management, and investment decision-making?

Being client-centric in an environment that’s opaque is a big challenge. Without the proper data, we can’t make informed decisions about what products to launch, which channels to prioritize, or which clients we should focus on.

Data informs strategy, it informs pricing, it informs sales, and market trends. That’s where AI comes into play. AI can be used to help fill in missing pieces of the data puzzle. AI can help us not only understand current trends, but also anticipate and predict new ones.

Here’s a silly example: A few years ago, you’d get in your car, set your destination in the GPS, and it would give you an ETA. If you were me, you’d try to beat the GPS’ ETA — and I would! But, today? It’s impossible. Those systems use AI and predictive analytics, which are constantly learning about our habits, so that it’s impossible to beat the GPS. It knows exactly how fast I’m going to drive. It knows current traffic levels. It even knows stoplight timing.

Predictive analytics and AI are things we don’t use nearly enough. But, as we move into the future, these tools will help us dissect data, organize data models, understand market trends, and ultimately help us make more informed decisions.

“ What if we were able to tokenize private credit or real estate and put that into an ETF? I think blockchain technology is going to help us unlock new ways to create frictionless buying power.”

Q: Last year we asked you about ETFs’ potential role in shaping the future of retirement. So, where are we now?

There’s a tremendous market for retirement assets in index funds. We’ve estimated the retirement industry is currently allocating US\$4 trillion in assets to index funds. But, the retirement industry is fragmented due to regulation and technology.

For example, in the US most 401(k) plans do not buy ETFs because of technology issues and regulation. They have to buy at net asset value (NAV), not the open market. We have to process orders coming in overnight, so we can’t trade

everything on the exchange. And 403(b) plans can’t buy CITs because of current regulations.

As a result, you end up with a highly coveted US\$4 trillion in assets that the retirement industry wants to allocate to pension plans. But because of this fragmentation, that content delivery is patchwork. It’s delivered through ETFs, index funds, CITs, and institutional accounts. That fragmentation is expensive.

Think about operating two S&P 500® funds, one ETF and one index mutual fund. Now, you have two prospectuses, two sets of regulatory documents, two fact sheets, and two webpages. You have to pay independent accountants to do the review for two different products. And who largely pays the costs of this fragmentation? Investors.

ETF share classes are one way the industry could remove these challenges, because we’d have a mutual fund share class living within an ETF product. That means you’d only need one fact sheet, one product webpage, one independent accountant, and you could benefit from the size and scale of existing products to bring to market something that would help the retirement industry.

All that is to say, our job is not just to fix what is not working. We also have to look at what is working and ask ourselves how we can improve upon it. If Steve Jobs and so many other tech entrepreneurs didn’t ask themselves that question, we wouldn’t be using smartphones right now. If something can be done more efficiently, why wouldn’t you want to be the one to provide a better playbook?

Q: What most excites you about the potential for ETFs to help investors manage longevity risk or even the risk that they might not be able to retire as comfortably as they’d hoped?

I’m most excited about our ability to get creative with the rest of the ecosystem. We have the opportunity to partner with big players in the game to create something really special.

I find it so refreshing that, here at State Street Investment Management, we have the ability to partner with leading companies to bring premier solutions to our clients.

“ I find it so refreshing that, here at State Street Investment Management, we have the ability to partner with leading companies to bring premier solutions to our clients.”

Very rarely do you see a framework within which you can pull best-in-class capabilities and package them in one solution that clients can access using the State Street Investment Management platform.

We continue to expand our work with existing partners while onboarding new ones, looking at the real possibilities those partnerships pave the way for. We also continue to look inward, asking ourselves, “What are the things that we do really, really well here that we can bring to our clients?”

To me, these are going to bring about game-changing possibilities within the next five to 10 years.

Q: Looking ahead, what game changing ETF innovations excite you most?

We’ve talked about each of these already, but I’d say ETF share class filings, private assets within the ETF wrapper, and the expansion of digital capabilities.

“ There are inefficiencies right now, and it’s our job to continuously seek to improve the market. If something can be done more efficiently, why wouldn’t you want to be the one to provide a better playbook?”

Q: What do you see on the horizon that could redefine portfolio construction in the next decade?

As we move into the future, I think it’s important to remind investors that ETFs offer something financial markets and single stocks don’t — the power of diversification and optionality in a single trade. Meaning ETFs give you the ability to be very broad or very targeted, based on your beliefs.

If you just want to be invested in the market, there’s an ETF for that. If you want to participate in US equity growth, there’s an ETF for that. If you believe Europe is the next frontier of growth, there’s an ETF for that.

But you can also get very targeted with ETFs. There are ETFs that offer specific allocations to sectors and specialized asset classes. There are ETFs that allow you to invest in gold. If you believe in the growth of industrials, healthcare, or technology, there are ETFs you can buy to focus on that specific sector.

“ ETFs are bringing the power of diversification in a single trade. You can go as broad or precise as you want without relying on single stocks to get there.”

All this is to say, ETFs are bringing the power of diversification in a single trade. You can go as broad or precise as you want without relying on single stocks to get there.

That diversification, or optionality, is a powerful thing. And I know it’s going to continue to transform investment portfolios in tremendous ways as we move forward into the future.

Versatility Unbound

Using ETFs as Risk Management Tools



Volatility happens. Markets move, policies change, and unexpected events are on the horizon. In a world this unpredictable, agility is key. **ETFs are adaptive tools that can help investors build more resilient portfolios no matter what the future holds.**

ETFs: A Modern Approach to Risk Management

Uncertainty breeds volatility. But it also propels innovative thinking, ingenuity, and the adoption of resilient strategies. While no investment can totally eliminate risks, ETFs have potential structural advantages to help you manage them (Figure 6).

Figure 6
Potential Structural Advantages of ETFs

Feature	Benefit
Diversification	ETF holdings are able to span across asset classes, geographies, sectors, and factors, reducing concentration risk and smoothing out returns over time.
Liquidity	ETFs trade on exchanges like stocks, and they also offer an added layer of liquidity thanks to their unique creation and redemption process. This enables market makers to adjust supply in response to demand, helping stabilize prices even in volatile conditions.
Execution	Unlike mutual funds, ETFs offer intraday trading, allowing investors to react to market events in real time instead of waiting for end-of-day windows.
Hedging	ETFs simplify defensive strategies, such as tactically allocating to gold to hedge against inflation and geopolitical risks.
Cost Efficiency	ETFs generally have lower expense ratios — for instance, the median expense ratio for ETFs (0.44%) is less than half that of mutual funds (0.92%). ¹⁵
Transparency	Most ETFs, with the exception of some active funds, disclose their holdings daily. This gives investors transparency into portfolio composition and risk exposure.
Access	ETFs can open the door to investment opportunities and asset classes that have been traditionally harder to access, such as private markets, commodities, crypto or digital assets, and hedge fund strategies.

Using ETFs to Adapt to Market Movements and Macro Shifts

As inflationary pressures began to ease in 2024, central banks cut rates and equity markets reached new highs. Still, uncertainty persisted into 2025. Now, volatility and inflation concerns are back due to geopolitical tensions, trade policy uncertainty, and continued global fragmentation.

To manage macro shifts and prolonged uncertainty, more investors are rifling through their toolboxes and pulling out ETFs for strategic and tactical uses — whether adjusting duration in fixed income portfolios, diversifying beyond traditional 60/40 stock-bond allocations, or tactically responding to macro-driven opportunities.

Figure 7

How ETFs Help Manage Risk Amid Rates, Inflation, and Geopolitical Uncertainty

Interest Rate Cycles	In rate -hiking environments, investors have historically rotated into short -duration bond ETFs to minimize interest rate risk. Conversely, when rate cuts are imminent, longer -duration bonds become more attractive for capital appreciation. Three US Federal Reserve (Fed) rate cuts appear probable by December 2025¹⁶ — which may prompt investors to re -evaluate their duration exposures as the Fed’s easing cycle unfolds.
Inflation Hedging	Commodities like gold and real assets have historically served as hedges against inflationary pressures. For instance, as inflation has risen, central banks have purchased 3,176 tonnes of gold since 2022.¹⁷ This spike in demand, coupled with ongoing geopolitical instability, accentuates gold’s role as a strategic, long -term tool for managing risk.
Geopolitical Tensions	Tariffs, fiscal uncertainty, and military conflicts are potential strains on global commerce. ETFs tracking potential safe -haven assets (e.g., Treasuries, gold) may prove to be a useful hedge, as investors seek ways to counter heightened volatility on multiple fronts.

How Investors Think About Risk and What They’re Doing About It

In our 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, we zeroed in to see how investors view risk today: what they perceive as the biggest threats to portfolios, how they manage those risks, and how confident they feel about their strategies.

What’s Keeping Investors Up at Night?

In 2025, the top concerns among US investors surveyed are trade wars/tariffs (44%), recession (37%), unexpected inflation (34%), and market volatility (34%).

Figure 8
Top Three Perceived Risks to Portfolios, Ranked

Trade wars/tariffs	44%
Recession	37%
Unexpected inflation	34%
Volatility in the market	34%
Changes in government policies/regulations	32%
Interest rate changes	25%
Unforeseen event(s)	21%
Geopolitical instability	21%
Government overspending that can't be maintained	20%
Changes in tax laws	16%
Technological disruption(s)	8%
Lack of diversification	7%

Trade wars and tariffs dominated conversations in early 2025. These results highlight how retail investors — and their portfolios — are vulnerable to headline risk.

Investor sentiment can shift rapidly based on the latest news cycle. Staying diversified and focused on the long-term can help investors avoid reactionary decision-making.

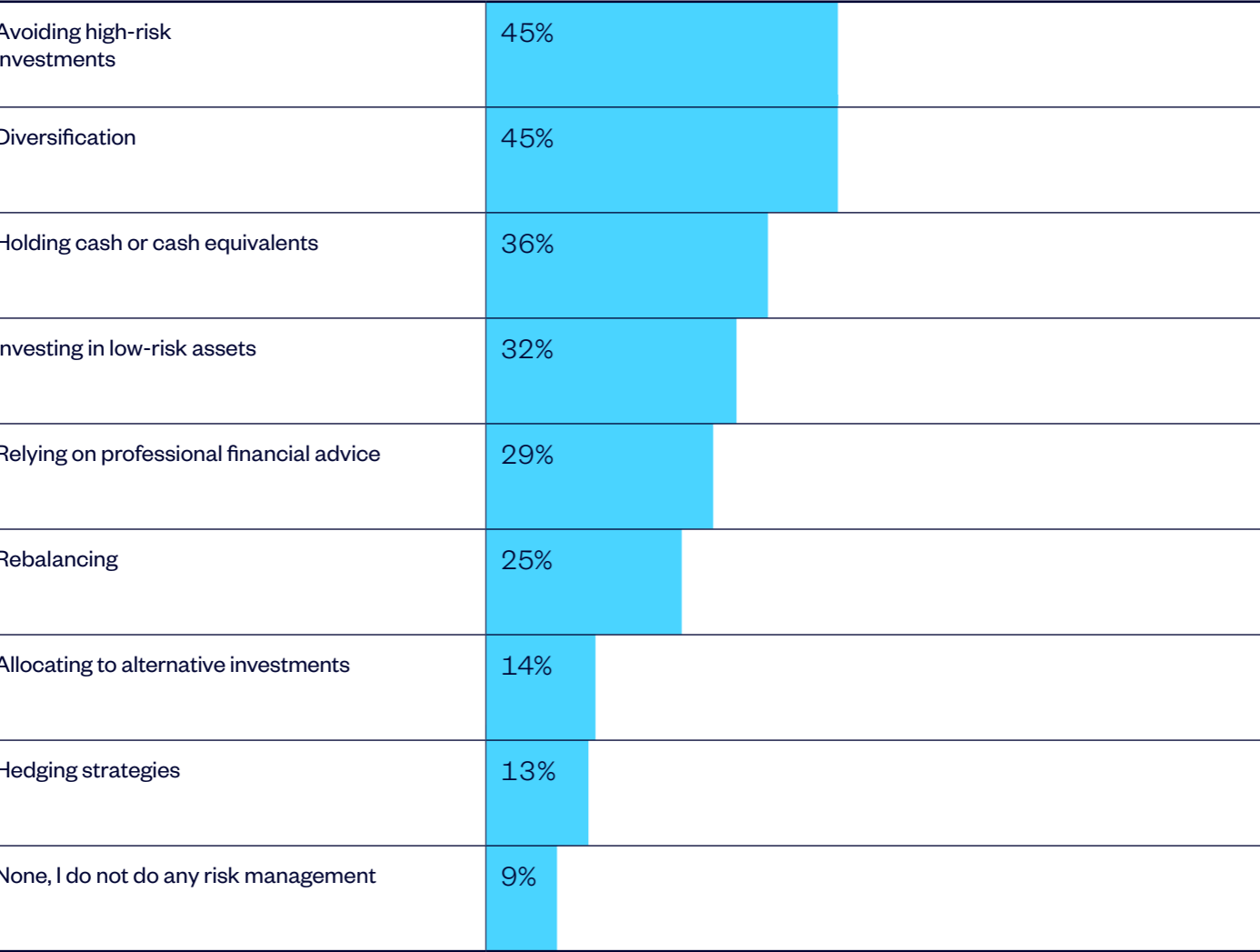
Source: State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: What do you perceive to be the three greatest risks to your investment portfolio over the next 12–18 months? (Rank order top 3) | Base: Total

How Investors Are Managing Risk

Being aware of risk is one thing, acting on it is another. Our study found that managing risk is nearly universal, with only 9% of respondents saying they don't plan around it. And, US investors are employing a variety of risk management tactics — namely, avoiding high-risk investments (45%), diversification (45%), and holding cash and cash equivalents (36%).

Figure 9

Top Approaches to Risk Management, Ranked



Source: State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How do you approach managing risk in your investment portfolio? (Select all that apply) | Base: Total

Confidence in Risk Management Strategies

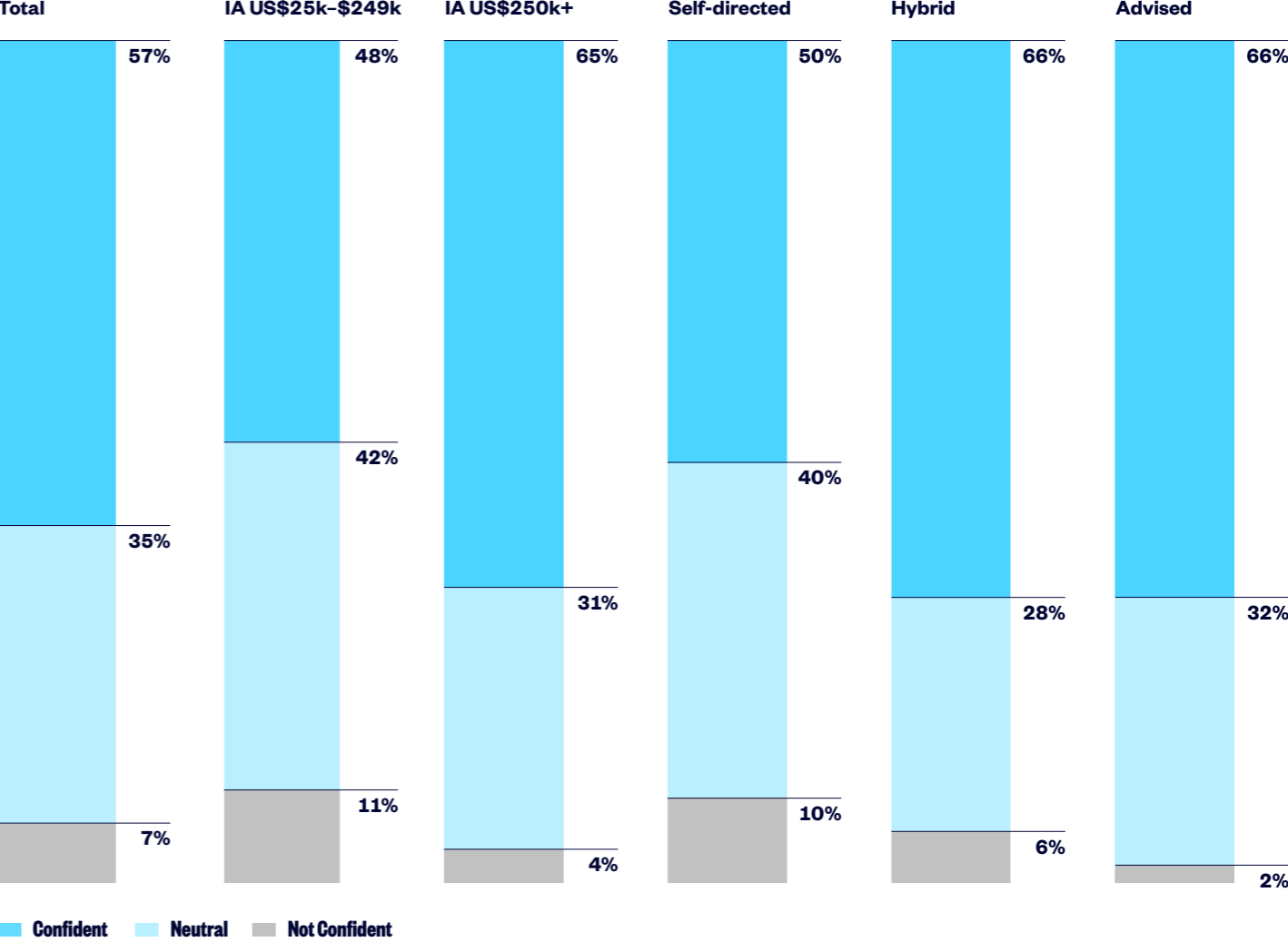
Are these strategies working? We asked US investors to rate their confidence in their current risk management approach. The majority of respondents were confident (57%), while only a small percentage were not (7%).

Confidence in risk management was closely tied to both professional guidance and portfolio size. Only 50% of self-directed investors feel secure in their approach, compared to 66% of those working with an advisor. Similarly, just 48% of investors with US\$25k–\$249k in assets express confidence, while that number rises to 65% for those with US\$250k or more.

Professional advice, or perhaps more experience in the market, could potentially make a significant difference when it comes to navigating risk and making disciplined investment decisions.

Figure 10

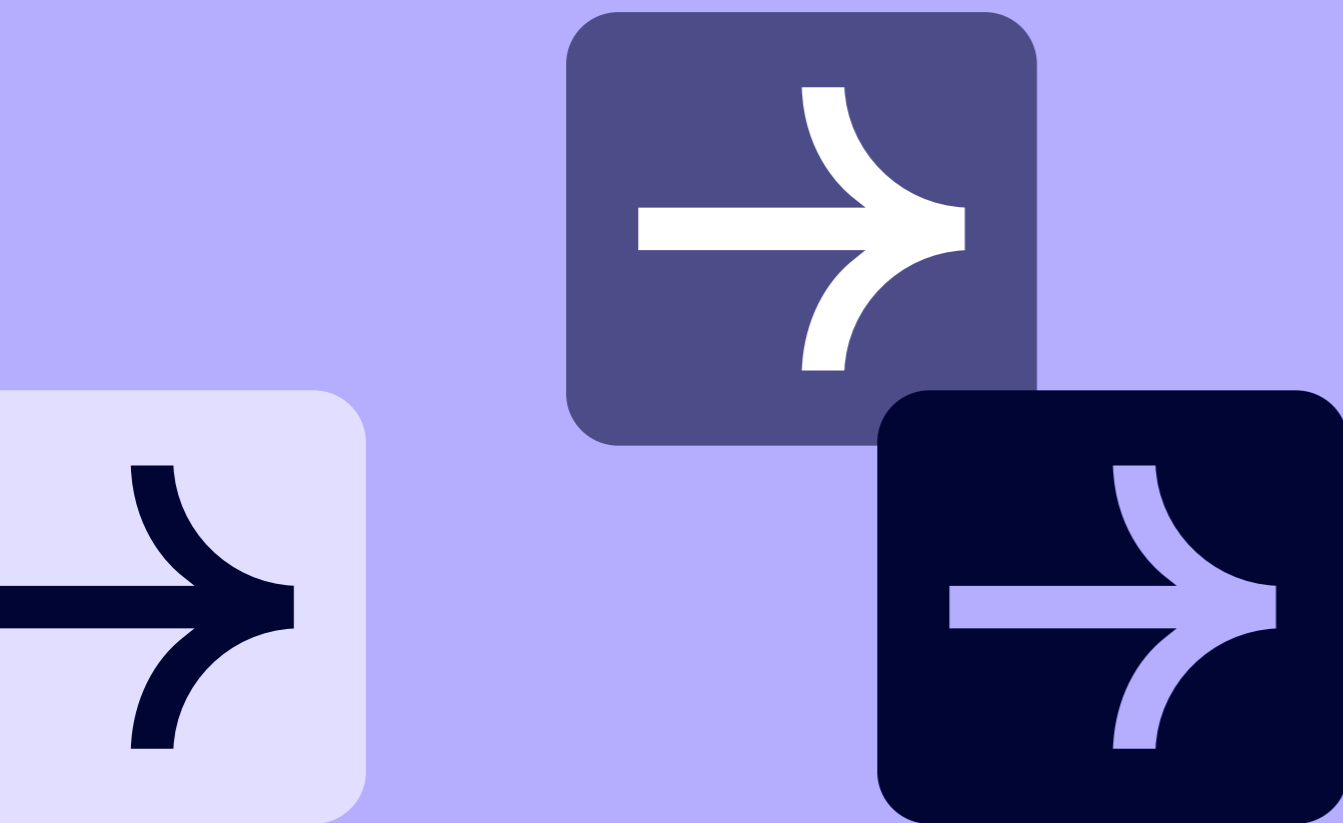
Confidence in Risk Management Approach



Source: State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How confident are you that your current risk management strategies will effectively mitigate potential losses in your investment portfolio? (5-point scale: 1 “Not at all Confident” to 5 “Very Confident”) Confident = Top 2 Box | Neutral = Middle Box | Not Confident = Bottom 2 Box | Base: Performing Risk Management Percentages may not total 100% due to rounding.

Adapting to Investor Needs

ETF Trends to Watch



ETF innovation doesn't happen in a vacuum — it's driven by investor needs. **Discover the top trends shaping ETF adoption worldwide**, from alternatives and active strategies to inflation hedging tools.

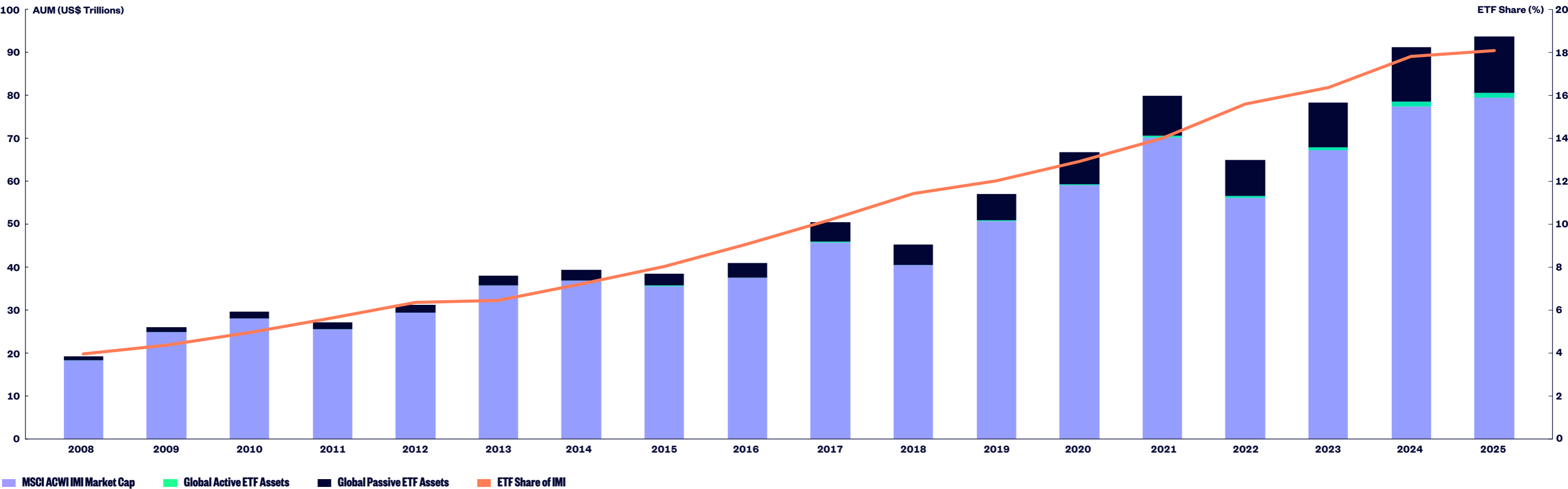
ETFs in 2025: Continuing to Raise the Bar

In the past year or so, we’ve seen rate cuts and new stock market highs as well as geopolitical conflict, increasing deglobalization, shifting trade dynamics, and a stock market correction. In other words, a whirlwind of catalysts and obstacles have materially influenced investment flows.

Nevertheless, ETF inflows have increased as investors seek opportunistic growth, liquidity, risk mitigation, and tactical adjustments to their portfolios. Through the first two months of 2025, the global ETF market has pulled in record inflows of US\$293 billion, and there are no signs of this trend slowing.¹⁸

Yet, ETFs only account for approximately 18% of global investable assets (Figure 11).¹⁹ The gap between adoption and opportunity suggests that ETFs are still in the early innings of their evolution and their role in portfolio construction is poised to grow even more in the years ahead.

Figure 11
ETFs Account for Less Than 20% of Investable Assets Globally



Source: Morningstar Direct, Bloomberg Finance, L.P., as of February 28, 2025. Past performance is not a reliable indicator of future performance.

The ETF Innovation That Ignited the Industry

The **SPDR® S&P 500® ETF Trust** gives investors cost-efficient, highly liquid exposure to the S&P 500® Index — providing access to 500 of the largest publicly traded US firms.

Why the SPDR® S&P 500® ETF Trust?

The SPDR® S&P 500® ETF Trust offers a number of potential benefits for investors seeking core US equity exposure.

Trusted Providers

The SPDR® S&P 500® ETF Trust is managed by State Street Investment Management, an ETF pioneer and one of the world's largest asset managers, and is benchmarked to the S&P 500 Index from S&P Dow Jones Indices, one of the most trusted index providers.

Diversification in a Single Position

The SPDR® S&P 500® ETF Trust touches nearly every corner of the US economy, giving investors broad exposure to the world's largest market and many of its most recognized brand names in a single trade.

What Can You Do With the SPDR® S&P 500® ETF Trust?

The SPDR® S&P 500® ETF Trust immense size and liquidity inspire innovative use cases that help investors meet their investment goals.

Diversification

**Strategic
Asset Allocation**

**Transition
Management**

**Managing
Risk**

**Tactical Asset
Allocation**

**Liquidity
Management**

Alternatives in Uncharted Territory: How ETFs Are Unlocking New Possibilities

The 60/40 portfolio is arguably the most universally recognized allocation in investment management. Equities for growth, bonds for stability. This has been the standard of diversification since the birth of the Modern Portfolio Theory in the 1950s.

But the past few years have tested that standard, as stock and bond correlations have increased. By the end of March 2025, stocks and bonds had exhibited positive correlation for more than 700 days.²⁰

When both asset classes generally move in the same direction, diversification benefits diminish, making traditional portfolios more susceptible to concentration risk. And so, investors have begun to explore what true portfolio diversification looks like now — more specifically, what role can alternatives play in a portfolio?

But what exactly is an “alternative?” Broadly, it refers to possibilities outside the traditional choices. And while simple, this definition makes the term particularly difficult to pin down in financial markets.

Can gold, real estate, private equity, and infrastructure fit into one asset class? They differ fundamentally, yet each falls under the widening “alternatives” umbrella. Not to mention alternative portfolio-building and outcomes-based approaches — strategies that layer in options, leverage, and other mechanisms to pursue various investment goals.

In the name of clarity, let's classify alternatives into two distinct categories:

- **Alternative Investments**

These are assets that don't fall into traditional equity and fixed income classes.

Examples: Commodities, real estate, private credit and equity, hedge funds, infrastructure, and digital assets

- **Alternative Strategies**

Rather than focus on the asset itself, this category includes non-traditional investment approaches.

Example: Defined-outcome ETFs (also known as buffer ETFs) that cushion volatility and target predefined ranges of return

Q: What product structure innovations will drive growth and adoption of alternative ETFs in the next decade?

We fully expect that ETFs will continue to help democratize access to both traditional and alternative strategies. As regulations evolve, we may be seeing the early stages of private and public market convergence, driven by demand for diversified portfolio core holdings. Ultimately, investor needs will drive product innovation — whether through single-ticker solutions like ETFs or seamlessly integrated model portfolios that blend public, private, and crypto exposures.



Mark Alberici

Global Head of Product
Innovation and Strategic
Partnerships

Alternative ETFs Likely to Go Mainstream

In many ways, alternatives are becoming less “alternative” as investors continue to look for asset classes and strategies that offer lower correlations, help diversify beyond stocks and bonds, and help manage risk. The traditional 60/40 portfolio isn’t obsolete, but it’s no longer the only path to risk-adjusted returns.

So, where is the demand going? A variety of alternative ETFs have caught investors’ attention (Figure 12), including:

- Digital assets and transformative tech for next-gen innovation exposure
- Gold and other commodities for hedging, diversification, and appreciation
- Structured outcome-driven ETFs to help manage equity risk while still pursuing upside potential

As new products continue to modernize the alternatives market, ETFs are playing a key role in democratizing access to these once hard-to-access opportunities.

700+

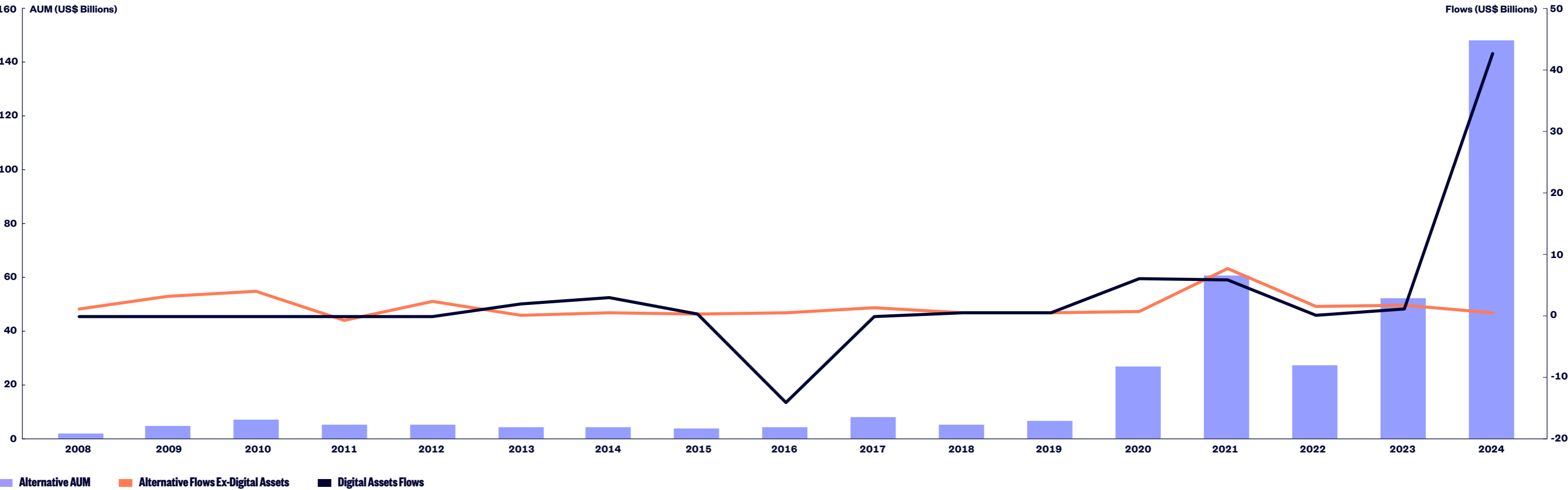
Days of rolling positive correlation across stocks and bonds²¹

10

Stocks account for 33.6% of US S&P 500® market cap²²

Figure 12

The Growth of Alternative Flows YoY



Source: Morningstar Direct, as of February 28, 2025. Past performance is not a reliable indicator of future performance.

Gold and Real Asset ETFs: The Search for Resilience and Growth in a Changing World

For centuries, gold has been the quintessential alternative asset — a store of value, a hedge against inflation, and a traditionally reliable stabilizer in unpredictable markets. And, the current macro and geopolitical landscape has only increased gold’s relevance.

2024 was a banner year for the precious metal, as gold posted a real return of 21.4%, despite equities being in a bull market.²³ It’s eye-opening that gold ETFs posted net *outflows of 6.8 tonnes*, largely due to sizable redemptions in Q1 2025.²⁴

A reversal of this trend is already underway in 2025, as lofty equity valuations test investor confidence and the desire to stabilize portfolios or hedge uncertainty increases.

Historically, strong gold ETF inflows have coincided with every gold bull market over the past two decades.²⁵ If these inflows return in full force and central banks continue their shopping spree, gold prices could reach record highs in 2025, potentially hitting US\$3,400/oz or higher.

Gold isn’t the only real asset benefiting from changing market dynamics, though. Broad commodities, infrastructure, and real estate are also gaining traction as investors seek tangible, inflation-resistant exposures. With structural inflationary forces — such as tariffs, fiscal stimulus, and supply chain fragmentation — persisting, the case for real assets as diversifiers grows stronger and stronger.

Figure 13
Global Gold ETF Assets Under Management



Source: Bloomberg Finance, L.P., London Bullion Markets Association, and State Street Investment Management, as of March 31, 2025.
Past performance is not a reliable indicator of future performance.

Q: How long do you believe gold’s record-setting price rally can continue?

The Baker, Bloom & Davis Global Economic Policy Uncertainty Index recently hit its highest level since COVID-19, reinforcing investor demand for gold as a tail risk hedge. With ongoing structural shifts that remain unresolved, we see potential for a new gold price base to form on either side of US\$3,000/oz

and think price could swell to US\$3,400/oz later in 2025 in our bull case scenario (40% probability). While the path is unlikely to be linear, current dynamics support a re-rating of gold and a higher price regime.*



Aakash Doshi
Head of Gold Strategy

* Actual performance may differ substantially from the hypothetical performance presented. Past performance is not a guarantee of future results.

Active ETFs: Managing Risk, Volatility, and Outcomes

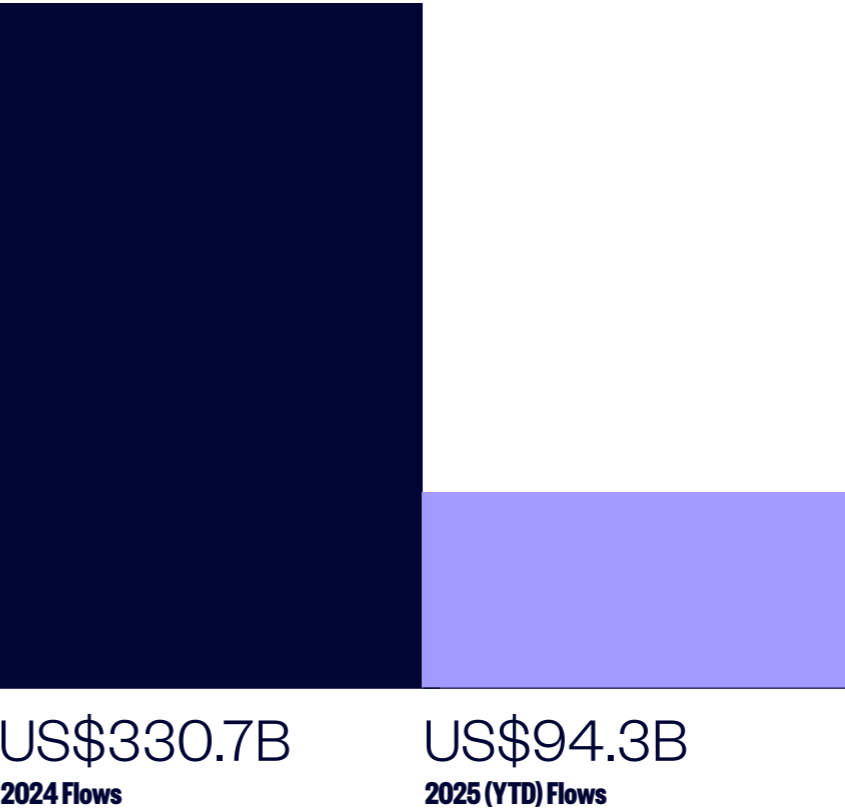
A fine-tuned suspension system allows the world’s supercars to hug sharp turns and maintain control at high speeds. While land speed records and podiums aren’t in play, active ETFs offer similar real-time adaptability — helping investors adjust to the unpredictable twists and turns of markets.

Investors can lean on active equity ETFs to pursue growth opportunities, active fixed income ETFs to pivot alongside changing rate conditions, and even buffered strategies to help mitigate downside risk. In short, actively managed ETFs can help pave a path toward achieving specific outcomes with potential increased cost-efficiency.

Through this lens, 2024 was the year of adaptation. After securing a record US\$166 billion in global inflows in 2023, active ETFs captured US\$330.7 billion in 2024 — 22.24% of all ETF inflows globally.

To date, 2025 tells a similar story: pulling in US\$94.3 billion and representing 32% of all ETF flows in 2025 (Figure 14). Multiple factors are behind the inflows, including increased product innovation, the continued migration of assets from mutual funds to the ETF wrapper, and budding investor demand internationally.

Figure 14
Total Active ETF Flows: Comparing 2024 and the First Two Months of 2025



Source: Morningstar Direct, as of February 28, 2025. Past performance is not a reliable indicator of future performance.

Q: To what extent are investors using active ETFs to manage risk versus potentially generating excess return?

Since the 2008 Great Financial Crisis and the 2020 pandemic selloff, investors are looking for more stability and protection from those kinds of events, especially as they near retirement. Active ETFs have started to answer that call, as they’ve evolved beyond their traditional role of benchmark outperformance or

alpha. Increasingly, they’re now being used to target specific outcomes or improve portfolio risk management — and potentially provide more predictable risk/reward tradeoffs, better downside protection, and greater risk-adjusted returns.



Robert Selouan
Senior Research Strategist

Global Momentum Builds Behind Active ETFs

Advisors seem to have their fingers on the pulse of the active ETF market. In our [2024 ETF Impact Survey](#), US advisors identified active as the ETF trend that would have the most significant impact on the global ETF market through 2025 — and they were right. US active ETF flows in 2024 surpassed US\$300 billion, bringing total active ETF AUM to US\$1.07 trillion (Figure 15).²⁶

In Asia-Pacific, regulatory shifts and growing investor demand are accelerating the adoption of active ETFs. Over the past year, active ETFs in APAC have expanded from US\$38.75 billion to US\$51.63 billion in AUM, representing nearly 6% of the regional ETF market. Notably, active fixed income ETFs surged 33% in 2024, while active equity ETFs climbed 67%.²⁷

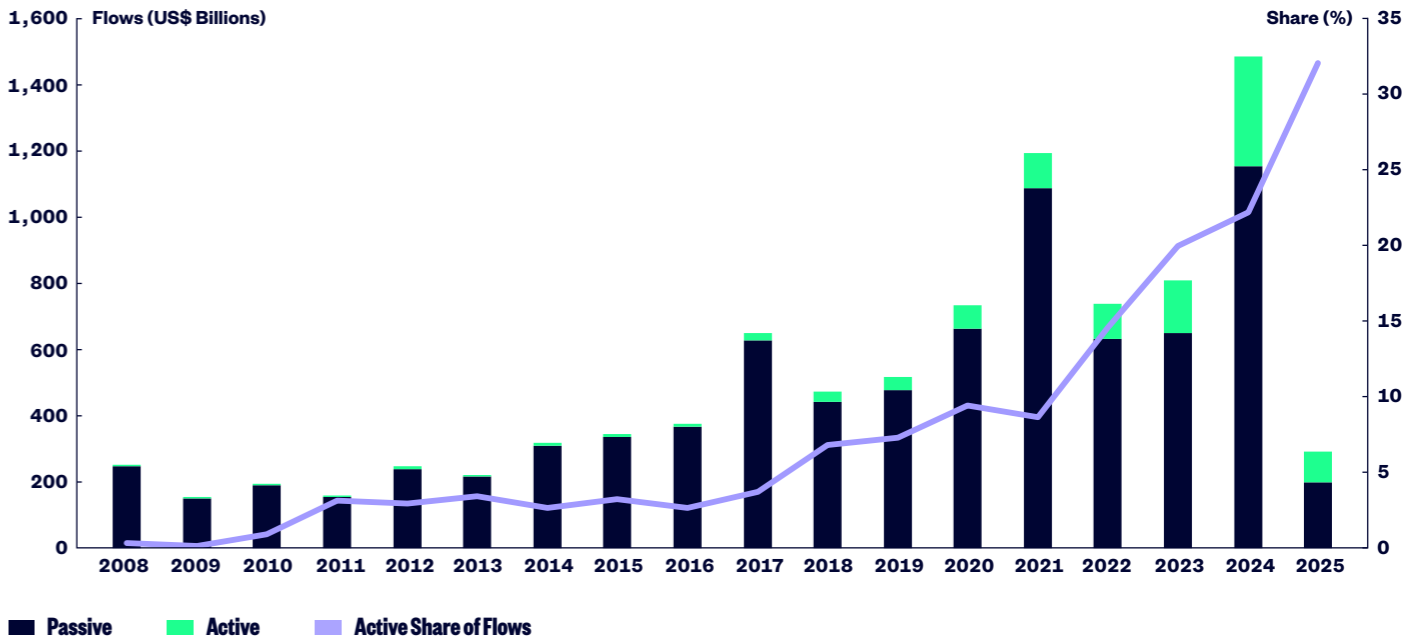
Europe's ETF market surpassed US\$2 trillion in AUM in 2024, where active ETFs remain a small but rapidly developing segment. Over the past year, European active ETF assets swelled from US\$38 billion to US\$55.7 billion, as investors sought cost-efficiency, alpha generation, and specialized strategies.²⁸

While some investors still associate “active” with “alpha,” the rise of actively managed ETFs has also been driven by a different set of priorities — like the ability to better manage risk or achieve a defined outcome.

For example:

- **Active fixed income ETFs** enable investors to construct potentially more resilient bond portfolios in response to changing macro, credit, and rate trends by allocating to fixed income in more flexible and dynamic ways.
- **Buffered ETFs** have gained traction as more investors seek downside protection while still pursuing upside potential.
- **Options-based strategies** are enabling investors to pursue enhanced income potential.
- **Thematic growth strategies** are helping investors tap into the potential of innovation while managing the fundamental and macro risks involved.

Figure 15
Active ETFs Continue to Set Records



Source: Morningstar Direct, as of February 28, 2025. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. **Past performance is not a reliable indicator of future performance.**

Q: What do you think is the most misunderstood advantage of active management now?

The raging bull market of the last decade-plus has made it easy to overlook the value of outperforming index return. But as market concentration eases and equity returns normalize (to single-digit returns per annum), the added benefit of active management will become more important in hedging against a lower-return world.

In addition, active managers can dynamically manage risk — an increasingly valuable skill in unpredictable markets. Unlike passive strategies, a risk-controlled active approach combines broad market exposure with added flexibility to adapt to changing market conditions.



Toby Warburton
Head of Active Portfolio Management

Fixed Income ETFs: New Milestones Amid Uncertainty

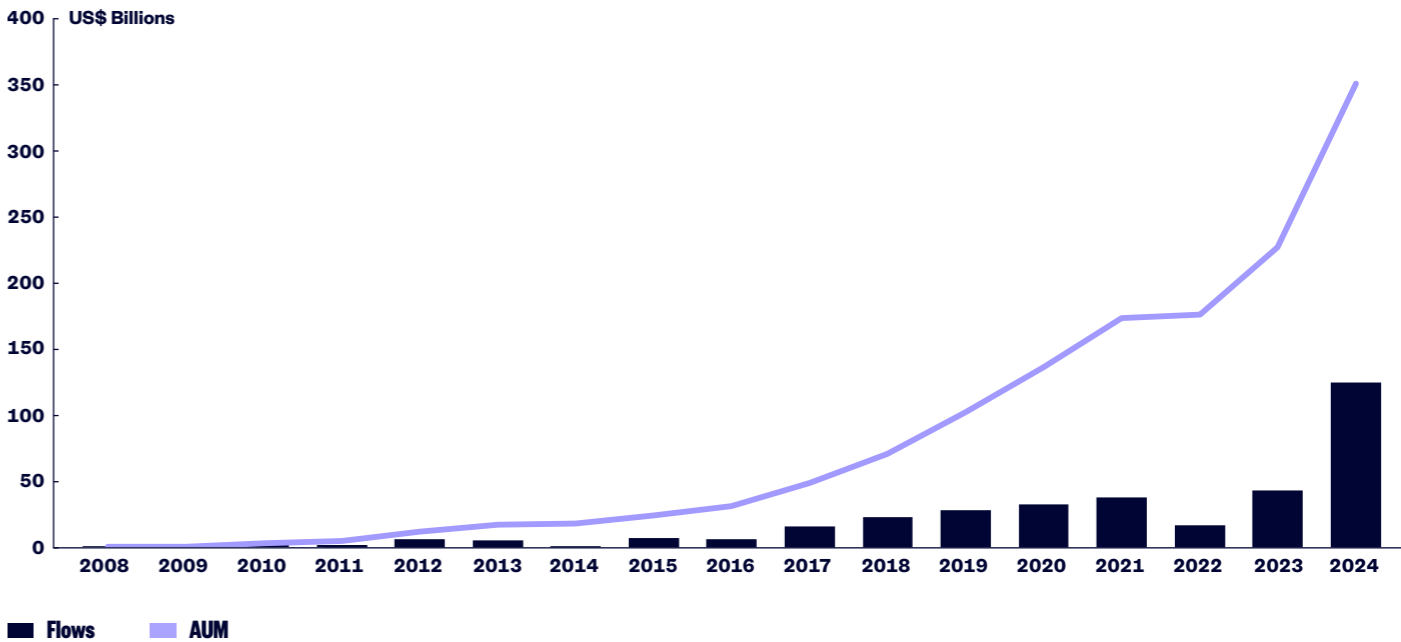
Fixed income ETFs offer investors exposure to a wide range of debt securities, combining the potential benefits of bonds — like income generation and risk mitigation — with the flexibility, liquidity, and transparency of the ETF wrapper.

This versatility proved invaluable in 2024, particularly as the Fed delivered its long-anticipated jumbo rate cut in September, setting the stage for shifting yield curves and renewed focus on duration strategies.

Active fixed income ETFs are gaining popularity, eclipsing US\$124 billion in inflows in 2024 (Figure 16).²⁹ Actively managed strategies provide the ability to pivot in real time — adjusting duration, credit quality, and sector exposure to capitalize on market conditions.

That agility is attractive, especially considering how the current US administration's policy decisions have injected a dose of volatility into markets. The growing diversity of active fixed income ETFs — including investment-grade credit, high-yield debt, securitized products, and CLOs — also sweetens their appeal.

Figure 16
Global Active Fixed Income Assets and Flows YoY



Source: Morningstar Direct, as of February 28, 2025. Past performance is not a reliable indicator of future performance.

Q: What fixed income ETF innovations are helping investors navigate challenges like liquidity, credit risk, and duration management?

Through ETFs, investors can now gain exposure to more segments of the fixed income market than ever before, allowing them to fine tune their fixed income portfolios.

More specifically, the launch of collateralized loan obligation (CLO) ETFs is now enabling fixed income investors to potentially add to a portfolio's yield while simultaneously lowering its duration risk.



Jason Simpson
Senior Fixed Income Strategist

Rate Volatility Driving Global Demand

As rate volatility remains a central theme in 2025, actively managed fixed income ETFs are primed for continued expansion across the globe. In APAC, greater institutional adoption and regulatory clarity helped drive 25% growth of active fixed income ETFs in 2024,³⁰ with further traction expected this year.

In Europe, diverging central bank policies are fueling demand, as investors seek tactical positioning opportunities. With the European Central Bank (ECB) expected to continue cutting rates this year in an effort to stimulate economic activity,³¹ European investors are reassessing their bond allocations, prompting greater inflows into actively managed strategies — with active fixed income strategies having taken in US\$2 billion in 2024.³²

Q: How has the growth of fixed income ETFs changed the underlying bond market's liquidity dynamics?

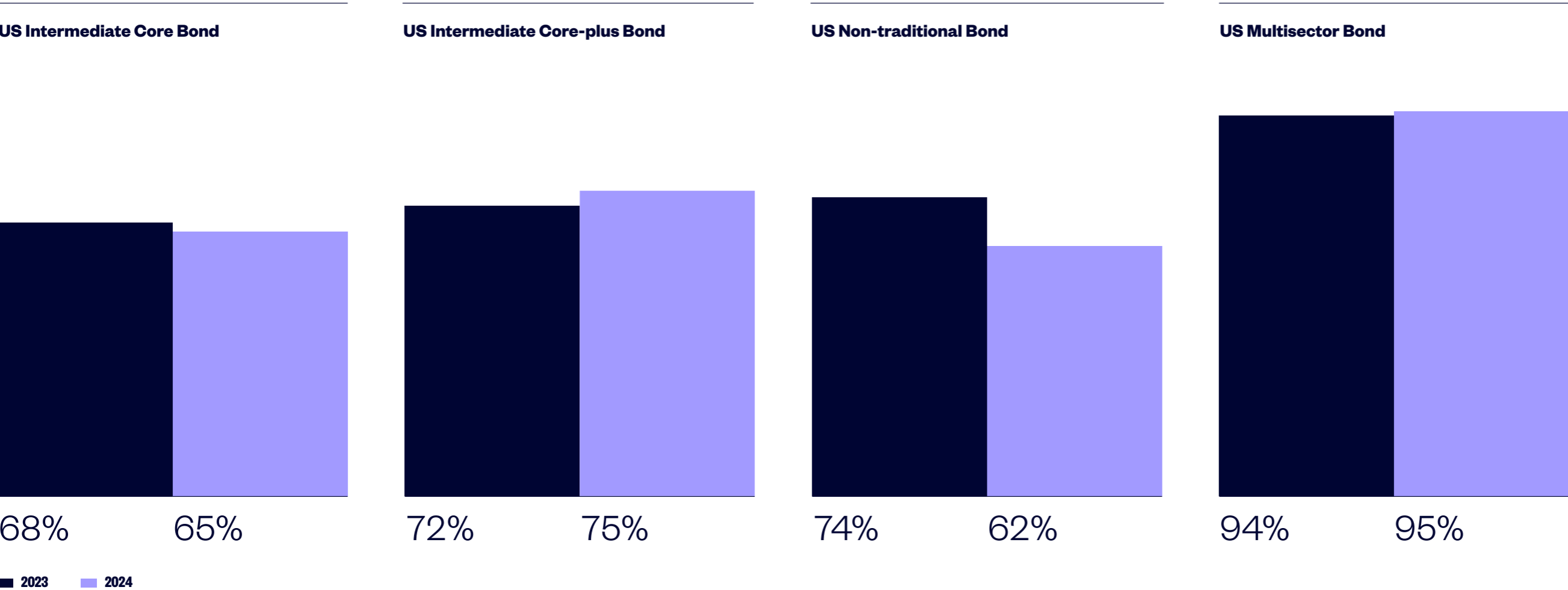
Remarkably, trading volumes of fixed income ETFs have risen 100% over the last five years, climbing from US\$3.4 trillion to US\$6.8 trillion,³³ boosted by the electronification of the bond market and the increase of portfolio trading.

Our Capital Markets team observes, on average, a spike in trading volumes during periods of market volatility. This allows fixed income ETFs to provide a potential additional buffer of liquidity to investors.



Gunjan Chauhan
Global Head of ETF Capital Markets and Markets Intelligence

Figure 17
Active Bond Manager Performance Trends: Percentage of Managers Beating Their Benchmark



Source: Morningstar Direct, as of February 28, 2025. The universe is based on Morningstar Category. **Past performance is not a reliable indicator for future performance.**

AI, Crypto, and Digital Disruption: A Tale of Tailwinds

The saying, “You must live under a rock” usually applies to those who are blissfully unaware of the latest inventions, thinking, or trends. These days, chances are even rock-dwellers have heard of AI and digital assets.

AI is transforming industries, driving productivity, and disrupting business models. From generative language and robotics to enterprise collaboration and 3D-printing, AI’s applications are expansive. And its potential impact is undeniable. But the best way to invest in AI innovation may not be so obvious.

When you think of AI, you may think of large language models like ChatGPT or massive data centers. But AI investment opportunities extend across the entire value chain and include building blocks for AI development, as well as the companies adopting AI to drive greater efficiency and broader technological innovation.

Similarly, the digital assets ecosystem has boomed in recent years — crypto market capitalization rose nearly 966% between August 2019 and March 2025.³⁴ As the market expands, instead of thinking only about coins, investors may want to consider the massive ecosystem enabling cryptocurrency — the miners, exchanges, tech providers, crypto services, fintech go-getters, and blockchain innovators.

And just like AI, the full potential and value-creation opportunities of blockchain and other enabling technologies are still unfolding. The crypto asset value chain now spans infrastructure (e.g., cloud computing, cybersecurity), next-gen payments (e.g., stablecoins, central bank digital currencies (CBDCs)), and smart contract automation. These advancements are streamlining transactions and improving data security in finance and a wide array of other industries — making it all the more important for investors to look beyond cryptocurrencies.

For digital asset ETFs, 2024 was the year of momentum, as still-developing (but favorable) regulatory frameworks, heightened institutional interest, and a growing global appetite for diversified crypto vehicles collectively helped drive ETF inflows.

Q: How do you see digital asset ETFs evolving in terms of accessibility, security, and investor confidence?

In the US, the current administration has committed to digital asset regulatory clarity and is in support of the broader ecosystem’s growth. As a result, digital assets and blockchain technology are expanding investors’ asset allocation toolkit and becoming integral to the future of finance. So too are digital

asset exposures. I think innovative exposures and strategies — such as derivative income, leveraged, staking-enabled, and a basket of cryptocurrency ETFs — will likely continue to grow over the next few years given increasing institutional adoption and strong retail demand.



Anqi Dong

Senior Research Strategist

In January 2024, the SEC followed other countries by greenlighting the first US spot bitcoin ETF, a watershed moment for digital asset integration into mainstream finance — providing investors with a regulated and accessible avenue for bitcoin exposure.

The immediate market response was substantial. The percentage of affluent investors* holding crypto or digital assets increased nearly 50% from March 2023

(21%) to August 2024 (31%).³⁵ ETF AUM tells a similar story — by December 2024, global crypto ETF AUM surged to US\$125 billion, a remarkable 255% year-over-year increase (Figure 18).³⁶

Unsurprisingly, digital asset momentum isn't limited to North America. In APAC, digital asset ETFs saw inflows of US\$209 million in 2024, bringing APAC digital asset AUM to US\$446 million.³⁷ In EMEA, assets in crypto ETFs had reached US\$9.4 billion by year-end 2024.³⁸

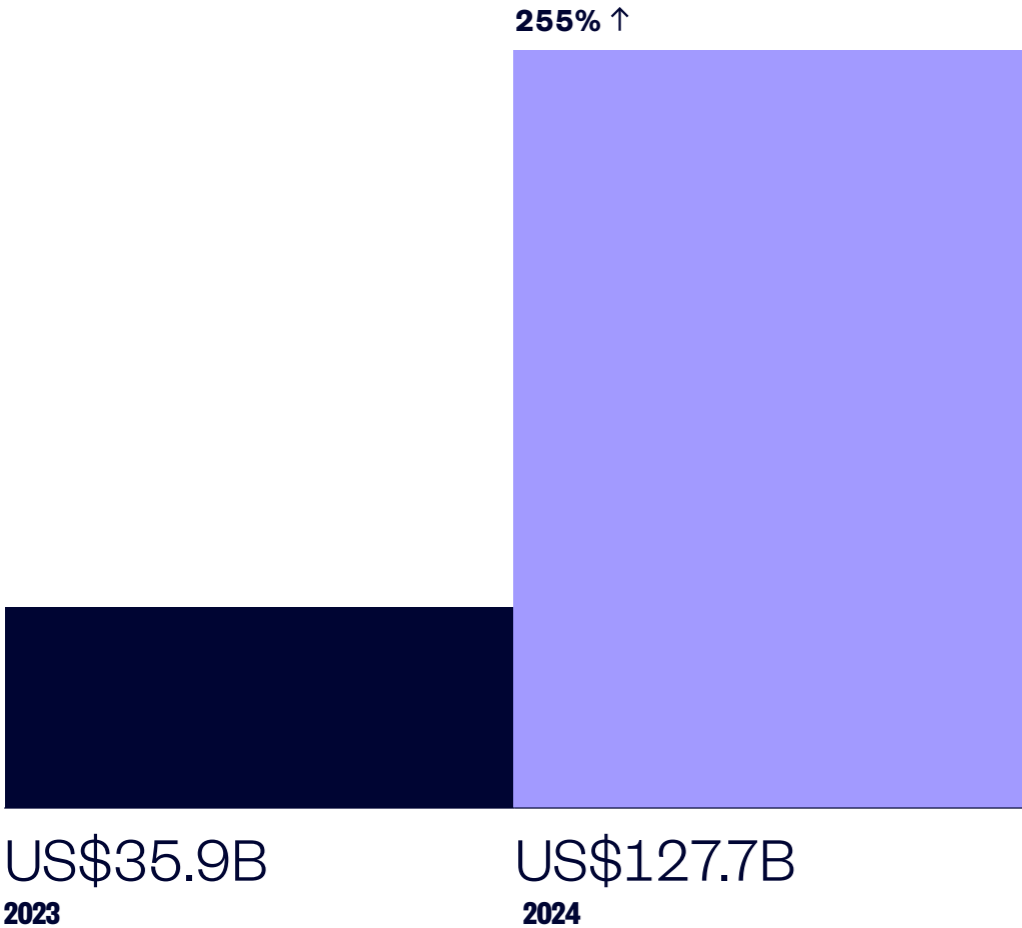
While some investors are approaching this still-youthful asset class cautiously, advancements in tokenization, CBDCs, regulatory efforts, and increased access to more diversified crypto-related exposures are helping them feel more comfortable investing.

From a portfolio perspective, the role of digital assets is evolving — where once they may have been viewed as speculative, more investors are now incorporating them as sources of potentially uncorrelated returns for portfolio resilience, alternative diversifiers, and to access the broader digital asset industry's long-term growth potential.

Despite current market volatility, 8% of investors[†] intend to increase their portfolio's crypto/digital assets allocation within the next 12 months.³⁹

Figure 18

Global Crypto ETF AUM Boasts 255% Increase YoY



Source: Bloomberg Finance, L.P., as of March 31, 2025. Category is comprised of funds that are identified as US Fund Digital Assets in Morningstar. Past performance is not a reliable indicator of future performance.

* Investors with US\$250k+ in investable assets

Figure 19

Bitcoin Exhibits Relatively Low Correlations to Stocks, Bonds, and Real Estate



Bitcoin/S&P 500® correlation⁴⁰

Bitcoin/US Aggregate correlation⁴¹



Bitcoin/US REITs correlation⁴²

[†] Investors with US\$25k+ in investable assets

Sustainability ETFs: Investing in the Future, Transparently

For investors with climate-related goals, sustainability is further rooted in portfolio construction, thanks in large part to regulatory momentum. That said, there are ongoing hurdles — particularly around sustainability data reliability and standardization.

A recent State Street Investment Management survey, *The Climate Opportunity*, found that 40% of EMEA-based institutions report difficulties in obtaining reliable climate-related data; the same percentage of respondents have trouble measuring the actual impact of climate investments.⁴³ Even so, many institutional investors who want to incorporate sustainability factors into portfolio construction are doing so, citing investment risk mitigation (34%) and regulatory compliance (26%) as primary drivers of their investment decisions.

In Europe, the EU Green Deal continues to align efforts toward making Europe climate-neutral by 2050. While energy efficiency remains a challenge, the initiative has driven capital toward clean energy projects and shifted reliance away from nonrenewable sources; half of the EU's electricity generation came from renewable sources in the first half of 2024.⁴⁴

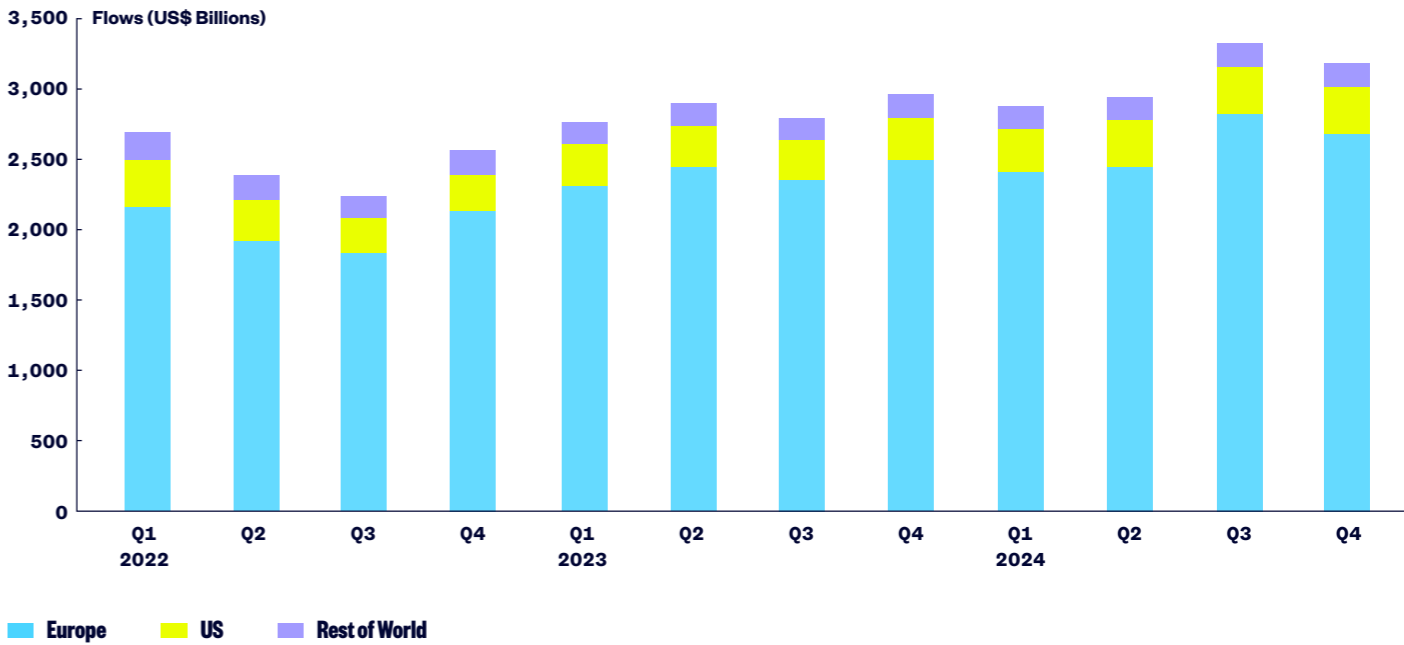
In the US, the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act opened the door for significant investments in clean energy, including renewables and electric vehicles. As of August 2024, about two-thirds of IRA funding had been awarded.* But with the January release of the Unleashing American Energy executive order, which temporarily paused clean energy incentives, the future of these investments and related projects remains unclear.

In APAC, sustainability policies are progressing at varying speeds across different markets. Japan's Green Transformation (GX) initiative is accelerating decarbonization through public-private investment partnerships, targeting a US\$1 trillion commitment over the next decade.⁴⁵ The ASEAN Taxonomy for Sustainable Finance is also taking shape, helping guide capital flows toward sustainable investments in the region.

Across regions, efforts are underway to attempt to standardize reporting requirements. The "Corporate Sustainability Reporting Directive" in Europe and the similarly named "Corporate Sustainability Disclosure Standards" in China are just a couple of examples. These mandates are collectively revamping how companies disclose environmental and social risks.

As regulatory oversight evolves and climate-conscious investments become more popular, staying apprised of these shifts could help investors navigate the risks and uncover new opportunities.

Figure 20
Global Sustainable Fund† Assets Are Growing Incrementally



Source: Morningstar Direct, as of March 2024.

Q: What thematic sustainability ETF categories do you see emerging?

In *The Climate Opportunity*, a study we recently commissioned surveying hundreds of EMEA-based institutional investors, we found that decarbonization continues to be a primary focus in the sustainability space. Nature and biodiversity is also drawing significant attention from these

same institutional investors. As data quality improves over time, investors who want to incorporate environmental considerations or other more distinct sustainability objectives into their investing will likely have more ETF solutions to choose from.



Dr. Xinting Jia
Sustainable Investing Strategist

* Brookings, "What will happen to the Inflation Reduction Act under a Republican Trifecta?" January 6, 2025.

† Fund is representative of open-end funds and ETFs.

Talk of the Trade

ETF Momentum and Macro Shifts



Chief Investment Strategist Michael Arone and Head of SPDR Americas Research Matthew Bartolini unpack **the growth drivers and macro forces set to define the next phase of ETF evolution.**

The Leading Drivers of ETF Growth

A Conversation with Chief Investment Strategist Michael Arone and Head of SPDR Americas Research Matthew Bartolini

In this exclusive interview, Chief Investment Strategist Michael Arone and Head of SPDR Americas Research Matthew Bartolini share their bold predictions for the global ETF market — from which segments are positioned for growth to strategies they expect to take the industry by storm. They also address what recent macro and market headwinds mean for investors.

Q: What are your predictions for global ETF AUM and the total number of ETFs five to 10 years from now?

Matthew: Last year, I predicted assets would reach US\$43 trillion by 2034. If we're sitting at US\$14 trillion right now, I see us as halfway to that figure — let's say US\$28 trillion, give or take — within the next five years.

Globally, the number of ETF strategies is also only going to grow. But it's difficult to predict a specific number because we're seeing a ramp up of multiple product and strategy variants or expressions launching at once. For instance, a fund might have a July series, an August series, and so on.

Or a pair of funds may launch that are virtually the same in their intended exposure, but one targets a 10% drawdown and the other, a 20% drawdown. There might be a group of funds that provides the same options overlay or active strategy, but one is based on the S&P 500® and another on the Russell 2000.

So, the number of strategies is difficult to predict — but I can say with confidence that I think people will be shocked by how many ETFs are in market 10 years from now.

“ The number of strategies is difficult to predict — but I can say with confidence that I think people will be shocked by how many ETFs are in market 10 years from now.”

Q: Given these growth predictions, which client segments do you think will account for a significant amount of growth in AUM?

Michael: From my perspective, I think four segments will lead the way in the ETF industry's rapid expansion:

1. Mass affluent investors — households with US\$1 to US\$5 million of investable assets — are growing at an incredible clip. And they're the segment most in need of financial advice. Why? Because they're not always able to access some of the more complex investment products out there. As a result, they are prime buyers of ETFs —

“ [Retail ‘do-it-yourselfers’ are] more comfortable accessing portfolios online through user-friendly apps — so, they're more likely to use tradable vehicles like ETFs to build portfolios.”

which can still give their portfolios the liquidity, reasonable costs, and transparency they need.

2. Retail “do-it-yourselfers” are another fast-growing group, particularly among younger cohorts. For younger investors, information is more readily available than it's ever been before. They're also more comfortable accessing portfolios online through user-friendly apps — so, they're more likely to use tradable vehicles like ETFs to build portfolios.

3. Middle-income and high-net-worth investors in emerging markets are a third fast-growing segment of the wealth management market, especially in regions like Latin America and Asia-Pacific. I think this investor group's wealth and use of ETFs will grow quickly in the next decade because they tend to adopt technology and innovative products at a much faster rate and may forego current accessibility in favor of newer technology.

For example, the growing middle-class and high-net-worth populations in emerging markets didn't use landlines in their homes — instead, they went straight to smartphones and other smart devices. In the same vein, they're bypassing older legacy investment products within their markets, like mutual funds, in favor of more modern or innovative products like ETFs.

4. And finally, institutions. They're already a large portion of the market. But with the proliferation in ETF numbers and more diverse exposures becoming available, as Matt mentioned, I think institutions will continue to look to ETFs to hedge risks through specific exposure or options strategies, amplify exposures, manage liquidity needs, and manage cash components.

Q: Can you get a little more specific on the role you expect institutional investors will play in the ETF market's evolution?

Michael: You know, it's interesting. We noticed that the bank loan category, a floating rate product, had been growing exponentially over the last year or so, at a time when the Fed was expected to cut rates. That seemed unusual. So, Matt and the research team did some work and uncovered that, given the growth in private credit

investments and the exposures that many of our institutional clients had, they were beginning to use ETFs in those categories as a way to gain liquid exposure with a similar risk/return profile as their private credit.

Going forward I expect — given the number of products, risk and return exposures, and the options that are written on a lot of these products — that institutions will continue to use ETFs in ways that allow them to manage their liquidity, hedge their risks, amplify exposures, and manage their cash needs.

“ Each [institutional segment] has different use cases and motivations for using ETFs — and I think they'll all underpin the future growth of this ETF industry.”

Matthew: I think the institutional category is such a melting pot of different investor segments. You have pensions, foundations, endowments, hedge funds, asset managers, and ETF strategists that are managing models. Then you have large sovereign wealth funds and insurance plans. The list goes on and each has different use cases and motivations for using ETFs — and I think they'll all underpin the future growth of this ETF industry.

At the same time, I might look at institutional usage as cyclical. Over the past 20 years, we've seen a broad shift to asset management insourcing — a trend represented within some pensions and endowment plans. But lately, they have been using more ETFs — especially as costs keep decreasing.

For some mandates, institutions may begin to view the cost-benefit analysis of having their own staff manage and trade a portfolio of securities as less attractive than owning, for example, an S&P 500 ETF for 2bps as part of a liquidity program or beta replication strategy. And then there's the way in which the broader growth of ETFs paves the way for insurance companies to use the products, which should help drive ETF AUM even higher.

Q: Let's talk macro for a moment. What macroeconomic factors do you see having the biggest impact on ETF flows over the next five years?

Michael: In many ways, the investment landscape and the asset management industry have been impacted by some structural forces over the past 40 years.

Think about 1982 to 2022 — an environment largely categorized by falling interest rates, benign inflation, a peacetime dividend between the world’s militarized superpowers, and globalization. Whether due to the pandemic, the populist movement, or the current environment, a lot of that has shifted.

There’s more deglobalization. The US is no longer the world’s singular superpower, and others are testing its global influence at a time when it is backing away and becoming more domestic focused.

All this results in greater geopolitical risk, elevated interest rates, and stickier inflation. What worked under that previous 40-year period — traditional 60/40 portfolios, for example — will be far less likely to work going forward. And, you may need to modify allocations to more diverse market segments as a result.

Matthew: From my vantage, as Mike alluded to earlier, demographics play a big role. Aging demographics will require more financial planning, which will likely lead to an increased use of model portfolios as a one-stop shop for asset allocation. Given that ETFs continue to gain market share within models broadly, as the use of models grows, so should assets in ETFs. Fundamentally, I think we’ll see a bigger shift out of traditional stock/bond portfolios and into managed solutions, particularly as investors age and become more tax sensitive.

We also have to appreciate that, for younger investors, ETFs are not a new investment vehicle to learn and understand. In some cases, ETFs have been around longer than the younger segments of investors have been alive. For Gen Z and many millennials, ETFs are a traditional investment — I think that familiarity will help propel market growth.

We’re already seeing that preference for the ETF vehicle reflected in flows, regardless of what’s happening in the market. In 2022, for example, when stocks and bonds were both down, we still saw sizable inflows into ETFs. And even at the start of 2025 when equities sold off, ETFs still had record flows in Q1. I think we’ll likely see that continue over the next decade.

“ What worked under that previous 40 -year period — traditional 60/40 portfolios, for example — will be far less likely to work going forward. And, you may need to modify allocations to more diverse market segments.”

“ In some cases, ETFs have been around longer than the younger segments of investors have been alive. For Gen Z and many millennials, ETFs are a traditional investment — I think that familiarity will help propel market growth.”

Q: Early adopters of ETFs prioritized cost efficiency, liquidity, and transparency. As ETFs continue to evolve, what do you see as the next major catalyst of global adoption?

Matthew: As more sophisticated use cases for ETFs emerge, I think access, customization, and efficiency — what I call ACE — grow increasingly important and I expect will be a major catalyst of adoption globally. Let me break it down:

- **Access:** Investors want more transparent access to markets that are hard to reach. Think private markets, which I’m getting asked about all the time.
- **Customization:** Investors want products that deliver a greater level of customization to their portfolios in a very focused, transparent way.
- **Efficiency:** As more complex investment use cases emerge, investors need to know how efficient a fund will be in providing more complex return streams or delivering the outcomes they seek.

Michael: When most investors think about their investment portfolio, they’re thinking about risks and returns. And so, from my perspective, I think that these will be the next catalysts for how folks allocate.

Matt just talked about that outcome orientation to help tackle investors’ objectives. Under a lot of the scenarios I’ve been describing — globalization, peacetime dividends, falling rates, and benign inflation — most assets have done exceptionally well. If these things are beginning to shift, returns, exposures, and outcomes will become that much more important compared to a fund’s costs, transparency, or liquidity profile.

In the past, investors were asking questions like, “What exposure am I getting at what cost? At what tax efficiency? And at what liquidity profile?” But as the ETF industry has opened itself up to more complex products and a more dynamic market, investors will start to ask “What return am I getting for what level of risk?”

Matthew: If investors are looking to better identify returns and risk patterns, I think they could end up feeling a bit frustrated. A lot of active and more complex strategies are emerging, but the ability to provide a back test or show a proxy of historical returns is often limited by regulatory constraints.

That means investors will need to evaluate an ETF’s ability to deliver the desired outcome based on other factors. That’s where the credibility of the asset manager or fund issuer matters. Faith in the ETF’s ability to perform as expected will depend, in large part, on the perceived credibility of the manager. Without a back test, the manager’s expertise and ability to educate on the fundamental drivers or philosophical beliefs that underpin the strategy will set investor expectations on the range of outcomes. I think that will be true whether it’s a brand-new strategy or an investment approach previously accessible only to a certain investor base.

Michael: Absolutely. The point is that risk and return will become a far more important part of the ETF conversation moving forward, especially given the choices today.

Q: Given the macro shifts you talked about and the more recent market volatility, how do you anticipate investor preferences or allocations shifting?

Michael: In the past 30 years, we’ve seen a massive transformation in how capital is allocated. In 1996, US public-listed stocks reached their peak at a little more than 8,000. Today, that number is closer to 4,300. Just a few decades ago there were only about 1,900 US companies that worked with a private equity investor. Today, that number is more than 12,000. In the past decade alone, private credit has quadrupled and is now roughly the same size as listed high yield fixed income bonds.

The ETF industry will evolve along the same lines. In many ways, the industry has democratized investing for a broader group of investors — giving them access, a lower cost point, and greater liquidity. Going forward, I think we’ll begin to see a transformation that moves ETF allocations in a direction similar to how capital is allocated today.

Given the structural changes Matt and I highlighted, I think more ETFs will be launched and assets will amass in areas that are more outcome oriented. Investors will ask more questions, like, “What outcome am I trying to achieve?” They may be motivated to get a return that protects their capital or is greater than inflation.

I also think we’ll see investors allocate more money to real assets, private markets (both equity and credit), real estate, and alternatives with ETFs.

Q: What about the elephant in the room... tariffs? What effect could they have on the global ETF industry?

Michael: On April 7, the average stock was down 26% from its 52-week high. At the time of this interview, the stock market is in decline — a reaction to President Trump’s Liberation Day reciprocal tariff whiplash and China’s retaliation.

The way I see it, there are a lot of potential bad outcomes from the Trump administration’s attempt to transform the global trading system — rising prices, slowing growth, and increasing unemployment. I don’t believe Trump’s trade policy will balance the trade deficit, raise revenues, restore manufacturing jobs, eliminate fentanyl from entering the country, or end illegal immigration. That’s just smoke and mirrors. Political posturing. But if Trump’s reciprocal tariffs do result in a global reduction in trade barriers, then that would be a positive outcome for the global economy.

I assume it will take several months or even quarters for the Trade War to play out. With capital market volatility likely to remain elevated, I’m encouraging investors to consider safe havens like gold, defensive sectors, services versus goods, dividend growers with stable earnings, and alternatives to traditional 60/40 portfolio allocations.

“ With capital market volatility likely to remain elevated, I’m encouraging investors to consider safe havens like gold, defensive sectors, services versus goods, dividend growers with stable earnings, and alternatives to traditional 60/40 portfolio allocations.”

Matthew: Tariffs are meant to be used as a bargaining chip across different countries to create more balance and order within a global trade dynamic. But increasing the economics of trade may have a second order effect of reducing financial investment in US assets. Consider the fact that the US’ share of global GDP is about 20%, but our share of global market capitalization is roughly 70%, well above our GDP. And the US’ share of globally listed ETF assets is about 78%.

What happens if geopolitical tensions brought on by more mercantilist trade policies all of a sudden create firmer boundaries within investor preference and choice? For example, will some European investors no longer want to buy US equities or US-listed exposures? Or maybe cross-listing suddenly becomes much more difficult in Asia-Pacific because regulators may view the US as not working in the most collaborative manner.

Mike talked about the peacetime dividend earlier. One of its byproducts is this idea of global coordination. But if you lose global coordination and become more insular, what are the ramifications? Will a European pension plan no longer want to seed a fund from a US asset manager because locally the politics are such that investors are advocating for boycotts? Or maybe aggressive trade policies toward key US allies will reduce the number of foreigners who want to hold US equities. And less capital flowing into the US could impact the strength and market value of the asset class as well as ETF AUM growth.

Trade policies that are very restrictive and domestically focused on increasing US GDP — which, remember, only represents 20% of the global GDP — could be detrimental to investments, specifically US-listed ETFs, that make up a much greater share of the markets. As a result, perhaps European-listed ETFs, and other locally domiciled ETFs, start to gain more flows or become a bigger market because investors will be buying on their local exchanges.

Q: Let's talk global markets, then. Which regions do you believe are on the cusp of major ETF adoption? And what factors are driving this?

Matthew: I see Japan as the market best poised for ETF adoption. Japan is sitting on a pile of savings excess, and so local regulators are incentivizing citizens to invest some of that savings through increased investment limits and tax allowances into Nippon Individual Savings Accounts (NISAs). This will push savings into markets where they can potentially invest that money.

If we think of the US as historically having always been at the forefront of market expansion, I think Japan is going to try and play catch up because they have so much in savings. And, that could spur consumption and wealth transfers due to the country's aging demographic base.

“ I see Japan as the market best poised for ETF adoption. Japan is sitting on a pile of savings excess.”

Q: Will the next phase of ETF growth be driven more by product innovation or by new investor demographics and emerging investor needs?

Michael: I actually think it will be the intersection of all three. When ETF providers attempt to launch products focused on just one of these things, it often falls flat.

So, asset managers first need to identify the investment need, followed by the challenge we're trying to solve for. Afterward, we have to determine how we create an ETF structure that may be different or innovative compared to what's already out in the marketplace. Finally, we have to evaluate the emerging trends and what types of investors would buy this particular asset exposure in an ETF.

When you do any of these in isolation, it can result in a flawed vehicle or an ETF that doesn't meet the expectations of either the investment community or the provider.

Q: I'm interested to hear what role(s) you see the use of technology and data playing in shaping the next generation of ETFs?

Matthew: You know, it's easy to say we should use blockchain and distributed ledger technology with ETFs. There's one currently doing that in Europe. But ultimately, it's a nice-to-have, not a must-have. A lot of the buyers of these ETFs operate within heavily regulated entities — large, global, systemic, influential banks — so I think there's a limit to how much new technology can be applied within the walls of older infrastructure in the near-to-medium-term.

But I do think we could see technology integrate more seamlessly with portfolio modeling over the next several years.

Right now, there's too much product and too much noise in the industry. So, it's not surprising that one of the questions I get asked most is where a specific product belongs in a portfolio, especially when it comes to alternatives and other more sophisticated ETF strategies. I can imagine a technology solve for this. An investor could pose this question to AI, which could show you exactly what role an ETF could play, even if it's a brand-new product.

If technology could pinpoint the exact role an ETF could play in a portfolio — and the outcomes it could potentially provide from a risk, return, income, and volatility perspective — that could spur ETF adoption as a whole.

Michael: To Matt's point, when Markowitz considered Modern Portfolio Theory, he was limited by computing power. But as tech has evolved, so have investment strategies and model development.

“ Technology will ultimately help us break down more traditional structures, like the 60/40 or the 9-style box, to develop more interesting portfolio outcomes: income-oriented, options-oriented, and others.”

I think that technology will ultimately help us break down more traditional structures, like the 60/40 or the 9-style box, to develop more interesting portfolio outcomes: income-oriented, options-oriented, and others. It all goes back to Matt's point about how technology could help model that completely, or at least make those allocation decisions easier.

Matthew: But we're definitely not there yet with current AI platforms. My friend did his fantasy baseball prep using a popular AI platform and used the outputs to build his roster. He's currently in last place. So, I wouldn't trust it to build an investing portfolio quite yet.

Q: If you had one prediction about the ETF industry in 2025 and beyond, what would it be and why?

Michael: This is a tough one. But I'd say that right now, broadly speaking, active ETFs make up roughly 9% of the AUM but almost 40% of the flows. And so, my bold prediction for the immediate future and beyond is that active inflows will either be equal to — or greater than — index ETF flows. I don't know if that's big and bold, but I think that's the direction we're headed.

“ Active inflows will either be equal to — or greater than — index ETF flows.”

Matthew: I think that's a good one. Along the same lines, active ETFs have largely been a US phenomenon. But I think we'll see active ETFs outside the US gain significant market share in 2025 and beyond, as other markets start to catch up to what the US has been able to do and as global asset managers replicate US learnings and success.

US-listed ETFs make up 80% of global active fixed income ETFs. The other 20% outside the US has been gaining traction. So, I think it will increase significantly from here, not just within active fixed income but equities and alternatives too.

Q: Last question. What's one key piece of advice you'd give investors as they position their portfolios for the next five years?

Michael: The bond market experienced a bull market from 1982 to 2022, largely driven by falling rates and benign inflation over that timeframe. Ever since 10-year Treasury yields broke through 4%, which was back in September of 2022, investors have either expected rates to fall or flirted with the idea of extending maturities to lengthen duration in their portfolios. And this has been as volatile as investing in the stock market.

If rates and inflation are higher, more volatile, and stickier than anticipated, stocks will do fine. Provided the economy is growing and earnings are growing, they'll remain a good inflation hedge. That's proven to be the case this time around.

But bonds may struggle after a very prolonged period of bullishness. If that's the case, investors need something to complement their stock portfolio. Bonds may or may not be that, since they've shown the same risk and return characteristics over the past four decades.

It may be wise for investors to hold a bit more real assets — such as real estate, infrastructure, commodities, natural resources, or precious metals like gold — in their portfolios. Depending on what they choose and how they build it, they can generate income from those allocations as well.

Investors don't have to give up all the income that bonds generate, but should rates be stickier and inflation higher than expected, their real asset portfolios should do well. In these volatile, early days of 2025, having a greater allocation to a diversified basket of real assets would have benefitted investors. And I think that may be the case going forward.

We've seen fewer and fewer investors continue to use the 60/40. But those still using it might consider a 60/30 and 10% allocated to a diversified portfolio of real asset ETFs.

Matthew: With so much noise and information out there, it can feel impossible to make sound investment decisions. In the US alone, investors have 4,000 ETFs to choose from. So, especially when more complex products emerge, investors should take the time to understand the product, who the manager is, and the role they play in the product.

“ Don’t just buy the shiny new toy because its new. Instead, frame all investments, new or old, around how a solution may help build a portfolio that can preserve wealth, generate income, and compound over time in a risk-managed way.”

If you do those four things over the long-term — 20, 30, 40 years — past stock market performance shows us that you’ll likely have a sizable nest egg in the end that you can use to retire, leave a legacy, do philanthropic work, or whatever it is your goal might be.

Matthew: That’s absolutely true. While nothing is guaranteed, history shows investors have to withstand some down periods to generate positive returns over time — that means staying in the market for the long haul.

I do think there’s a fine line between charlatans and geniuses. What I mean is, when there’s a lot of success in the marketplace, there can also be a lot of imitators who bring new products to market that may be more marketing intelligent than investment intelligent.

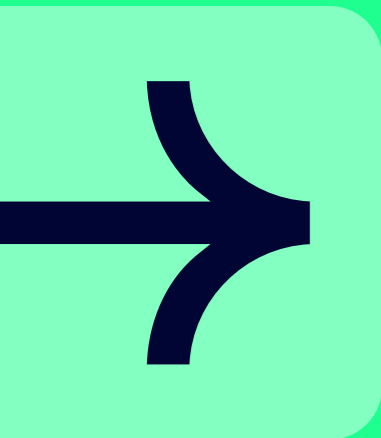
My advice to investors? Don’t just buy the shiny new toy because its new. Instead, frame all investments, new or old, around how a solution may help build a portfolio that can preserve wealth, generate income, and compound over time in a risk-managed way.

Michael: For me, it comes down to keeping it simple. Investors want to get lucky on these rare, one-off stocks that boom — like NVIDIA or Apple. That’s not reality for most of us. I believe with conviction that there’s a four-part formula for investors looking to build wealth over the long-term:

1. Embrace the benefits of diversification.
2. Keep costs reasonable.
3. Keep taxes efficient.
4. Invest 20% of your total income every year.

“ There’s a four-part formula for investors looking to build wealth over the long-term: embrace the benefits of diversification, keep costs reasonable, keep taxes efficient, and invest 20% of your total income every year.”

Top Predictions On Future ETF Growth



What's next for ETFs? From record-shattering AUM to technology-led breakthroughs to expansion into new markets, here are **nine bold predictions about the growth of ETFs** in 2025 and beyond.

1 The global ETF market takes in US\$2 trillion in 2025

If 2024 proved anything, it's that investors hold ETFs in high regard — a sentiment supported by steady ETF industry growth year over year. In 2025, budding international adoption and demand from sovereign wealth funds could springboard the global ETF market to its strongest year ever — we predict global ETF flows will hit US\$2 trillion by year-end.

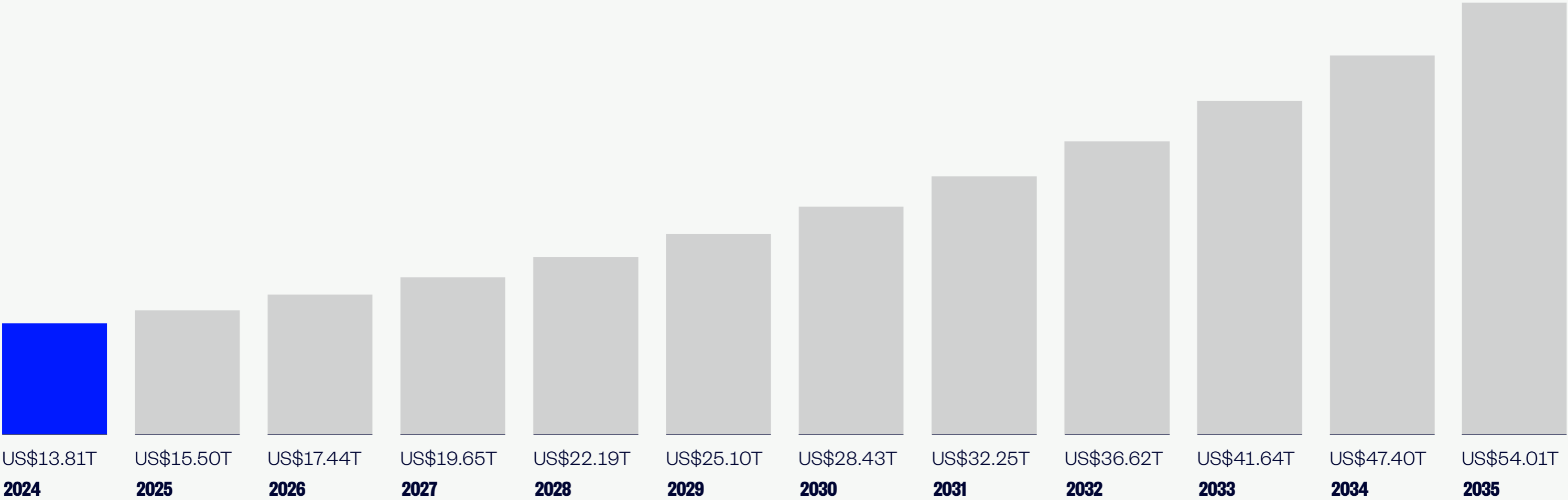
Riding last year's record-setting US\$1.48 trillion momentum,⁴⁶ international ETF inflows could double, with regulatory advancements, expanded product offerings, and increased accessibility continuing to attract investors.

Sovereign wealth funds in the Middle East are expected to play a notable part in ETF demand.

Another tailwind is the ongoing migration from mutual funds, as more investors recognize ETFs' potential structural advantages, namely their liquidity, tax efficiency, and cost. With active ETFs capturing an ever-larger slice of the pie and new alternative exposures expanding the investable universe, expect ETF growth to continue its rapid ascent.

In the first three months of 2025, the global ETF market has taken in US\$431 billion.⁴⁷

Figure 21
Anticipating the Surge: Global ETF AUM Growth Projections



Source: Morningstar Direct, as of March 31, 2025. Past performance is not a reliable indicator of future performance.

2

Global gold fund AUM will crack US\$500 billion by 2026

Gold has long been a staple of portfolio hedging strategies, but its role is evolving. With persistent inflationary pressures, general economic uncertainty, and geopolitical risks mounting, investors are increasing their allocations to gold.

Gold ETFs have posted inflows of US\$21 billion so far in 2025, bringing total AUM to US\$345 billion⁴⁸ — a sizable resurgence from a year ago. In addition to investor demand, banks are a major catalyst for growth in gold investing, especially in emerging markets, and have been net buyers of gold every year for the past 15 years.⁴⁹

This aggressive pace should continue, as governments diversify dollar-heavy reserves in response to de-dollarization trends and investors hedge portfolios against economic headwinds. Coupled with rising gold prices, we expect global gold ETF AUM to nearly double in the near term and surpass US\$500 billion by 2026.⁵⁰

US\$345B

Total gold ETF AUM, as of March 31, 2025⁵¹

With persistent inflationary pressures, general economic uncertainty, and geopolitical risks mounting, many investors are increasing their allocations to gold.

3

Global active fixed income ETF AUM will hit US\$700 billion by the end of 2026

Active fixed income ETFs have cemented their place in portfolios. Global active fixed income ETF AUM stands at US\$350 billion, as of December 31, 2024.⁵²

While US demand has been a primary driver, we anticipate non-US markets will propel the asset class's next wave of expansion. Institutional investors across Europe and Asia are turning to actively managed bond ETFs as tools to deftly manage duration, allocations, and yield. As global central banks pivot from rate hikes to rate cuts, investors are re-evaluating bond positioning and leaning on active ETFs for real-time adjustments.

This momentum should accelerate substantially over the next year and a half — we expect global active fixed income ETF AUM to reach US\$700 billion by year-end 2026.

US\$350B

Global active fixed income ETF AUM, as of December 31, 2024⁵³

4

Bank loan and CLO ETF AUM will overtake traditional high yield by 2026

The search for yield never stops. Today, it's leading investors away from traditional high-yield bonds and toward the relatively young but ever-expanding market of bank loan and collateralized loan obligation (CLO) ETFs. As of March 31, 2025, the former (US\$118 billion) still has a sizable AUM lead over the latter (US\$54 billion)⁵⁴ — but not for long.

The gap should diminish this year, as both institutional and retail investors with newfound market access turn to CLO ETFs. Thanks to generally higher credit quality relative to standard high-yield bonds, lower duration risk, and income-generating potential, securitized credit products are likely to play an even larger role in fixed income portfolios in 2025.

CLO ETFs are on a particularly historic run. Total AUM swelled from just US\$120 million in 2020 to more than US\$46 billion during 2024 alone.⁵⁵ By 2026, we project the AUM of bank loan and CLO ETFs will exceed that of traditional high-yield bond ETFs.

Figure 22

High-yield Bond ETF AUM vs. Bank Loan and CLO ETF AUM in 2024



Source: Bloomberg Finance, L.P., as of March 31, 2025.

5

AI will lead thematic ETFs to record flows in 2025

In 2023, AI-themed ETFs stormed onto the scene, as excitement around generative AI reached a fever pitch. In 2024, the proverbial dam broke as investors sought exposure to the companies driving the next era of AI innovation. Now, in 2025, AI is rapidly assimilating across industries, uncovering new applications and efficiencies on what seems like a daily basis.

Thematic ETFs, especially those centered on AI, are on pace to post record flows this year. Through February, thematics had US\$2.4 billion of inflows — the largest two-month haul since 2021.⁵⁶ Robotics and AI-focused ETFs have been primary drivers, pulling in approximately US\$1.1 billion and easily outpacing other popular themes.⁵⁷

As capital flows into high-growth innovation-oriented sectors, other thematic ETFs — such as Future Security and Enhanced Connectivity & Exponential Processing Power — should also benefit. With AI at the helm, 2025 could unfold as a defining year for thematic investing.

US\$2.4B

Through February, thematics had US\$2.4 billion of inflows⁵⁸

50%

Nearly 50% (US\$1.1B) of thematic ETF flows come from robotics and AI-focused ETFs⁵⁹

6

More AI-powered ETFs will run on blockchain

AI isn't just an investment theme, it's also changing the way investments are managed. Last year, AI-powered ETFs — those using machine learning models to support asset selection, risk management, and portfolio rebalancing — picked up momentum.

While we certainly don't expect robots to replace fund managers, integrating this sophisticated technology into portfolio construction and monitoring could offer efficiency benefits worth monitoring.

As the underlying technology iterates and improves, we expect more of these products to launch in the near future.

AI-powered ETFs — those using machine learning models to support asset selection, risk management, and portfolio rebalancing — picked up momentum.

7

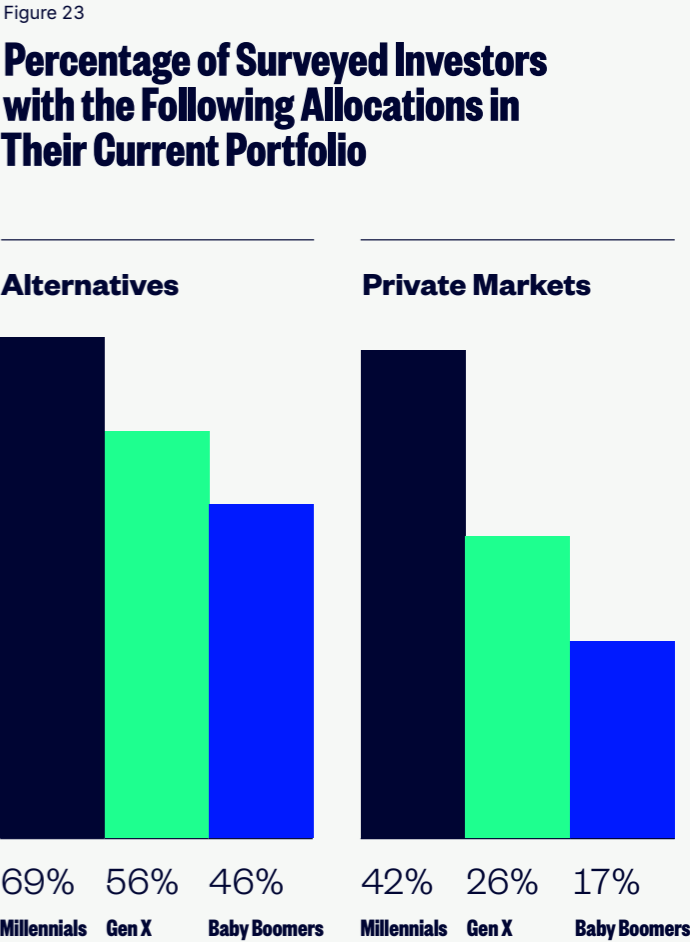
Private & public markets will blur thanks to ETFs

Historically, the line between public and private has been indelible. The former being open and accessible, with the latter generally reserved for institutions and ultra-wealthy investors. Today, after plenty of scrubbing, the line doesn't seem so distinct — in fact, it's starting to blur.

Unsurprisingly, the driving force of the private-public blur is growing investor demand. Millennials, in particular, are pushing this trend forward. According to the 2025 ETFs in Focus Study, 69% of millennials invest in alternatives, compared to 56% of Gen X and 46% of baby boomers.⁶⁰ The generational gap is even broader in private markets specifically — 42% of millennials hold private assets, versus only 26% of Gen X and 17% of baby boomers.⁶¹

Advisors tend to see things similarly; allocating to alternatives is the top risk management strategy utilized by advisors, according to our survey. Moreover, eight in 10 advisors agree that alternative investments play a valuable role in long-term planning and retirement planning strategies.⁶²

ETFs are poised to help meet this demand by providing easier access to private markets.



Source: State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: Please indicate whether or not your current investment portfolio contains each of the following. | Base: Total

8

Alternative ETFs will go mainstream

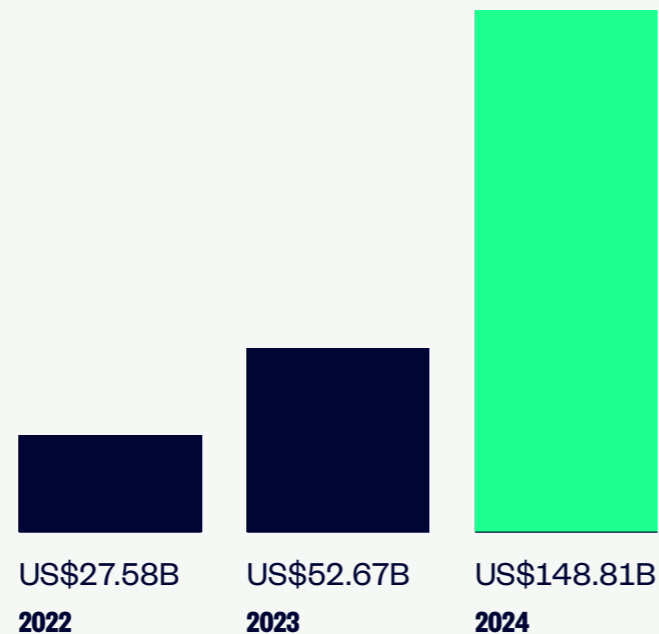
Institutional investors are quite familiar with alternative investments, leveraging these assets for additional diversification, hedging, and return-enhancing potential. Individual investors, on the other hand, haven't been able to reap the same benefits — too many barriers to access. That's changing.

Alternative investment ETFs, which package exposures like commodities and digital assets into a more accessible investment wrapper, have experienced record-breaking adoption in the past year. In the same vein, alternative strategy ETFs are finding their way into more portfolios as well — two trajectories we expect will trend further upward.

As innovation drives new product development and investors grow more comfortable making room for non-traditional asset classes in their portfolios, we expect alternative-based ETFs to evolve from a niche segment to a mainstream portfolio component by 2026.

Figure 24

Three-year Growth of Alternative AUM



Source: Morningstar Direct, as of February 28, 2025.
Past performance is not a reliable indicator of future performance.

9

Multi-share-class innovation will reshape retirement

What if the retirement industry and everyday retirement investors could benefit from the same cost efficiencies and innovation driving the incredible growth of the ETF market? We predict the emergence of a dual share-class structure for mutual funds and ETFs will bring many of the key advantages of ETFs to retirement savers, including defined contribution (DC) plan participants.

While the widespread ability to invest directly in ETFs within retirement plans still faces operational hurdles, it's broadly expected that the SEC will offer exemptive relief that allows a mutual fund to offer a class of ETF shares, and ETFs to offer a class of mutual funds shares. More than 50 investment managers have already filed for relief.⁶³

If granted, this new share class structure has the potential to reshape 401(k) investment options. This means retirement savers would potentially benefit from lower costs and a broader range of investment strategies and asset classes to choose from, while still investing in familiar mutual fund structures.




While we believe direct ETF investment in 401(k) plans remains a longer-term possibility for the industry at large, we predict the new multi-share-class structure could help the retirement industry expand its offerings now. A multi-share-class structure could help deliver benefits of scale to shareholders, while maintaining the same operational model that recordkeepers and employers have come to rely on.

“ While the SEC has not yet granted the Share Class Relief, to date the SEC has received over 50 applications from mutual fund and ETF sponsors across the industry, collectively representing trillions of dollars in fund AUM.”

Ropes & Gray
Share Class Structures for Mutual Funds/ETFs,
March 2025

How Our 2024 ETF Predictions Played Out

Last year, we forecast what we believed would be key catalysts of future ETF growth. Some of our calls hit the bullseye, others went a bit wide. Here’s a no-spin look at how the future actually unfolded.

Prediction	Did We Get It Right?	Our Commentary
Mutual fund conversions will ramp up		Perhaps this was low-hanging fruit, but mutual fund-to-ETF conversions trended in 2024. In the US, 56 mutual funds converted to ETFs, representing US\$7.08 billion in assets. Asset managers continue to embrace ETFs for their tax efficiency and liquidity benefits, and there’s no reason to think the conversion pipeline will dry up in 2025.
Active ETFs will grab a bigger slice of the pie		Active ETFs continued their ascent in 2024, capturing US\$94.3 billion in global inflows (just over 32% of all ETF flows). Fueled by product innovation, budding investor demand, and ongoing mutual fund conversions, active fixed income ETFs surpassed US\$100 billion in AUM for the first time.
Non-US markets will make considerable noise		Demand for ETFs grew across the globe in 2024, with non-US markets contributing US\$378 billion in inflows. Europe’s ETF market surpassed US\$2 trillion AUM, while APAC’s ETF segment grew 13.26% year over year to US\$863 billion. And, Japan saw tailwinds from policymakers’ increased investment limits and tax allowances in NISAs. In last year’s report, we suggested keeping an eye on the EU’s Consolidated Tape initiative, which aims to enhance market transparency and price discovery. This January, the European Commission provided an update, confirming that the derivatives consolidated tape tender process will begin in Q1 2026, giving regulators and market participants time to establish the necessary infrastructure.
Younger investors will continue increasing allocations to ETFs	Not Quite	Last year, we highlighted that younger generations (particularly millennials) prefer ETFs over traditional mutual funds. While that’s still true, our research shows that only 47% of millennial respondents reportedly hold ETFs in their portfolios, compared to 58% last year. ⁶⁴
Model portfolio growth will broadly spur ETFs		Model portfolio assets totaled US\$5 trillion in 2023; ETFs comprised 51% of model portfolios at the time. By the end of 2024, model portfolio assets reached US\$6.6 trillion, with ETFs accounting for 53% of the pie. This market still has a ways to go to meet the US\$11.8 trillion projection, but one step (and year) at a time.
Sizable inflows beyond stocks and bonds		Alternatives have strengthened their foothold in global portfolios, as investors continue to look outside the “Big Two” for less correlated assets. Retail and institutional investors were true to their word and increased allocations to alternative investments as planned, per our survey. By Q2 2024, investors worldwide had put US\$43.5 billion into alternative funds, bringing alternative AUM to US\$148 billion. ⁶⁵

One Chapter Ends Another One Begins

Another eventful chapter of the ETF's decades-long story has been chronicled.

A Storied Past

Since the launch of the SPDR® S&P 500® ETF Trust more than 30 years ago,⁶⁶ ETFs have grown exponentially not only in market share but also in products and use cases. While they still offer their foundational benefits of improved liquidity and cost efficiency, ETFs have evolved into more sophisticated portfolio tools as well.

A Dynamic Present

Markets are never predictable — 2024 was no exception. And, 2025 seems to be following its lead. But if there's one lesson investors have learned over the years, it's this: *adaptability matters*. ETFs have expanded beyond their passive origins into versatile instruments that help investors capitalize on opportunities and mitigate risks.

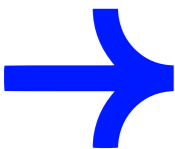
A Resilient Future

Not knowing what's coming next can feel daunting to investors, but the versatility of ETFs makes facing the future more energizing. From the rapid adoption of active and alternative ETFs to the continued integration of digital assets and private markets, the industry's skyward climb will continue to be sparked by investor demand for versatility. And it's that versatility that equips investors to stay resilient and ready for whatever comes next.

What Will Your Role Be in the ETF Story?

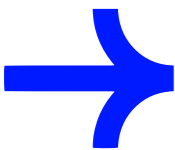
While we predict the ETF market will continue to flourish, growth alone isn't the story — investor needs are evolving, and markets will undoubtedly present new challenges.

Whatever unfolds, we're listening, adapting, and innovating to help you seize new opportunities and respond to unexpected headwinds. Whatever your goal, desired outcome, or destination, we're committed to providing ETF solutions and insights that help you get there.



Get In Touch With Us

For more insights and investment strategies, connect with your State Street Investment Management representative.



Explore More Resources

Access key ETF and investment strategy insights to stay ahead of the curve in a market that never stops moving.



ETF Education
Everything you need to know about ETFs.



Market Trends
The latest market commentary, macroeconomic perspectives, and ETF flows data.



Other ETF Insights
The latest research and timely insights from State Street Investment Management.

Getting There Starts Here With State Street Investment Management

State Street Investment Management serves governments, institutions and financial advisors with a rigorous approach, breadth of capabilities and belief that good stewardship is good investing for the long term. As pioneers in index and ETF investing and the world's fourth-largest asset manager,⁶⁷ we are always inventing new ways to invest.

US\$4.7T

in assets⁶⁸

US\$2.95T

in AUM with institutional clients⁶⁹

US\$1.42T

in AUM with financial intermediary clients⁷⁰

1st

US's first, and world's most traded, ETF⁷¹

45 yrs

Managing investments

58

Countries with clients⁷²

10

Global investment centers⁷³

Endnotes

- 1 The SPDR® S&P 500® ETF (SPY) is a U.S. domiciled ETF. The Singapore domiciled SPDR® S&P 500® ETF Trust (S27) was first listed on the SGX on 4/05/2001.
- 2 Morningstar Direct, as of December 31, 2024.
- 3 Morningstar Direct, as of December 31, 2024.
- 4 Morningstar Direct, as of December 31, 2024.
- 5 Morningstar Direct, as of December 31, 2024.
- 6 Morningstar Direct, as of December 31, 2024.
- 7 Morningstar Direct, as of December 31, 2024.
- 8 Morningstar Direct, as of December 31, 2024.
- 9 State Street Investment Management, Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following statements? (5 -point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Currently Have ETFs in Portfolio
- 10 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following statements? (5 -point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Currently Have ETFs in Portfolio
- 11 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree that alternative investments provide effective downside protection during periods of market volatility? (5-point scale: 1 “Disagree Completely” to 5 “Agree Completely”) Agree = Top 2 Box | Neutral = Middle Box | Disagree = Bottom 2 Box | Base: Aware of Alternative Investments
- 12 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following statements? (5-point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Aware of ETFs
- 13 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following statements? (5-point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Aware of ETFs
- 14 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following statements? (5-point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Total
- 15 Morningstar Direct, as of March 31, 2025. Average prospectus net expense ratio for ETFs and open end mutual funds as defined by Morningstar.
- 16 Bloomberg Finance, L.P., as of April 3, 2025.
- 17 “Gold Demand Trends - Third Quarter 2024,” World Gold Council, October 30, 2024.
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- 19 Morningstar Direct, Bloomberg Finance, L.P., as of February 28, 2025.
- 20 State Street Investment Management, Bloomberg Finance, L.P., MSCI, as of March 31, 2025.
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- 23 Bloomberg Finance, L.P., as of December 31, 2024.
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- 27 Morningstar Direct, as of December 31, 2024.
- 28 Morningstar Direct, as of December 31, 2024.
- 29 Morningstar Direct, as of December 31, 2024.
- 30 “ASIC extends relief to actively-managed ETFs,” Financial Newswire, March 19, 2024.
- 31 Bloomberg Finance, L.P., as of April 3, 2025.
- 32 Morningstar Direct, as of February 28, 2025.
- 33 Bloomberg Finance, L.P., as of December 31, 2024.
- 34 “Crypto Total Market Cap, \$,” tradingview.com, market cap evaluated from August 31, 2019 – March 31, 2025. <https://www.tradingview.com/symbols/TOTAL>
- 35 State Street Investment Management Research Center, 2024 Gold ETF Impact Study, July 2024. Question asked: Do you currently have the following in your investment portfolio? (Mar/Apr 2023=1,000, Jul/Aug 2024=1,502) | Base: Investors with US\$250k+ in investable assets
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- 37 Morningstar Direct, as of February 28, 2025.
- 38 Morningstar Direct, as of February 28, 2025.
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- Questions asked: Please indicate whether or not your current investment portfolio contains each of the following? Base: US\$25k IA, Total; For each of the following, what do you plan to do with your investment allocation over the next 12 months? (Keep the Same, Increase, Decrease): Base: US\$25k IA, Total
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- 41 Bloomberg Finance, L.P., as of March 31, 2025. The Expanded Correlation Matrix tracks a 6-year correlation period of XBTUSD against the Bloomberg Aggregate Bond Index.
- 42 Bloomberg Finance, L.P., as of March 31, 2025. The Expanded Correlation Matrix tracks a 6-year correlation period of XBTUSD against the MSCI US REIT Index.
- 43 State Street Investment Management, The Climate Opportunity, 2024.
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- 48 Bloomberg, Company Filings, ICE Benchmark Administration, World Gold Council, as of March 31, 2025.
- 49 World Gold Council, Gold Demand Trends - Fourth Quarter 2024, as of December 31, 2024.
- 50 State Street Investment Management, as of March 31, 2025.
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- 54 Bloomberg Finance, L.P., as of March 31, 2025.
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- 60 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: Please indicate whether or not your current investment portfolio contains each of the following. | Base: Total
- 61 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: Please indicate whether or not your current investment portfolio contains each of the following. | Base: Total
- 62 State Street Investment Management Research Center, 2025 ETFs in Focus Study: Risk Management Attitudes and Behaviors, January/February 2025. Question asked: How much do you agree or disagree with each of the following? (5-point scale: 1 “Disagree Completely” to 5 “Agree Completely”) | Agree = Top 2 Box | Base: Total
- 63 Ropes & Gray, Share Class Structures for Mutual Funds/ETFs: How Fund Groups Can Begin Preparing for Anticipated SEC Exemptive Relief, March 2025.
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- 65 Broadridge, Q2 2024 Distribution Insights: Model Portfolios.
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- 67 Pensions & Investments Research Center, as of December 31, 2022.
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- 69 State Street Investment Management Finance.
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Marketing Communication

Glossary

60/40 Shorthand for an asset allocation approach that combines equities and fixed income, with 60 percent in stocks and the remaining 40 percent in bonds. The combination is meant to balance potential to generate capital gains (and losses) associated with stocks with the capacity to protect principal inherent in income-generating bonds.

401(k) Plan A retirement plan established by private-sector employers so that employees can contribute a certain percentage of wages earned into a tax-deferred account to save and invest for retirement. Earnings within a 401(k) accrue on a tax-deferred basis and are taxable once they are withdrawn at retirement. Early withdrawals are penalized.

403(k) Plan A retirement plan established by not-for-profit employers so that employees can contribute a certain percentage of wages earned into a tax-deferred account to save and invest for retirement. Earnings within a 403(b) accrue on a tax-deferred basis and are taxable once they are withdrawn at retirement. Early withdrawals are penalized.

Active and Passive Strategies An actively managed approach involves a manager choosing securities to build, say, a fixed-income portfolio, while a passive approach involves managing a portfolio so that it tracks an index such as the Bloomberg Barclays U.S. Aggregate Bond Index.

Active Index Investing An actively managed investment approach that uses only index funds for alpha-seeking strategies. The term was popularized by Steven Schoenfeld in his 2004 book “Active Index Investing,” which explores the use of indexing, and index ETFs in particular, as a way to maximize returns and control risks.

Active Management A portfolio-management approach that uses a human hand, such as a single manager, co-managers, or a team

of managers, to select and adjust a fund’s holdings over time. Active managers rely on research, forecasts and their own judgment and experience to make decisions on what securities to buy, hold and sell. The opposite of active management is passive management, which includes indexing.

Alpha A gauge of risk-adjusted outperformance that is measured relative to a benchmark because benchmarks are often considered to represent the market’s movement as a whole. The excess returns of a fund relative to the return of a benchmark index is the fund’s alpha.

Asset Allocation An investment strategy of mixing a portfolio’s stocks, bonds and cash equivalents — and sometimes other assets — to balance risk and return according to an individual’s goals, risk tolerance and investment horizon.

Asset Class Distinct groups of investments that have similar characteristics and past performance, such as stocks, bonds, cash, real estate and commodities. Asset classes can also be further segmented, such as emerging market equities in the case of stocks and US corporate bonds in the case of fixed income.

Basis Point (bps) A unit of measure for interest rates, investment performance, pricing of investment services and other percentages in finance. One basis point is equal to one-hundredth of 1 percent, or 0.01%.

Bid-Ask Spread (Spread) The difference between the highest price a buyer is willing to pay for an asset and the lowest price the seller will accept to sell. Bid-ask spreads are a key measure of the liquidity of an asset or security.

Bitcoin A peer-to-peer digital currency created in 2009 that offers the promise of lower transaction fees than traditional online payment mechanisms. Unlike government-issued currencies, bitcoin is run and ‘regulated’ by its own users using an infrastructure called “blockchain.” Bitcoin was created by someone whose identity has not yet been verified who goes by the name of Satoshi Nakamoto.

Blockchain A blockchain is a distributed ledger with growing lists of records (blocks) that are securely linked together via an algorithm. This public ledger records all transactions that have ever been executed on that blockchain. Blockchains are constantly growing, as completed ‘blocks,’ or transactions, are added in a linear, chronological order. Every computer connected to the Bitcoin network gets a copy of the blockchain which, in theory, makes the whole system more secure as more computers, or “nodes,” become part of the blockchain.

Bloomberg US Aggregate Bond Index A broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasurys, government-related and corporate securities.

Bond A debt investment in which an investor loans money to an entity — typically a corporate or governmental entity — that borrows the funds for a defined period of time at a variable or fixed interest rate. Bonds are used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities. Owners of bonds are debtholders, or creditors, of the issuer.

Bullion A term used to describe physical gold or physical silver that is at least 99.5 percent pure.

Carbon Risk An investment risk linked to scientific evidence suggesting that unchecked climate change has the potential to negatively impact the lives, livelihoods and savings of many people, including investors — now and well into the future. This investment risk has created a new dimension of fiduciary responsibility, particularly among institutional investors.

Commodities A basic good used in commerce that is interchangeable, or “fungible,” with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. For example, crude oil is a commodity that is used to make motor fuels, and heating oil and lubricants.

Concentration Risk The risk of loss due to lack of portfolio diversification, and instead, heavy exposure to a single counterparty, sector, region, or asset.

Correlation The historical tendency of two investments to move together. Investors often combine investments with low correlations to diversify portfolios.

Credit Financial slang for so-called fixed-income “spread” products such as corporate bonds that are sometimes priced in terms of how much more they yield than risk-free fixed-income securities with the same maturities such as Treasurys.

Creation and Redemption The process by which ETF shares are created and redeemed. The creation process involves authorized participants (APs) buying underlying shares and delivering those shares to the fund sponsor in exchange for equally valued ETF shares. The redemption process is the reverse, wherein the AP removes ETF shares from the market and exchanges those ETF shares with the ETF sponsor for an equally valued amount of the ETF’s underlying shares. These in-kind transfers help explain the tax efficiency of ETFs as well as their relative.

Credit Risk The potential for an investment loss based on the borrower’s inability to repay a loan or meet other obligations. Credit risk is typically measured by credit ratings maintained by credit ratings agencies such as S&P, Moody’s and Fitch.

Cryptocurrency Cryptocurrency, or crypto, is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it.

Decentralized Finance (DeFi) Financial services that operate with blockchain technology to facilitate transactions directly between participants. DeFi uses blockchain and peer-to-peer networks to facilitate financial services like lending, staking, and trading. DeFi services operate without a central authority.

Defined Contribution Plan (DC Plan) The type of pension plan, such as a 401(k) or 403(b), that is defined by the amount of money and the types of assets pension holders put into their retirement accounts on the road to retirement. Often times, an employer will match an employee’s contribution, up to a certain amount. There are restrictions as to when and how you can withdraw these funds without penalties. DC plans have in recent decades become the predominant way for workers to prepare for retirement as have increasingly abandoned traditional DB Plans, or defined benefit plans, which are defined by what an employer pension plan will pay out to the pension holder once retirement begins.

Distributed Ledger A digital system for recording the transactions of assets. Distributed ledgers have no central data store or administration, unlike a traditional database.

Diversification A strategy of combining a broad mix of investments and asset class to potentially limit risk, although diversification does not guarantee protecting against a loss in falling markets.

Dot-Com Bubble The speculative stockmarket run-up of the late 1990s that grew out of excitement about the potential of the Internet. While companies such as eBay and Amazon were born in this period, countless other start-ups with vague business plans and no profits were funded by investors dreaming of winning big. The fervor peaked on March 10, 2000, and a nearly three-year bear market followed.

Downside Protection The use of an option or other hedging instrument designed to limit or reduce losses in the case of a decline in the value of an underlying security. Downside protection often involves the purchase of an option to hedge a long position. Other methods of downside protection include using stop losses or purchasing assets that are negatively correlated to the asset being hedged. An example of downside protection would be the purchase of a put option for a particular stock. If an investor already owns shares and the price of that stock falls, the value of the option will increase and thus limit the total loss exposure.

Downside Risk A given security’s potential to lose value if a prevailing market trend suddenly changes. The term also refers to the specific financial amount of the “worst case” loss that that can occur in such a sudden shifts.

Drawdown A specific decline in the stock market during a specific time period that is measured in percentage terms as a peak-to-trough move.

Emerging Markets Developing countries where the characteristics of mature economies, such as political stability, market liquidity and accounting transparency, are beginning to manifest. Emerging market investments are generally expected to achieve higher returns than developed markets but are also accompanied by greater risk, decreasing their correlation to investments in developed markets.

Equities An instrument that signifies an ownership position, or equity, in a corporation, and which represents a claim on its proportionate share in the corporation’s assets and profits.

Exchange The marketplace where securities, commodities, derivatives, and other financial tools such as ETFs are traded. Exchanges, such as stock exchanges, allow for fair and orderly trading and efficient circulation of securities prices. Exchanges give firms looking to market publicly listed securities the platform to do this.

Exchange Traded Fund (ETF) An ETF is an open-ended fund that provides exposure to underlying investment, usually an index. Like an individual stock, an ETF trades on an exchange throughout the day. Unlike mutual funds, ETFs can be sold short, purchased on margin and often have options chains attached to them.

Factor-Based Investing Factor investing is an investment strategy in which securities are chosen based on attributes that are associated with higher returns. Factor investing requires investors to take into account an increased level of granularity when choosing securities; specifically, more granular than asset class. Common factors that are ‘mined’ in factor investing include style, size, and risk.

Fixed Income A type of investing, usually involving bills, notes or bonds, for which real return rates or periodic income is received at regular intervals and at reasonably predictable levels. Fixed income can also refer to a budgeting style that is based on fixed pension payments. Fund An investment that is made up of a variety of different securities. A target retirement fund comprises a broadly diversified mix of investments, including stocks, bonds and cash.

Global Financial Crisis The economic crisis that occurred from 2007–2009 that is generally considered biggest economic challenge since the Great Depression of the 1930s. The GFC was triggered largely by the sub-prime mortgage crisis that led to the collapse of systemically vital US investment banks such as Lehman Brothers. The crisis began with the collapse of two Bear Stearns hedge funds in June 2007, and the stabilization period began in late 2008 and continued until the end of 2009.

Index An indicator or measure of something — typically securities prices. An index is typically an imaginary portfolio of securities (stocks, bonds or even futures contracts) that represent a specific market, such as, say, the US equities market by way of the MSCI USA Total Return Index.

Inflation An overall increase in the price of an economy’s goods and services during a given period, translating to a loss in purchasing power per unit of currency. Inflation generally occurs when growth of the money supply outpaces growth of the economy. Central banks attempt to limit inflation, and avoid deflation, in order to keep the economy running smoothly.

Individual Retirement Account (IRA) Any of a number of different types of accounts used by individuals for retirement savings. As of 2016 the types of IRAs available to investors included Traditional IRAs, Roth IRAs, SIMPLE IRAs and SEP IRAs. In their IRAs, investors can own a variety of different products, including stocks, bonds, mutual funds and ETFs.

Industry A way of classifying a group of companies in terms of their main businesses. There are dozens of different industry classifications, which are typically grouped into larger categories called sectors.

Interest Rate The amount charged, expressed as a percentage of principal, by a lender to a borrower for the use of assets.

Institutional Investor Any large group or organization that has a large amount of money or assets to invest, such as a company, mutual fund or insurance corporation. Accounts held by institutional investors account for half of the volume of trades on the New York Stock Exchange. They move large blocks of shares and have tremendous influence on the stock market. They are considered to be knowledgeable and therefore less likely to make uneducated investments. They are subject to few of the protective regulations that the SEC provides to an average everyday investor.

Liquidity The ability to quickly buy or sell an investment in the market without impacting its price. Trading volume is a primary determinant of liquidity.

Macro The part of the economics concerned with large scale or general economic factors such as interest rates and national productivity.

Market Cap A measure of a company’s market value calculated by multiplying its share price by its total number of shares outstanding. MSCI A provider of research-based indices and analytics, including the MSCI EAFE Index, a popular equity benchmark for international developed markets.

Money Market Fund A low risk, low return fixed-income investment designed to provide a minimum of interest while maintaining a net asset value (NAV) of \$1 per share — that is, without any capital gains or capital losses. Such funds contain fixed-income securities with maturities of less than one year that are typically high in credit quality and reliably liquid. In a portfolio context, such funds are sometimes referred to as “cash equivalents” because the steadiness of their value resembles cash.

Nasdaq Inc. A US equities index of more than 3,000 stocks focused largely but not exclusively on the technology and biotech sectors. Bellwether companies such as Apple, Google, Microsoft, Oracle, Amazon, Intel and Amgen all have their primary listings on the

Nasdaq. The Nasdaq Composite was created by the NASD in 1971 to enable investors to trade securities on a speedy computerized and transparent system. It became part of Nasdaq OMX Group in 2007.

Net Asset Value (NAV) The price of a share determined by the total value of the securities in the underlying portfolio, less any liabilities.

Options Financial derivative contracts sold by one party, called the option writer, to another, referred to as the option holder. Options contracts offer the buyer the right, but not the obligation, to buy (a call) or sell (a put) a security at an agreed-upon price, which is called the strike price.

Outcome-Oriented Investing An approach to investing that avoids benchmarking performance against big market indexes such as the S&P 500 Index, and instead focuses on ongoing assessments of the progress investors are making relative to specific long-term goals they or their financial advisors have established.

Overweight The weighting of a given security, industry or market sector that exceeds the weighting assigned that security, industry or sector in a relevant benchmark or benchmark portfolio.

Passive Investing An investment strategy that removes the active human hand from the process and replaces it with systematic, rules-based approaches to securities selection. Passive investing, notably index investing, is relatively cheap because it typically limits portfolio turnover and because the passive investing does not involve relatively costly research.

Plan Sponsor The designated entity, usually a company or an employer, which sets up a retirement plan such as a 401(k) for its employees. The plan sponsor is typically responsible for determining requirements for plan membership, establishing investment choices and, sometimes, providing contribution payments of stock and/or cash.

Portfolio A portfolio is a group of stocks, bonds, cash equivalents – a few or many – or a combination of various assets that are owned by an investor and/or managed by a professional.

Recession A period of temporary economic decline during which trade and industrial activity are reduced.

Return Anything a business or an investor reaps above principal amount of investment. Return is received in many different forms besides rising principal, such as interest and dividends. Return can also be linked to currencies, such as when a business holds foreign-currency savings accounts. In such cases, return includes the interest received and the benefit from the fluctuation of foreign currency rates.

Risk The possibility that an investment's return will differ from expected returns, especially the possibility of losing some or all of an investment. Risk is typically measured by calculating the standard deviation on historical, or average, returns of a given investment.

Risk Tolerance The degree that an investor is comfortable taking on investment risk in pursuit of potential returns.

Secondary Market The market in which ETF shares or common shares of public companies that currently exist are traded on exchanges between investors.

Sector Investing An investor or portfolio that invests assets into one or more sector of the economy such as financials, energy, or health care.

Security A financial instrument representing ownership positions in a publicly-traded stocks, corporation- and government-issued bonds, or rights to potential ownership as options represent. A security is a fungible, negotiable financial instrument that represents some type of financial value. The party that issues the security is called the issuer.

Senior Loans Floating-rate debt issued by corporations and backed by collateral such as real estate or other assets.

Smart Beta A set of investment strategies that use alternative index construction rules seeking to achieve outperformance over first-generation market capitalization-based indices. Most smart beta indices isolate six particular “factors” – individually or in some combination. Those six factors include small size, value, high yield, low volatility, quality and momentum. Smart bet indices seek to deliver better risk-adjusted returns than cap-weighted indices.

Spread The difference between the yield on a given security and the yield on a reference security. The yield differences between, say, a corporate bond and a Treasuries security with the same maturity would be expressed as the spread. Assets such as corporate bonds are thus sometimes referred to as “spread products.”

S&P 500® Index A popular benchmark for U.S. large-cap equities that includes 500 companies from leading industries and captures approximately 80% coverage of available market capitalization.

Strategy The idea behind an investment plan. A strategy consists of portfolio. A strategic balanced portfolio includes multiple asset classes and is designed to achieve a long-term asset allocation objective. The weights of the various asset classes are pre-determined and the portfolio is periodically rebalanced to ensure that the asset class weights reflect that pre-determined or strategic mix over time.

Tariff Taxes imposed by one country on goods imported from another country.

Tax Efficiency A term that describes various approaches to investing that minimize tax liability. Certain types of investments, including funds like ETFs or securities like municipal bonds are valued for their tax efficiency, as are tax-protected accounts such as Individual Retirement Accounts (IRAs) or Roth IRAs. Also, certain practices, such as tax-loss harvesting, which is designed to lighten tax obligations, are considered ways to pursue greater tax efficiency.

Tokenization The process of converting rights to an asset into an immutable digital token on a blockchain. Tokenization often involves issuing digital tokens to represent ownership of an asset. Tokens are usually immutable and tradable.

Treasurys The debt obligations of a national government. Also known as “government securities,” Treasuries are backed by the credit and taxing power of a country and are thus regarded as having relatively little or no risk of default.

Valuation The process of determining the current worth of an asset or a company.

Value One of the basic elements of “style” - focused investing that focuses on companies that may be priced below intrinsic value. The most commonly used methodology to assess value is by examining price-to-book (P/B) ratios, which compare a company's total market value with its assessed book value.

Volatility The tendency of a market index or security to jump around in price. Volatility is typically expressed as the annualized standard deviation of returns. In modern portfolio theory, securities with higher volatility are generally seen as riskier due to higher potential losses.

World Gold Council (WGC) The market-development organization for the gold industry.

Yield The income produced by an investment, typically calculated as the interest received annually divided by the price of the investment. Yield comes from interest-bearing securities, such as bonds and dividend-paying stocks.

Important Information

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Equity securities may fluctuate in value and can decline significantly in response to the activities of individual companies and general market and economic conditions.

Volatility management techniques may result in periods of loss and underperformance may limit the Fund’s ability to participate in rising markets and may increase transaction costs.

The value style of investing that emphasizes undervalued companies with characteristics for improved valuations, which may never improve and may actually have lower returns than other styles of investing or the overall stock market. The Funds may emphasize a “growth” style of investing. The market values of growth stocks may be more volatile than other types of investments. The prices of growth stocks tend to reflect future expectations, and when those expectations change or are not met, share prices generally fall. The returns on “growth” securities may or may not move in tandem with the returns on other styles of investing or the overall stock market.

Actively managed funds do not seek to replicate the performance of a specified index Funds that are actively managed and may underperform its benchmarks. An investment in the Fund is not appropriate for all investors and is not intended to be a complete investment program. Investing in the Fund involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

Passively managed funds invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund to experience tracking errors relative to performance of the index.

A Smart Beta strategy does not seek to replicate the performance of a specified cap-weighted index and as such may underperform such an index. The factors to which a Smart Beta strategy seeks to deliver exposure may themselves undergo cyclical performance. As such, a Smart Beta strategy may underperform the market or other Smart Beta strategies exposed to similar or other targeted factors. In fact, we believe that factor premia accrue over the long term (5-10 years), and investors must keep that long time horizon in mind when investing.

The returns on a portfolio of securities which exclude companies that do not meet the portfolio’s sustainable strategy criteria may trail the returns on a portfolio of securities which include such companies. A portfolio’s sustainable strategy criteria may result in the portfolio investing in industry sectors or securities which underperform the market as a whole.

Asset Allocation is a method of diversification which positions assets among major investment categories. Asset Allocation may be used in an effort to manage risk and enhance returns. It does not, however, guarantee a profit or protect against loss.

Investing in commodities entail significant risk and is not appropriate for all investors. Commodities investing entail significant risk as commodity prices can be extremely volatile due to wide range of factors. A few such factors include overall market movements, real or perceived inflationary trends, commodity index volatility, international, economic and political changes, change in interest and currency exchange rates.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Because of their narrow focus, sector investing tends to be more volatile than investments that diversify across many sectors and companies.

The use of short selling entails a high degree of risk, may increase potential losses and is not suitable for all investors. Please assess your financial circumstances and risk tolerance prior to short selling.

Investing in high yield fixed income securities, otherwise known as “junk bonds”, is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities.

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