ETF Impact Report 2024–2025

The Next Wave of Innovation

STATE STREET GLOBAL ADVISORS SPDR®

Brought to you by SPY

Table of Contents

03	**To the Valued ETF Investor Community**	A letter from Yie-Hsin Hung, President and CEO, State Street Global Advisors.
04	**The ETF Frontier** Pushing the Boundaries of Financial Markets	Explore the steady ascent of ETFs and how they've expanded to each corner of financial markets.
10	**ETFs Unfiltered** Straight Talk on the Future of Investing With Anna Paglia	A Q&A with Anna Paglia, Executive Vice President and Chief Business Officer, State Street Global Advisors.
13	**The Pulse of Progress** ETF Trends and Opportunities	Discover what's currently defining the global ETF market, from the surge in active management to goal-oriented solutions.
22	**Top Predictions** On Future ETF Growth	Gaze into the future, as we predict the top six growth catalysts shaping the future of ETFs.
31	**Next Steps and ETF Resources** What Will Your Role Be in the ETF Story?	Unlock resources to help you take the next step on your journey with ETFs.

To the Valued ETF Investor Community

Yie-Hsin Hung
President and CEO
State Street Global Advisors

We find ourselves at a pivotal moment in the history of financial markets. Unusual global dynamics and a technological revolution have precipitated a number of challenges, while simultaneously sparking innovation. In spite of widespread change, ETFs have exhibited remarkable resilience and adaptability in diverse market conditions.

Over the 30-plus years since the SPDR® S&P 500® ETF Trust (SPY)[1] jumpstarted our journey, one headline has remained constant: The ETF market continues to thrive across all corners, from equities and fixed income to alternatives and commodities. Yet, it is not just the growth of the market that excites us but the depth of innovation within it. This report highlights the transformative potential we see unfolding.

The ETF Impact Report 2024-2025 reveals the underlying forces behind the ETF industry's continued boom, the emerging trends and opportunities, and our top predictions for the future.

While there will be challenges and surprises as we navigate the complexities and opportunities ahead, our commitment to providing you with strategic insights and solutions has never been stronger.

Thank you for your continued trust. We look forward to exploring new frontiers together.

With warm regards,
Yie-Hsin Hung

The ETF Frontier

Pushing the Boundaries of Financial Markets

Look back at the evolving world of ETFs, where investor demand has spurred innovation after innovation since SPY's monumental launch 30-plus years ago.[1] From humble beginnings as passive index trackers to becoming the backbone of sophisticated portfolio strategies, explore how ETFs have grown to dominate various segments of the financial markets.

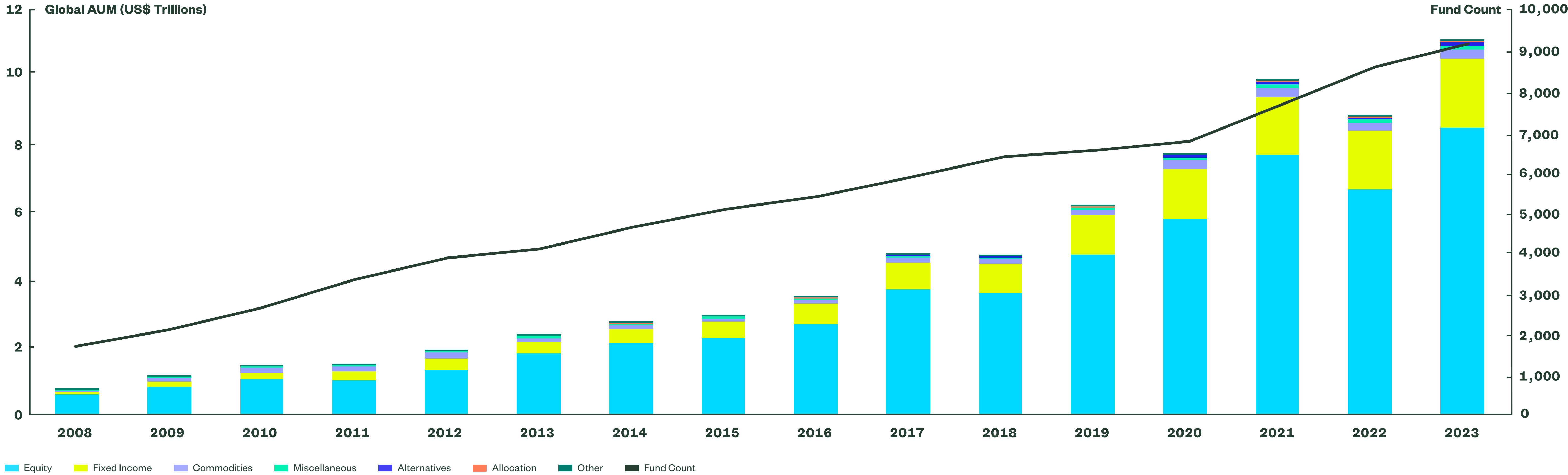
An Investing Era That Just Keeps Booming

No matter the economic environment, ETFs have a track record of growth and resilience. Since State Street Global Advisors launched the original ETF innovation, the SPDR® S&P 500® ETF Trust (SPY), over 30 years ago,[1] the global ETF market has expanded across demographics, strategies, asset classes, and everything in between.

With a cumulative annualised growth rate (CAGR) of 19.8% since 2008, ETFs reached US$11.1 trillion assets under management (AUM) on December 31, 2023.[2] And the number of ETF offerings globally has risen to 9,149 funds (Figure 1).[3]

Figure 1

The Impressive Growth of the ETF, 2008–2023



Source: Morningstar, as of December 31, 2023. 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 results.**

SPY: The ETF Innovation That Ignited the Industry

The SPDR® S&P 500® ETF Trust (SPY) gives investors cost-efficient, highly liquid exposure to the S&P 500® Index — providing access to 500 of the largest publicly traded US firms.[4]

Why SPY?

SPY offers a number of potential benefits for investors seeking core US equity exposure.

Trusted Providers

SPY is managed by State Street Global Advisors, 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

SPY touches nearly every corner of the US economy, giving investors broad exposure to the world's largest market and many of its most recognised brand names in a single trade.

What Can You Do With SPY?

SPY's immense size and liquidity inspire innovative use cases that help investors meet their investment goals.

Innovation Deepens

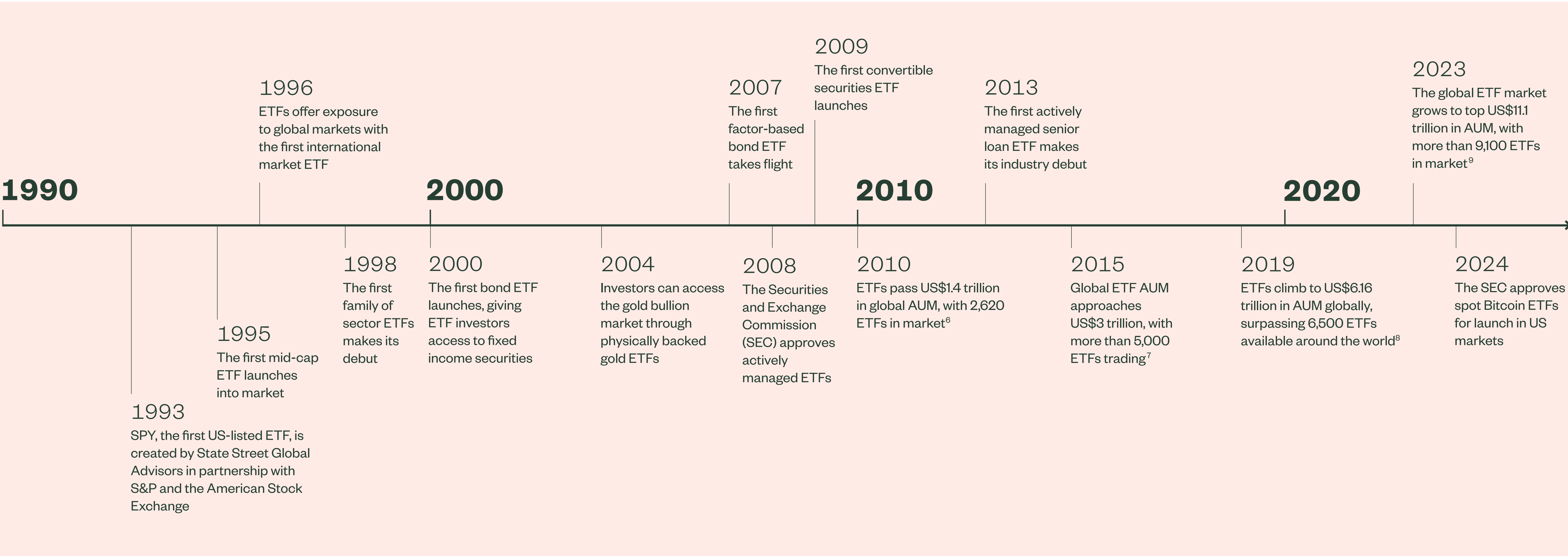
A Timeline of the ETF's Tremendous Growth

The booming US$11.1 trillion global ETF market has come a long way since SPY was its sole offering — and the path is marked by several key industry milestones, unpredictable developments, and inflection points (Figure 2).[5]

As the ETF market has grown and evolved, so too have the ways investors use ETFs. From indexed equity exposures to fixed income, active management, factor-based strategies, and alternatives — ETF applications have expanded, allowing all types of investors to prioritise outcomes with greater efficacy and efficiency.

Figure 2

Key Events That Led to the ETF Industry Boom



Evolution Across the Board

A Snapshot of Today's ETF Market

The ETF has come a long way since its humble beginnings as an innovative vehicle for tracking major indices. Today, ETFs are a cornerstone of global finance.

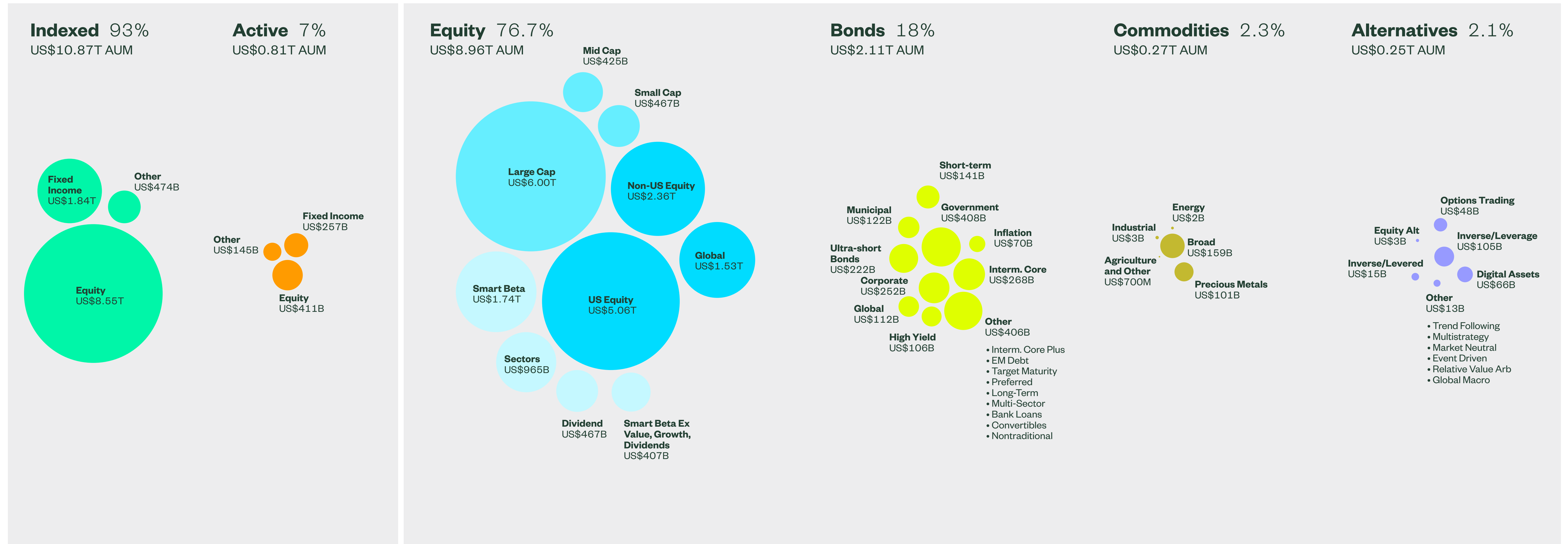
They cater to the full spectrum of investment strategies — including active management, factor-based strategies, and thematics — and cover everything from traditional asset classes to specialty markets and innovative sectors like technology and sustainability.

Behind their robust, decades-long evolution lies increasing investor demand for transparency, liquidity, and cost efficiency, coupled with the desire for more specialised investment solutions.

The proliferation of ETFs across various asset classes and the introduction of novel ETF structures — from strategies that use derivatives to structured outcomes to spot-based commodity and currency exposures — highlight the industry's adaptability and desire to meet diverse investor needs. As a result, ETFs have become instrumental in democratising access to investments, enabling retail and institutional investors alike to tailor their portfolios with once-unimaginable precision and flexibility.

Figure 3

ETFs Have a Wide Investment Reach Globally



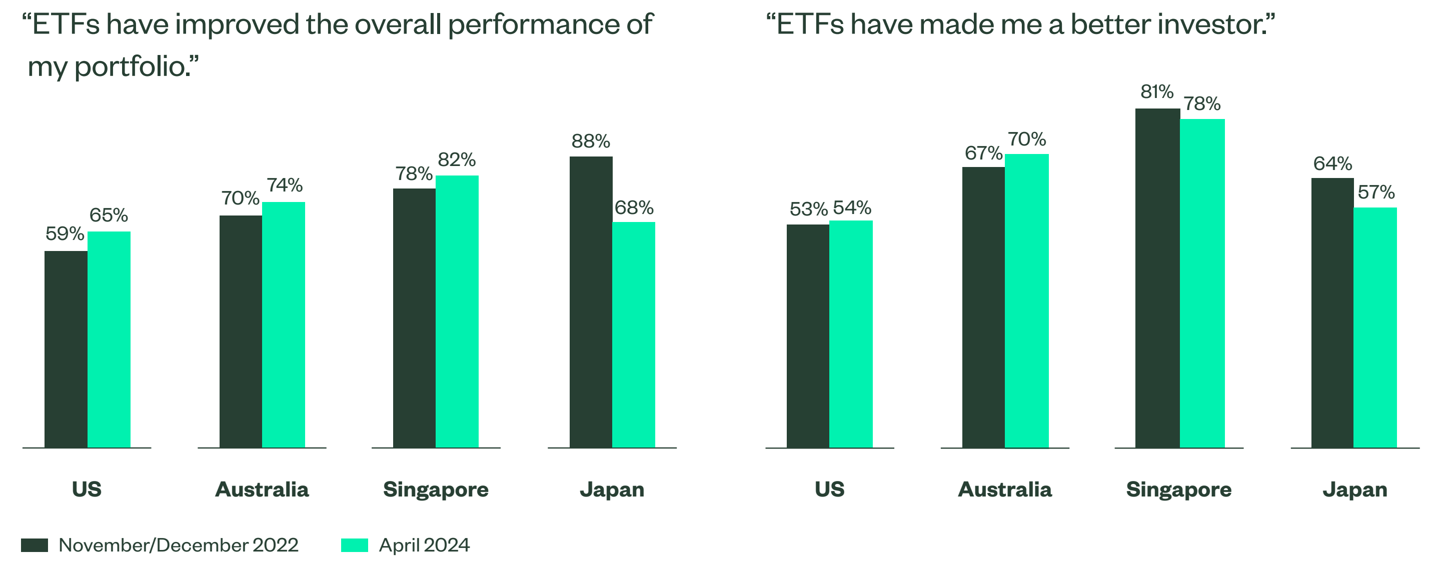
Source: Morningstar, as of April 30, 2024, based on SPDR Americas Research calculations. The information contained above is for illustrative purposes only. **Past performance is not a reliable indicator of future results.**

Rave Reviews from ETF Investors

ETFs are nothing without satisfied investors. Our 2024 ETF Impact Survey, which assesses key investment portfolio trends, the impact of ETFs on portfolio construction, and the sentiment of individual investors, and institutional investors, found that all investor types hold ETFs in high regard.

Figure 4

ETFs Continue to Get High Marks From Individual Investors



Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Question asked: How much do you agree or disagree with each of the following statements about ETFs? (Only participants who reported that they had ETFs in their current investment portfolio answered.)

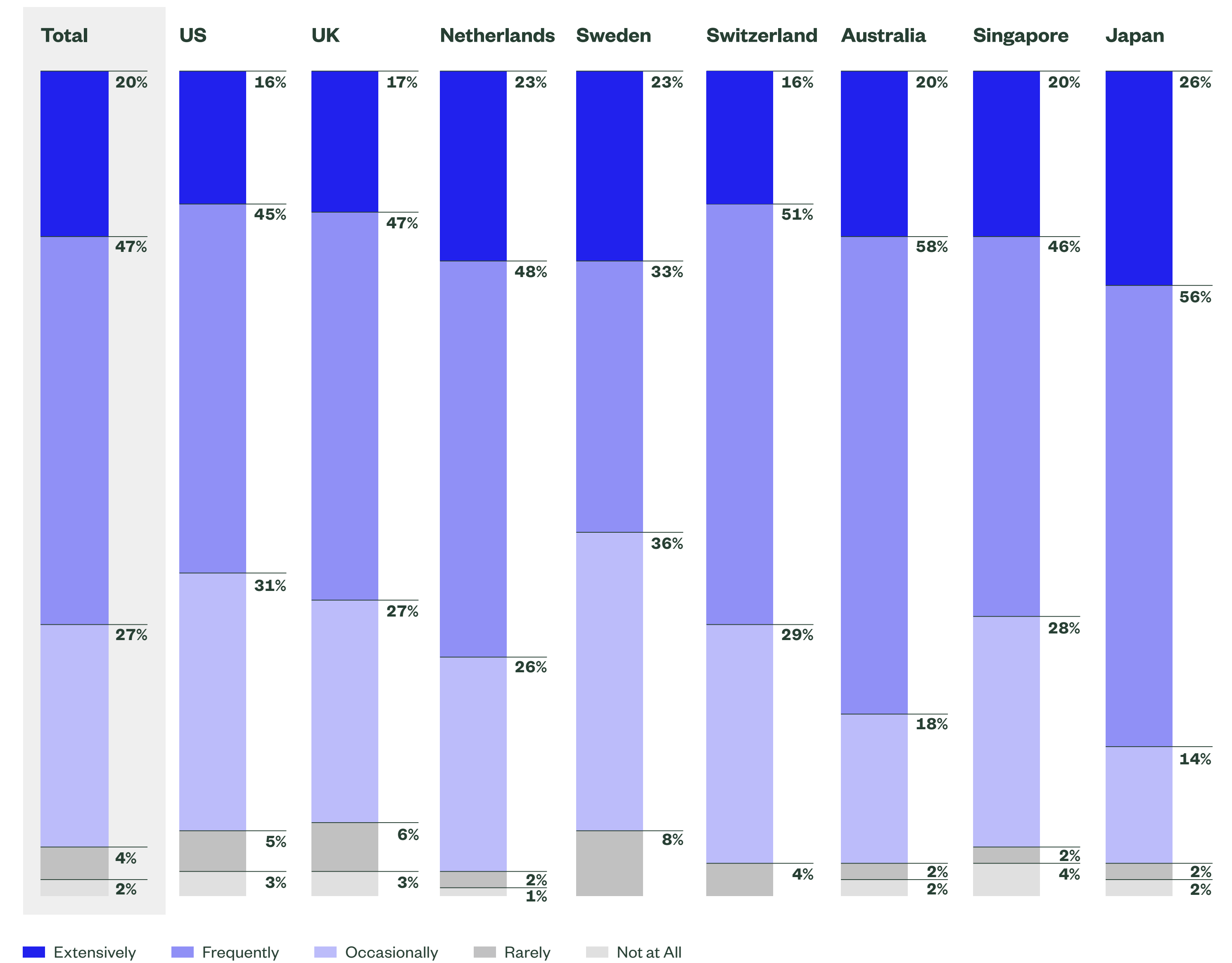
The majority of surveyed individual investors report that ETFs have improved their portfolio performance and helped them become better investors (Figure 4).

In a similar vein, 70% of surveyed US advisers regularly recommend ETFs to their clients. And among institutional investor respondents, regardless of country or region, a significant number report being heavy users* of ETFs (Figure 5).[10]

The rapid adoption of ETFs over their short three-decade history, coupled with the high levels of satisfaction they garner from investors around the world, suggest the future of the global ETF market is bright.

Figure 5

The Majority of Institutional Investors Are Heavy Users* of ETFs



*Heavy users indicate those who utilise ETFs "extensively" or "frequently."
Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Question asked: Does your institution utilise ETFs in its investment strategy?

ETFs Unfiltered

Straight Talk on the Future of Investing With Anna Paglia

Anna Paglia, Executive Vice President and Chief Business Officer for State Street Global Advisors, has had a front-row seat to the exponential growth of ETFs during her 27-year career in asset management. Sharing her perspective on ETFs as the great equaliser, Anna offers her candid views on what the future may hold and why she believes ETFs have the power to make wealth more accessible to every investor.

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

In this exclusive interview, Anna Paglia shares her take on key trends shaping the ETF industry. From artificial intelligence (AI), alternatives, and cryptocurrency to regulation, retirement, and disruption, read on to find out what she finds most exciting as she looks to the future.

Q: What most excites you about the ETF industry right now?

I've spent 27 years in the ETF industry, and that's not by accident. I deliberately joined because I believe the ETF wrapper democratises access to investments. And I feel strongly that building wealth should be accessible to everyone, that financial markets should be open and accessible to everyday investors as well as the largest institutions. The ETF was the missing link.

And so, there are many things that excite me about ETFs, including that they're:

- **Accessible and cost-efficient.** ETFs are an equaliser in financial markets, giving everyone the same opportunities.
- **Dynamic.** ETFs are dynamic, in that the ETF wrapper has the ability to evolve, which is something we don't see elsewhere in the market — like in managed funds, for example.
- **Investor-driven.** In the ETF space, we may build strategies that we feel very confident about. But once they go to market, if investors don't like them, they die on the vine. Every day, investors vote with their money and decide what's good and what's bad — that goes hand-in-hand with democratisation.
- **Transparent.** With full transparency and the ability to track the performance of the market, ETFs are becoming a catalyst to push away mediocre performance. Today, active managed fund managers do not compete against their peers — they compete against ETFs for as little as 3 basis points (bps). If they cannot beat these low-cost ETFs, they don't have a chance at surviving. But that means the investor wins. And when the investor wins, the industry wins.

> " I feel strongly that building wealth should be accessible to everyone, that financial markets should be open and accessible to everyday investors as well as the largest institutions. The ETF was the missing link."

Q: What is the relationship between regulation and the increasing democratisation that you believe ETFs bring?

ETFs are a forcing mechanism, which means they're pushing regulation to change. ETFs' secondary market trading is playing a big role in this, because the secondary market is pretty much an open border. Anyone can buy a fund, for example, that is traded in Canada or Tokyo. People are able to get access to the best type of regulation and arbitration.

Bitcoin ETFs, for instance, have been in negotiation with the SEC for the last five years. If investors didn't have access to a Bitcoin ETF in the US though, they could still buy it in Canada, Bermuda, and Europe. Ultimately, they were greenlit.

Q: Some may think regulation is too burdensome and others too relaxed. What are your thoughts relative to ETFs?

Whenever people think regulation is easing (like, for example, with the ETF Rule in the US bringing down some barriers to entry), there is usually a concern that we may be losing something. For example, are we losing some belts and suspenders?

I don't believe so. Because this industry is so competitive and so commoditised, asset managers really care about their reputation, regardless of whether there are rules mandating certain controls or risk management tools. If an asset manager puts a lemon in market or a fund that's likely to implode, that's going to have a big impact, no matter the size of the portfolio. Once you lose people's trust, it's hard to regain.

There's a saying, "Trust is earned in drops and lost in buckets." And this is especially true in the asset management industry. You earn clients' trust in drops. But once you lose it, you lose it in buckets and you can almost never recover.

Q: Over the next 5 to 10 years, what major disruption do you expect to see in the industry?

I believe digital assets are going to play a big role in this industry.

I always think about the "iPhone moment" — something we've all experienced. It was that moment when you opened the box and turned on your iPhone for the first time. You probably found yourself saying, "Wow! I can click this. I'm online. I can listen to my music. Answer emails. See all my text messages." That moment was magic. Because when I was growing up, my phone was attached to the wall, my TV was in another room, and I listened to the radio while driving.

> " Our industry's iPhone moment happens when all of these different touchpoints in financial services converge. This is where the real transformation in digital access happens."

But the iPhone brought all these different telecommunication means into a single device, in the palm of your hand. That was the iPhone moment. And the one single thing that created that moment was convergence. That convergence moment hasn't happened in financial services yet.

Consider, for example, the way we save, invest, and shop — it's all fragmented. We have a savings account, a checking account, a brokerage account, cash, and credit cards. But digital assets are building that convergence. In my opinion, our industry's iPhone moment happens when all of these different touchpoints in financial services converge. This is where the real transformation in digital access happens.

Q: How does that translate into ETFs?

Already, we have ETFs marketed as Crypto Ecosystem ETFs, Digital Asset ETFs, and Blockchain Technology ETFs. We have already seen companies start generating revenue through their association to the digital assets industry — and it will continue. So that's going to be a big change in the market.

The other evolution is going to be technology itself. ETFs trade on secondary markets. They benefit from the advancement of technology that allows investors to trade in one click. I think that one-click trading is going to differentiate ETFs from other collective investment schemes over the next five to 10 years.

> “I think that one-click trading is going to differentiate ETFs from other collective investment schemes over the next five to 10 years.”

Q: We touched on technology as an industry driver. There's been a lot of buzz about AI. How do you think AI or machine learning will shape the future of this industry?

AI makes our jobs easier — if we use it for the purpose it was created for. We'll be able to save so much time in the day to dedicate to something else, to more value-added activities. I think about generative AI systems that can help callers get the answers they need without having to wait and speak to a person. Or the way generative AI has accelerated how we write emails with predictive text.

There are many things that we can do with AI that will make us more efficient, more nimble and, in the realm of client service, that will help us better serve investors. That said, I don't believe AI will be used to build investments or portfolios. Some have tried and it didn't go anywhere. I don't think that particular use case for AI is the future of asset management.

Q: How do you see ETFs influencing the future of retirement in the US?

Right now, 401(k) plans don't buy ETFs because of the regulatory framework. And pension funds can only buy them on an exchange, which is a price difference from the net asset value (NAV). So there's nuance in regulation that makes it hard for 401(k) plans to invest in ETFs. However, ETFs are building blocks.

Think about target date funds: what's the goal? The portfolios act differently based on the various risk tolerances the investor will have throughout their entire lifecycle. So, when building a portfolio, we take into account a number of criteria: risk profile, the investment merit, and the exposure — but also fees because they eat into overall performance.

If investors have more opportunity to access cost-effective market performance, they can use the rest of their portfolio to get exposure to more exotic or spicy asset classes without having high fees eat up too much of the performance. To me, a 401(k) portfolio is never going to be invested in one single ETF or 100% in ETFs. But ETFs are going to play a major role in the overall costs of the portfolio.

At a recent conference I attended, an SEC Commissioner said that she was worried about retirement because, “People don't understand the cost of their investment because it's not explained to them in terms of years to retirement.” And that's true. We always explain cost in terms of the investment. For example, we tell people, “If you invest US$10,000 today, you'll pay US$500 in fees over five years.” But nobody is telling people, “If you didn't invest in 100 bps products, you'd be able to retire two years earlier.” When you explain it in terms of years to retirement, the cost becomes much more tangible.

At the end of the day, because of their cost efficiency, I believe ETFs will play a big role in accelerating one's time to retirement.

Q: Where do you see ETFs in the alternative space being the most popular?

Making illiquid assets liquid. That's the entire ETF story. If we had this conversation 25 years ago, no one would have believed that we'd put bonds into an ETF, or that with a US$25 or US$50 investment, one could get exposure to bonds, emerging markets debt, or senior loans.

> “If investors have more opportunity to access cost-effective market performance, they can use the rest of their portfolio to get exposure to more exotic or spicy asset classes without having high fees eat up too much of the performance.”

This evolution wasn't easy, but the ETF evolved so that illiquid securities could be put into the ETF wrapper and become liquid.

So what now? Private debt. Private markets. But it's not done by putting illiquid investments into the “magic ETF box,” where everything becomes liquid and accessible. Asset managers have to work with private markets, private credit issuers, and the entire ecosystem to come up with a solution that is going to unlock liquidity in the secondary market.

Nobody has cracked that code yet, but we're spending a lot of time trying to figure it out — because that's the next frontier in the ETF's evolution.

Q: Do you see alternatives also extending to individual investors?

Yes, absolutely. The power of ETFs is in providing access to investors who would not have had that access otherwise. If you provide access to private markets or private credit for banks and institutional investors, you make it easier for them — but they already have access. They can already do it themselves.

When you bring it to retail clients, that's where the real power of the ETF wrapper comes into play, because those clients would not have access if not for the ETF. That's the mission: bringing those funds to people who would not have access otherwise.

Q: Given ETFs are opening up access to new markets for individual investors, do you think asset managers also have an obligation to educate investors about those markets?

100%. And I feel very strongly about this. What we do is not a job. It's a privilege.

Every single one of us here at State Street Global Advisors carries that privilege. It doesn't matter if you're in marketing, compliance, investments, products, or something else.

> “People entrust us with perhaps the most valuable thing outside of their families: their money. Through education, we have the power to help drive financial decisions, hopefully allowing people to retire early, send their kids to college, or go on that beautiful vacation.”

Whether or not you like your job, you have to understand the weight that your decisions carry for others and you have to respect the opportunity that you have been given. Always.

People entrust us with perhaps the most valuable thing outside of their families: their money. Through education, we have the power to help drive financial decisions, hopefully allowing people to retire early, send their kids to college, or go on that beautiful vacation.

It gives us great power — and as the Spiderman Rule goes, “With great power comes great responsibility.”

The Pulse of Progress

ETF Trends and Opportunities

Step into the here and now, where the pulse of ETF innovation beats loudly in a complex, ever-evolving macroeconomic environment. In this snapshot of evolving market trends, we explore strategies and solutions that are currently defining the global ETF market, from the surge in active management to the use of goal-oriented solutions.

ETFs in 2024

New Paths to Growth

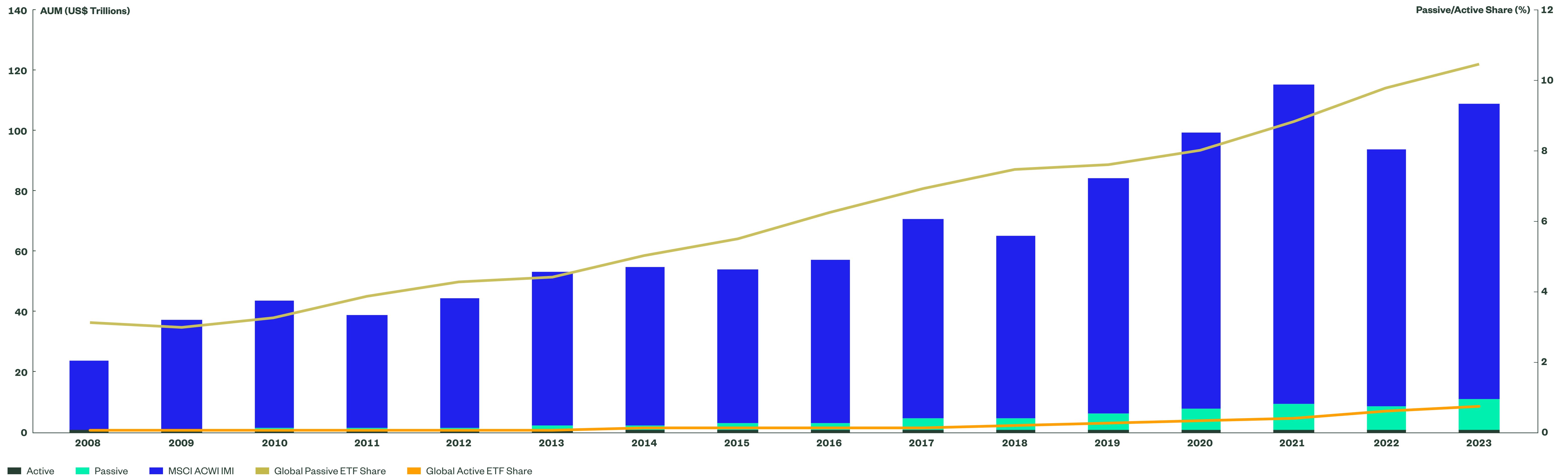
The market is continually influenced by many unpredictable factors. There are the expected movements, such as the spike in fixed income inflows due to hawkish public policy. And then there are the unexpected developments, such as the rapid eruption of AI. Regardless of these variables, one trend is unequivocal: ETFs have become a crucial tool for investors.

According to our 2024 ETF Impact Survey, only 45% of US individual investors currently have ETFs in their investment portfolios. But, nearly 70% of US financial advisers recommend ETFs to their clients "always" or "often" and 67% of US institutional investors use ETFs in their investment strategies "extensively" or "frequently."

Yet, ETFs still only account for 11.25% of investable assets globally (Figure 6). In other words, there is still room for significant growth.

Figure 6

Passive and Active ETFs Still Account for Less Than 12% of Investable Assets Globally



Source: Morningstar, Bloomberg Finance, L.P., as of December 31, 2023. **Past performance is not a reliable indicator of future results.**

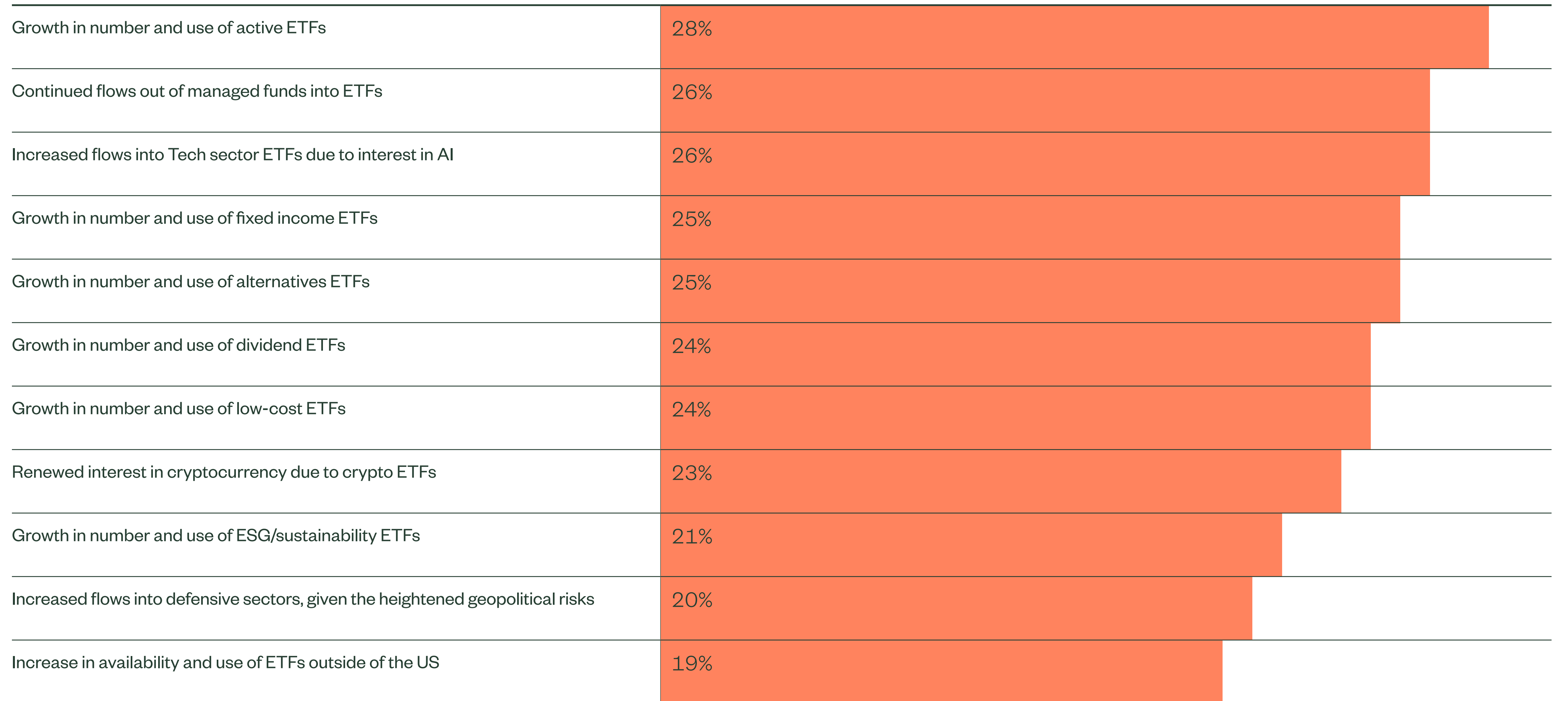
What Will Fuel Growth?

The sheer number of trending ETF opportunities continues to increase in response to investor demand and evolving market and structural forces. Given these dynamics, it's no surprise that surveyed US financial advisers identified several competing trends most likely to have a significant impact on the ETF industry through 2025 — from flows into active, alternatives, and sector ETFs (specifically, AI-focused technology), to managed fund outflows and interest in crypto (Figure 7).[11]

One thing looks certain though. Retail markets are likely to continue to propel growth, given the high interest in ETFs among the retail investors we surveyed. For instance, 63% of US investors plan to buy ETFs in the next 12 months, up from 37% in Q4 2022; Australian investor interest has doubled in the same timeframe, from 36% to 72%. These surveyed investors indicated that they value ETFs for their diversification benefits and added liquidity (and, therefore, adaptability in volatile markets).

Figure 7

ETF Trends that Will Have the Most Significant Impact on the ETF Industry Through 2025



Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Question asked: Which of the following do you think will have the most significant impact on the ETF industry through 2025? (Please select up to three)

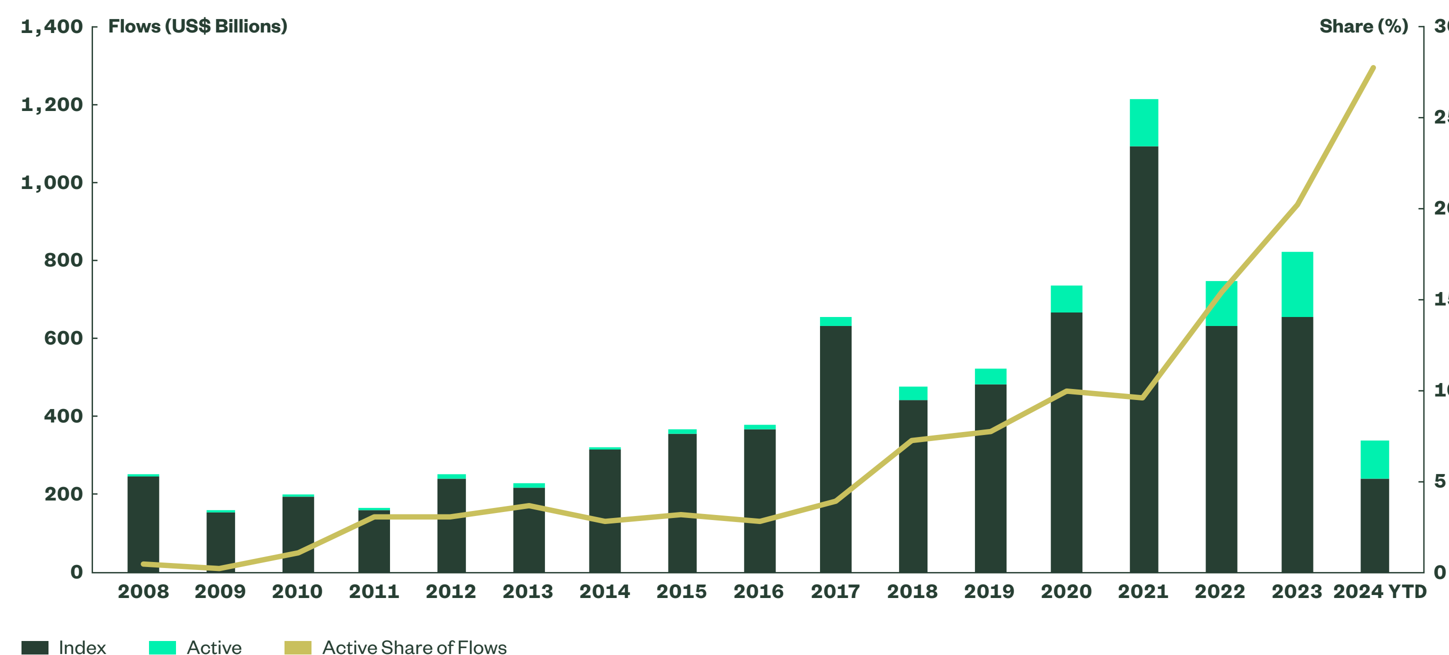
Active ETFs Take Center Stage

The New Era of Investing

Index ETFs may rule the roost, but it's time for active ETFs to strut their stuff. Last year, we predicted that ETFs had plenty of room for growth, especially considering three out of four US ETF issuers were either in the midst of developing or planning to develop active ETFs. Perhaps it was low-hanging fruit, but that vision certainly crystalised — a record US$166 billion flowed into global active ETFs in 2023, up from US$115 billion in 2022 (Figure 8).[12]

Figure 8

Active ETFs Continue to Set Records



Source: Morningstar, as of April 30, 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 results.

This year, the momentum has continued. Global active ETFs have taken in US$93 billion through just the first four months of the year (almost a third of all global ETF inflows) and are currently on pace to exceed last year's record.[13] New active products and a variety of strategies have driven the outsized inflows, including budding interest in fixed income and alternatives.

Remarkably, global active fixed income ETFs were responsible for almost half of total inflows into intermediate-core and intermediate-core-plus bond ETFs so far this year (US$7.6 billion, 42%).[14]

US advisers from our 2024 ETF Impact Survey identified active as the ETF trend that would have the most significant impact on the global market through 2025.

Early 2024 inflows seem to back their predictions. And in Asia-Pacific specifically, while active ETFs only make up 4% of the region's current ETF market, they're predicted to grow at a staggering 37% CAGR in the next five years.[15]

Investors tend to associate "active" with "alpha." While exploiting market inefficiencies to pursue excess returns is one inherent draw, many investors choose active ETFs for their ability to produce specific outcomes in a transparent, liquid, and tax efficient manner. For example, active fixed income ETFs provide managers the flexibility to incorporate non-traditional fixed income assets into their portfolios. In turn, managers can adjust fund holdings in response to changing market conditions, potentially mitigating risks and capitalising on opportunities that passive strategies might miss.

Q: As active ETFs have grown more popular, it has resulted in a greater breadth and depth of available strategies. What do you think the future looks like from here with respect to active ETFs?

Active ETFs have existed for many years, but their AUM share of worldwide ETFs has risen from a mere 0.3% during the Great Financial Crisis (GFC) of 2008–2009 to more than 6.4% today — nearly US$800 billion.[16] Active inflows really accelerated in 2018, jumping from less than 4% of global flows in 2017 to 7.9%.[17] Fast forward to 2023, which was a record year for active ETF flows — by year end, active ETFs accounted for 20.3% of global ETF inflows or more than US$160 billion.[18]

The US market continues to dominate in the active ETF space. But the burgeoning European industry is showing signs of an early blossom. In Europe, regulation clarity and new strategies have helped spur growth. As of now, active ETFs in Europe represent approximately 5% of worldwide AUM.[19]

Globally, investors are finding that the ETF wrapper offers easier access to markets in a more transparent and efficient structure. Whether focused on liquidity, costs, or alpha, investors are realising that they can achieve their portfolio construction goals with a single type of instrument: the ETF. This is why I believe active ETFs, both newly launched and those converted from existing vehicles, will spur another growth rally for the ETF industry across US, EMEA, APAC, and LATAM regions.

Antoine Lesne
Head of ETF Strategy and Research for EMEA

Fixed Income ETFs

New Challenges (and Opportunities) Emerge

When asked which factors would drive ETF asset growth in 2024, ETF managers pointed to increased use of fixed income ETFs as the predominant catalyst.[20] Fixed income ETFs offer investors exposure to a wide range of debt securities, combining the benefits of bonds — such as income generation and risk mitigation — with the flexibility, liquidity, and transparency of the ETF wrapper. And we've seen exponential fixed income growth year-over-year (YoY) across the globe (Figure 9).

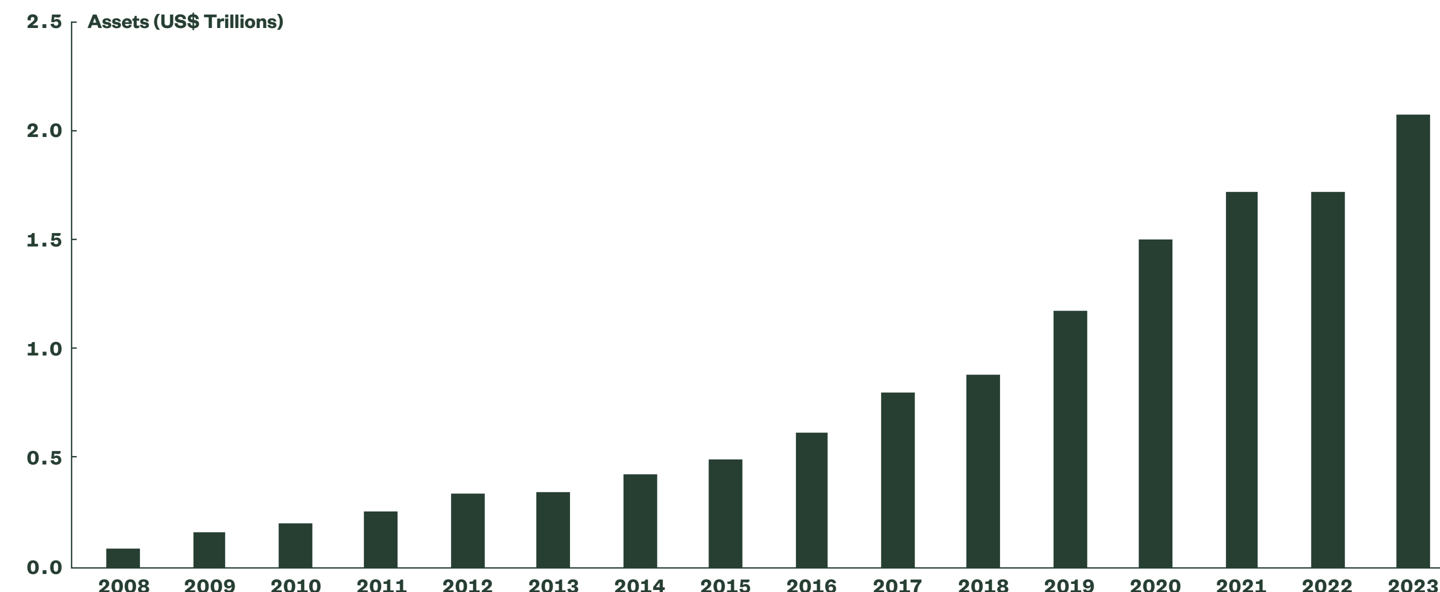
Undoubtedly, too, there is a near-term opportunity to capture yield, considering excess cash sitting on the sidelines. In response to generationally elevated yields, market volatility, mixed economic fundamentals, and evolving Federal Reserve (Fed) policy, investors gravitated to the safety and reliability of money market funds, leading to nearly US$1 trillion of global inflows over the past year.[21]

Now, with the Fed and many of the world's central banks expected to strategically shift from holding rates to cutting them, investors sitting on piles of cash-like exposures face new challenges — reinvestment risk and rate volatility.

Balancing income and stability is the key to unlocking opportunities going forward. To strike this balance, since quality can help mitigate credit risks and fundamental instability, we expect to see increased inflows into active core bond ETFs as well as a mix of short and intermediate investment-grade bond ETFs.

Figure 9

Global Fixed Income AUM Shows Steady Growth YoY



Source: Morningstar, Bloomberg Finance, L.P., as of December 31, 2023. **Past performance is not a reliable indicator of future results.**

Q: What do you think the next wave of fixed income ETF innovation and growth looks like? Narrower exposures? More active funds? Something else? And what role will rate volatility play?

To extrapolate a trend in the US from the first four months of 2024, where more than 40% of US fixed income ETF inflows were into active funds,[22] I expect value-added active bond ETFs will continue to garner major market share.

Investors should also anticipate that the menu of ETFs will include increasingly precise exposures around key fixed income asset classes. The success of such bespoke strategies is contingent on key portfolio construction considerations plus adequate liquidity. Another area that may gather steam as bond yields hover near their highest levels in a generation: income-oriented funds and exposures that deliver relatively high distributions.

Volatility will play a supporting role in this stage of fixed income ETF growth. Some investors will gain comfort in leveraging the expertise of an active manager to navigate periods of uncertainty and higher volatility. Others will seek to benefit from the liquidity and precision of low-cost beta instruments.

In EMEA, we anticipate increased usage of fixed income ETFs for core passive exposure (Global Agg, US Treasury, Euro Government). Also, we anticipate credit allocations to increase for IG corporate and tactical usage for High Yield. And the next area of growth in EMEA would be active fixed income in an ETF wrapper.

William Ahmuty
Head of SPDR ETF Fixed Income

AI Opportunities Abound But Are Difficult to Identify

AI might as well stand for "all in" because investors are flocking to it in droves. Thematic Robotic and AI ETFs in the US have had nearly US$3 billion of inflows over the last twelve months[23] — the most of any granular thematic sector exposures. Meanwhile, traditional technology ETFs across the globe have had over US$18 billion in inflows during the same timeframe.[24] Those flows are into Technology sector ETFs, as well as specific industries supporting AI development, such as semiconductors.

With so much interest, the adoption of AI doesn't seem likely to stop anytime soon. In fact, "70% of business leaders believe that generative AI will significantly change the way their business creates, delivers, and captures value."[25]

The tricky thing about AI is that its scope extends beyond a specific sector or industry. Tech-forward companies from several industries have found ways to integrate AI advancements into their business models. Hyper-personalised retail experiences, predictive cancer screenings, safety testing autonomous vehicles — the use cases of AI multiply by the day. That doesn't even include companies laying the groundwork for AI's expansion, like advanced chip manufacturers and cloud computing firms.

This is one of the reasons why another thematic ETF sub-industry to receive outsized interest over the last year has been Smart Cities, taking in US$400 million so far in 2024 — a figure that increased assets in this burgeoning market by more than 20%.[26]

Pinpointing "pure" AI companies or investment exposures is nearly impossible. At the very least, it's counterproductive as AI is infused throughout many parts of our economy. Investors may benefit from adopting a more holistic view, focusing on industries and sectors that are broadly investing in AI for business growth.

For example, online retail platforms that have troves of customer data to train large language models are in a strong position to leverage AI technologies to improve efficiency in marketing and sales and provide curated customer experiences. Additionally, healthcare providers that deploy AI to improve patient diagnostics and deliver personalised care can enhance patient outcomes and efficiency. These efforts should have a tangible impact on bottom lines in the coming years.

Naturally, rapid and steep growth attracts skepticism. Some observers have raised alarms about bubble-like valuations, but a closer look reveals a market still grounded in reality. When compared to the exuberance of the dot-com era or the recent pandemic peaks, current valuations are supported by robust fundamentals, lower debt levels, and positive cash flows, suggesting a sustainable trajectory.

Owning a diversified basket of stocks connected to the AI-revolution may help investors reduce idiosyncratic risks, such as valuations or lofty growth expectations missing the target. And, it may help reduce the possibility of getting the theme right but the single stock call wrong — the foundational case for sector investing.

Q: What sectors do you think have the greatest potential to benefit from the emergence and advancement of AI? Why?

The emergence of generative AI (GAI) has excited business leaders, investors, and society as a whole due to its potential transformative impact in nearly every corner of life. It's gaining steam quickly, with 50% of consumers now optimistic about AI.[27]

The Information Technology sector is the most visible winner in the early building phase of AI technology, as it's the key enabler providing the AI computing power (e.g. advanced chips, data storage, cloud computing) to build large-language models (LLMs) and software applications. By adopting generative AI technology, tech companies may also see improvement in software development productivity, enabling them to create value-added products and services that boost their own profitability.

As AI technology becomes easier to adopt, broader AI applications across a wide range of sectors — social media and entertainment, life science research, health care, and financial services — will present significant value-creation opportunities. The convergence of smart device and edge AI technologies that process data on the device and provide an instant response could advance development at an unprecedented pace in autonomous vehicles, robotics, and industrial automation. As AI continues to develop and mature, it will open new frontiers in innovation.

Despite its tremendous potential for value creation, the pace and costs of AI technology penetration and monetisation among these industries will vary, depending on workforce readiness and the regulatory environment.

Anqi Dong
Senior Research Strategist

Goal-oriented Solutions in an ETF Wrapper

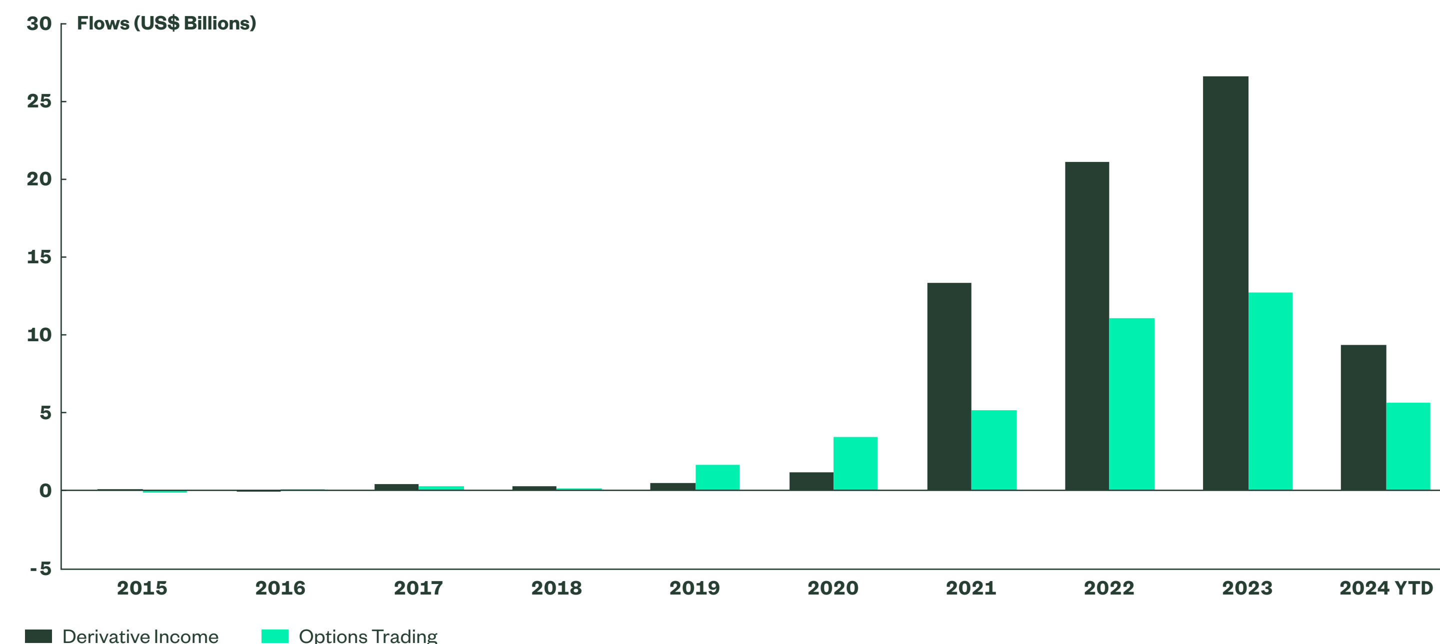
Investments are inherently unpredictable, but most portfolios don't need an uncapped risk-reward profile. Instead, investors are increasingly seeking out products that can directly address their unique financial objectives, whether planning for retirement, saving for a major purchase, or managing inheritance assets.

Goal-oriented solutions are designed to achieve precise investment goals, often within a predefined range of outcomes. For instance, one such solution might limit downside risk to 10% in exchange for capping potential gains at 15%, or it may sacrifice some equity upside for higher income. These strategies rely heavily on derivatives to construct portfolios, using layers of options to replicate an index and establish outcome bands.

In the US, the SEC's amendment to rule 18f-4 in 2020 paved the way for easier implementation of derivatives in ETFs, which provides ETF sponsors more flexibility to use options to mitigate risks, deliver a tighter range of potential outcomes, or generate income. In the first four months of 2024, for example, derivative income funds saw US$9 billion in inflows — on pace to break their 2023 record of US$26 billion. The options trading category has witnessed the same growth, setting a record in 2023 with US$13 billion. And, it's on pace to surpass that total in 2024 after seeing US$6 billion in inflows through just the first four months (Figure 10).

Figure 10

Flows Surge Into Derivative-based Exposures



Source: Morningstar, as of April 30, 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 results.

Q: Why do you think the time has come for outcomes-based or goal-oriented ETFs to shine? How might this category of ETFs reshape ETF investing?

I heard a statistic recently that surprised me — more people have died on Mt. Everest coming down the mountain than going up. Many investors have spent their lives "climbing the mountain" while saving for retirement, but now must ensure that they come down the other side safely.

Outcome-oriented investments can be an important tool in retirement planning that keeps the focus on goals such as not outliving your money, rather than trying to "beat the market." If used properly, these investments can increase the chances of retirement success — and it's for that reason that they're likely to grow in popularity in the years ahead.

Daniel Braz
Head of Intermediary ETF Strategy

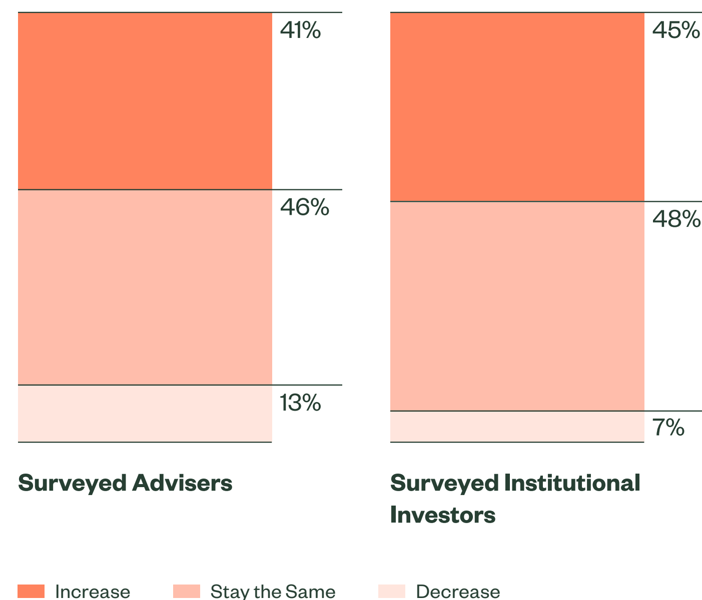
The Search for Diversification Elsewhere

Traditional 60-40 portfolios have not provided their cornerstone diversification benefits in recent years. With bonds and equities exhibiting historically high correlation at times, investors have started to turn to non-traditional asset classes that offer lower correlations to conventional markets for added diversification.

According to our survey, 45% of institutional investors globally plan to increase allocations to alternative investments in the next 12 months. And, 41% of US financial advisers plan to advise clients to increase their allocations. Only 7% and 13%, respectively, plan to decrease alternative allocations in the next 12 months (Figure 11).

Figure 11

Plans for Alternative Allocations in the Next 12 Months



Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Questions asked: Think about how you are advising your clients, in general, to allocate their portfolios in the next 12 months. For each of the following, please indicate whether you are recommending to decrease, stay the same, or increase the allocation; Think about how your institution is planning to allocate its investment portfolio in the next 12 months. For each of the following, please indicate whether your institution is planning to decrease, stay the same, or increase the allocation.

Gold is one alternative asset that tends to shine brightest in times of uncertainty and volatility, especially relative to other classic safe havens like bonds, treasury bills, and defensive equities. Yet, despite the low levels of volatility this year, gold prices have reached record highs in 2024.

The surge in prices has been largely driven by sovereign wealth and central bank demand — particularly those of mainland China, India, and Turkey — as countries position themselves against sticky inflation while diversifying their reserves away from the US dollar and other reserve currencies.

Bitcoin has also re-entered the arena, grabbing the market's attention once again. After investor demand flagged in 2023, the SEC's approval of the first US-listed Bitcoin ETF helped spark a resurgence earlier this year, which pushed Bitcoin to a new all-time high that exceeded US$73,000 in March.[28] It also sparked over US$11 billion of inflows worldwide through the first five months of the year as the fervor drew pent-up interest.[29]

Q: Are alternative ETFs the next frontier in democratising investing and why?

The combination of efficient access and transparent exposure has helped elevate ETFs as an effective portfolio management tool. While the growth in ETF AUM historically has been concentrated in traditional index exposures like equities and bonds, I expect to see increased inflows into alternative ETFs as the investment landscape expands (new products) and investor demand increases (new users).

Many investors are familiar with a core-satellite approach, where non-traditional satellite positions can be balanced alongside a core portfolio allocation. Investors comfortable using ETFs to build their core allocation are now demanding new, concentrated index solutions for satellite opportunities. I expect this will fuel investment in thematic index, actively managed, and crypto or digital assets ETFs.

Even as legacy ETF investors demand more product choices, new investors are considering ETFs. Institutional and retail investors are finding that ETFs offer an attractive value proposition with their daily liquidity, transparent holdings, and scaled pricing.

I think alternative ETFs will only increase that overlap between investor demand and asset manager supply.

Ryan Reardon
Senior Equity ETF Strategist

Sustainability ETFs

The Pursuit of Greener Pastures

Sustainability criteria are becoming an increasingly influential factor worldwide, as governments continue to prioritise green initiatives.

For instance, the European Union's Green Deal aims to make Europe the first climate-neutral continent by 2050, expanding the framework for sustainable activities and introducing more stringent requirements for companies — such as stricter energy performance standards for buildings and phasing out free allowances for certain energy-intensive industries. Similarly, in the United States, policies enacted through legislation like the Infrastructure Investment and Jobs Act and the Inflation Reduction Act open the door to significant investment opportunities in clean energy.

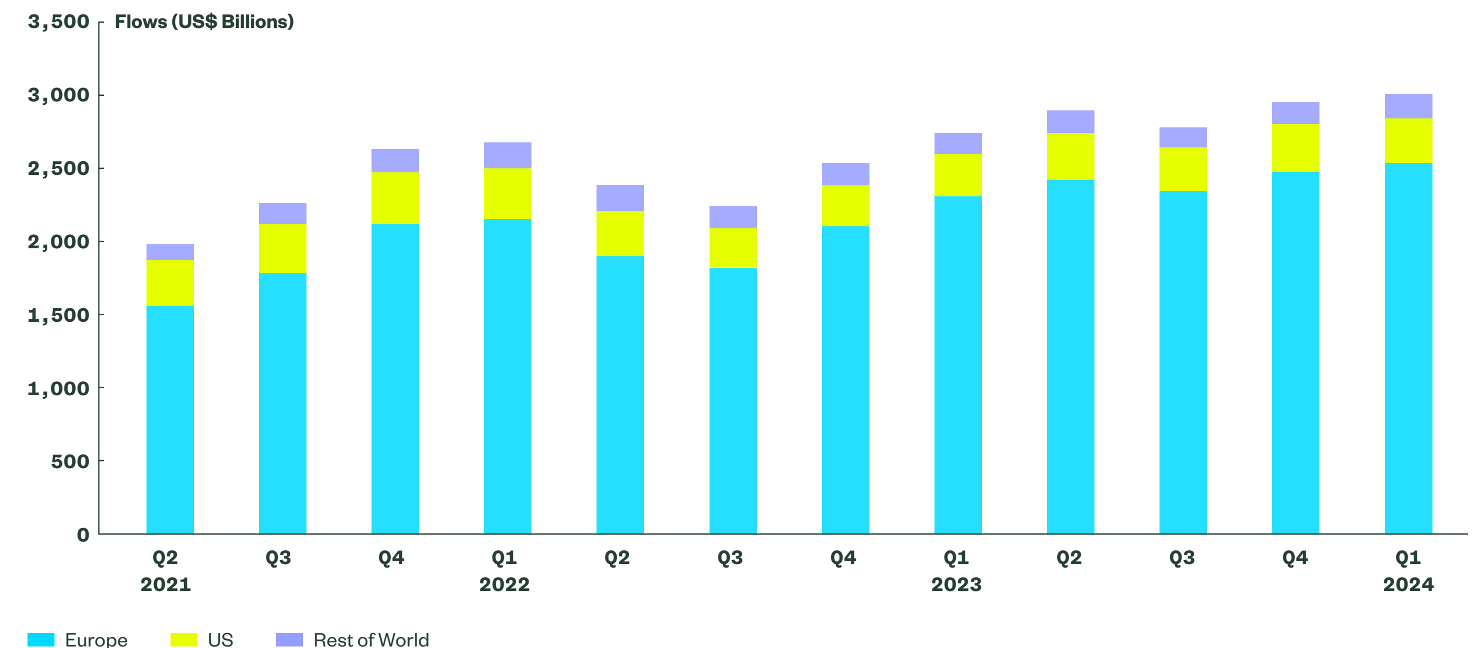
In the Asia-Pacific region and especially across Asian countries, there has been development of taxonomies to support sustainable investment activities. Mainland China pioneered its first Green Bond Endorsed Projects Catalogue in 2015 and has worked closely with the EU to develop Common Ground Taxonomy (CGT) in recent years. Using a three-tier "traffic light" and Energy Transition Mechanism respectively, both the Association of Southeast Asian Nations' (ASEAN) and Asian Development Bank's (ADB) taxonomies included mechanisms to support transition finance.[30]

The push for greater transparency and accountability in corporate practices — like the Corporate Sustainability Reporting Directive (CSRD), which is applicable to all companies in EU-regulated markets — has accelerated the expansion of sustainability ETFs across markets. These funds have the potential to help investors manage risk while gaining exposure to well-positioned companies in a rapidly evolving global landscape that favors low-carbon emissions and sustainability.

Quarter-over-quarter, we're seeing an incremental uptick in global sustainable fund* assets, just shy of US$3.0 trillion at the end of Q1 2024.[31] As data becomes more standardised and accessible, the ability to integrate sustainability criteria into ETF investments should improve, allowing for more nuanced and targeted strategies — potentially increasing the speed at which these funds grow (Figure 12).

Figure 12

Global Sustainable Fund* Assets Are Growing Incrementally



Source: Morningstar Direct, as of March 2024.

Q: Sustainability investing has gained significant traction globally. What do you see as the biggest drivers of growth for sustainability ETFs?

These ETFs will support investors' desire to invest sustainably while taking advantage of the unique characteristics ETFs offer, like transparency and deep liquidity. A growing number of investors are aligning their investment with new regulations, such as sustainable financial disclosure requirements (SFDR) and the EU Paris Aligned Benchmark (PAB). Overall, investors will continue to look to sustainable investing — including ETFs — to help mitigate risks while seeking alignment with their ethical beliefs.

For investors who are primarily driven by long-term value creation, there are sustainable ETFs with broad-market exposure and enhanced sustainability characteristics versus the traditional benchmarks. In addition, the recent introduction of Investor Voting Choice will help ETF investors align their votes to support long-term value creation.

Xinting Jia, PhD
Sustainable Investing Strategist,
APAC Region

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

Top Predictions On Future ETF Growth

Look into our ETF crystal ball, where the silhouettes of emerging opportunities have begun to materialise. Discover what is on the horizon for ETF investors, as we predict the top six growth catalysts that will shape the ETF market over the next year and beyond.

The Leading Drivers of ETF Growth

A Q&A with Matt Bartolini

Matt Bartolini
Head of SPDR North Americas Research

In this exclusive interview, Matt Bartolini, Head of SPDR North Americas Research, shares his bold predictions for the global ETF market. Read on to discover what he thinks about non-traditional asset classes, markets outside the US, the democratised customisation ETFs offer — and other potential drivers of ETF growth.

Q: Where do you predict the ETF industry will be in terms of AUM and number of funds in 5 to 10 years?

Based on current trends, in just five years I think we'll see 11,500 funds with more than US$20 trillion in assets globally. And by 2034, we'll likely see total assets swell to over US$43 trillion. That 10-year forecast sounds big, but given what we have witnessed in the last 10 years — where global ETF assets increased almost five-fold, from US$2.3 trillion in 2014 to US$11 trillion now — there's good reason to believe it will happen.

Q: Early adopters of ETFs chose them because of their cost-efficiency, liquidity, and transparency. What do you think will be the next key driver of global ETF growth?

I'd say the democratised customisation that comes with an increasing amount of choice.

What I mean by that is, more and more, ETF strategies are seeking to provide investors with specific outcomes or access to a very precise corner of the equity, bond, or alternative markets. This allows investors to tailor their portfolios in distinct, flexible, and purposeful ways.

Investors gain this ability to customise while still benefitting from centralised, professional portfolio management wrapped in an ETF that offers daily liquidity, transparency, real-time pricing and, in most cases, tax and cost efficiency. That's the democratised part, as both the largest institutions and "mom-and-pop" investors alike have equal access to that customisation.

Q: Is there a driver of ETF growth that most excites you? What is it and why?

I'm really excited about the expansion of non-traditional asset classes, such as commodities, currencies, alternatives, and multi-asset strategies. Not because they are likely to make up a huge portion of total ETF AUM, but because they continue the ETF's evolution from a single US equity index fund in 1993 to the democratising force in investing they are today. As the number of use cases for ETFs continues to expand, that only lends comfort and credibility to the entire ETF ecosystem, which in turn attracts more investors.

Q: Looking ahead, what regions do you believe hold the greatest potential for ETF expansion?

All markets, really. But I believe that the US will add the biggest asset base given its size already.

While there are definite growth trends in EMEA, Asia Pacific is likely to be the region with the actual highest growth rate. Major catalysts include demographic trends, regulatory changes (notably in mainland China), increased focus on wealth accumulation, and the existing size of an unaddressed asset base. Asia Pacific (ex-Japan) had a record US$170 billion of inflows in 2023, a 35% jump from 2022.[32] And new highs occurred in Australia, mainland China, South Korea, and Taiwan. It's a trend that I believe is likely to continue.

> "As the number of use cases for ETFs continues to expand, that only lends comfort and credibility to the entire ETF ecosystem, which in turn attracts more investors."

> "Given the growth trends, the increase in active strategies, and the increasing number of use cases, I think global ETF assets will surpass global managed fund assets in 10 years, or by 2034."

Q: Do you have any bold predictions for the global growth of the ETF industry?

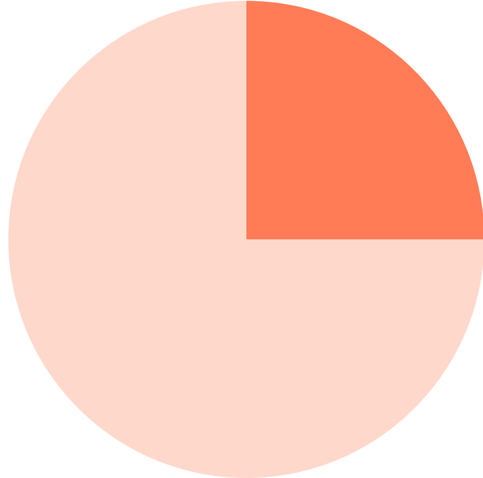
Right now, global ETF AUM is US$11 trillion, and global managed fund AUM is US$33 trillion. Given the growth trends, the increase in active strategies, and the increasing number of use cases, I think global ETF assets will surpass global managed fund assets in 10 years, or by 2034.

Prediction 1
Managed Fund Conversions Will Ramp Up

Managed funds converting to ETFs is hardly a novel phenomenon, but more recently it has been a US-centric one, with legacy managed fund firms seeking to enter the market. In the US, for example, 35 funds were converted in 2023, representing US$15.7 billion in assets.[33] And in the first four months of 2024, seven products were converted (with US$1.3 billion in current assets).[34] Similar successful conversions are happening around the globe.

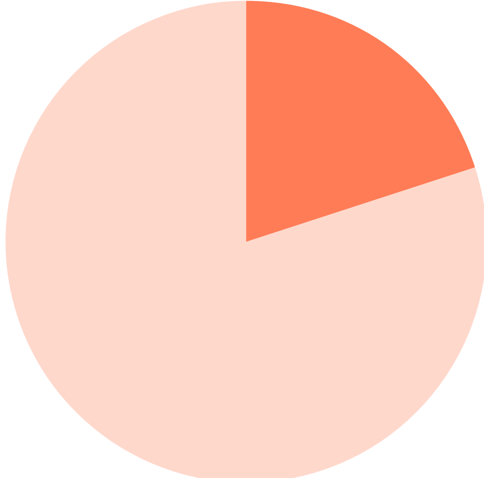
Don't be surprised if these figures increase in the coming months. In the US, almost one in four managers plans to convert at least one managed fund into a transparent active ETF.[35] Globally, the expectation is similar; one in five asset managers plans to convert a portion of their managed fund offerings into ETFs over the next two years, according to a PwC Survey.[36]

On a smaller scale, some wealth managers are also transitioning separately managed accounts (SMAs) into ETFs. For instance, in March 2024, Eagle Capital Management converted an SMA into an ETF with US$1.8 billion in assets.[37] The appeal of converting active managed funds into active ETFs is bolstered by the ETF's potential for tax efficiency and enhanced liquidity — particularly attractive in volatile market conditions. These advantages, coupled with the ability to precisely target market segments and investment themes, will likely drive more asset managers to expand their ETF offerings.



25%

of managers plan to convert at least one managed fund into a transparent active ETF.[38]



20%

of asset managers plan to convert a portion of their managed fund offerings into ETFs over the next two years.[39]

Prediction 2

Active ETFs Will Grab a Bigger Slice of the Pie

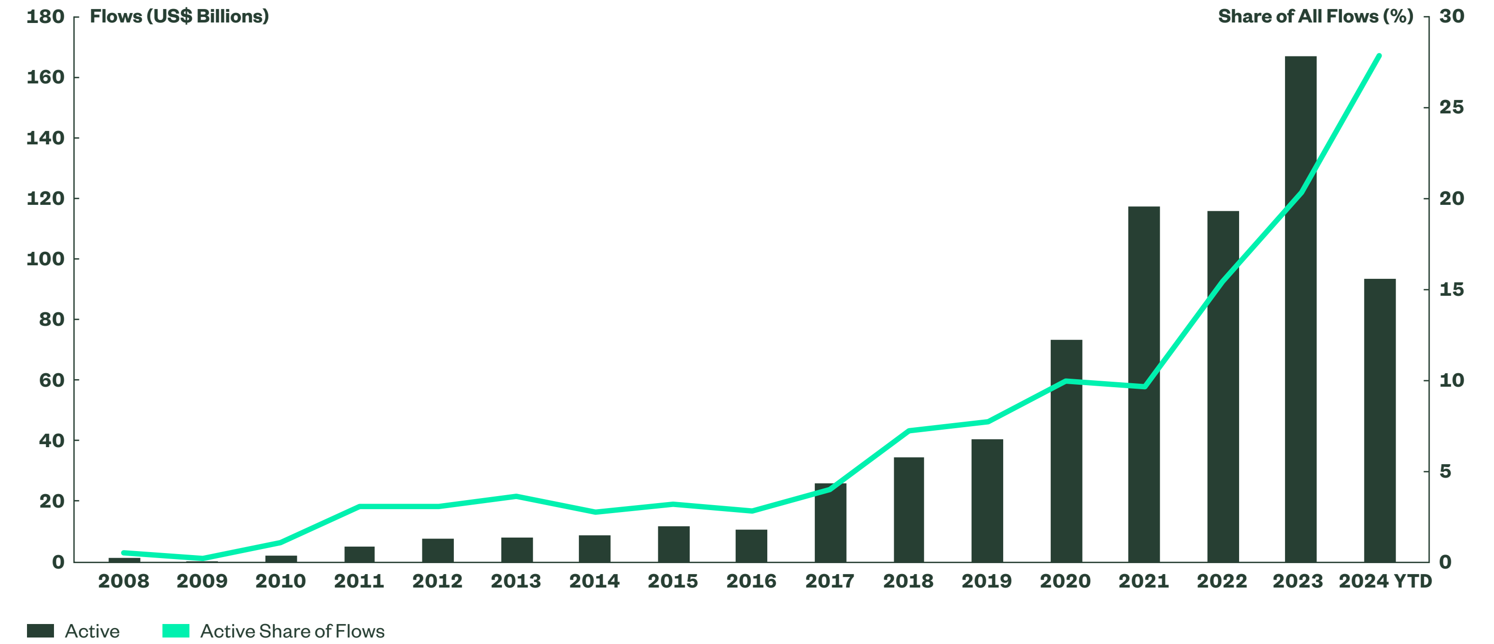
Globally, active ETFs have accounted for almost a third of all inflows in the first quarter of 2024 (Figure 13).[40] Several forces could add fuel to the fire — namely, opportunities in fixed income and alternatives as well as the aforementioned managed fund conversions.

There's significant demand for these products globally, led by the US and Canada (Figure 14). Moreover, in late 2023, 95% of US ETF issuers were either developing or planned to develop transparent active ETFs.[41] Passive funds won't pass the torch to their active counterparts anytime soon, but active fixed income and alternatives ETFs should continue to capture inflows as issuers launch more products and more investors make strategic allocations for diversification purposes.

Institutional Interest Is High
According to our global survey, roughly 80% of institutional investors are likely to consider actively managed ETFs, especially in the Netherlands where likelihood is even higher (90%).

Figure 13

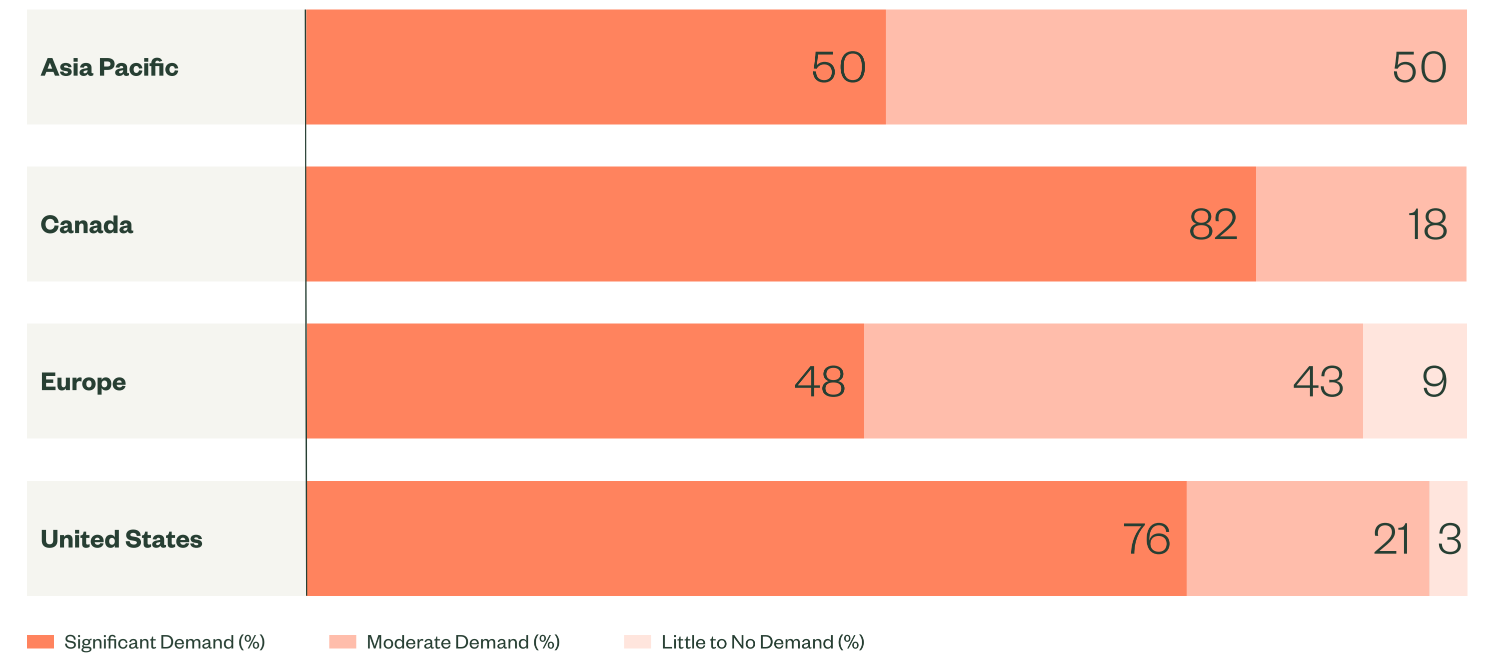
Active ETFs Took in a Record 28% of All Global Inflows Between January and April 2024



Source: Morningstar Direct, as of April 30, 2024.

Figure 14

Expected Investor Demand for Active ETFs Over the Next Two to Three Years (by Regional Market)



Source: PwC, Global ETF Survey 2023.

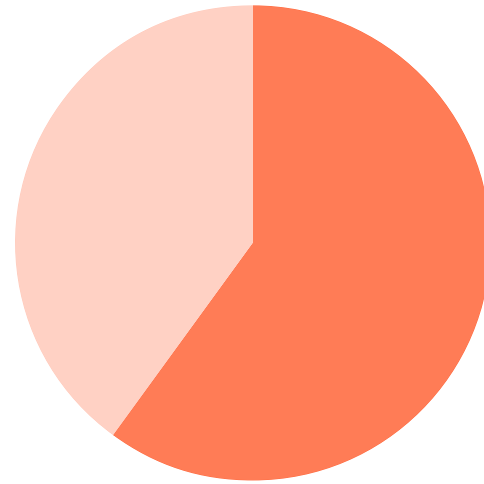
Prediction 3

Non-US Markets Will Make Considerable Noise

While the US has spearheaded the ETF market's expansion, there is growing appetite for ETF products across the globe.

Last year alone, European ETFs witnessed inflows of US$158.2 billion, bringing total AUM to US$1.8 trillion. According to a PwC report, industry experts are optimistic this demand will persist, with six out of 10 survey respondents predicting that European ETF AUM will eclipse US$3 trillion by June 2028.[42]

A key development to watch is the EU's push for a "Consolidated Tape" initiative, which aims to centralise real-time securities prices and volume data across EU capital markets. This could significantly enhance transparency, improve price discovery, reduce market fragmentation, and bolster the competitiveness of European-listed ETFs.



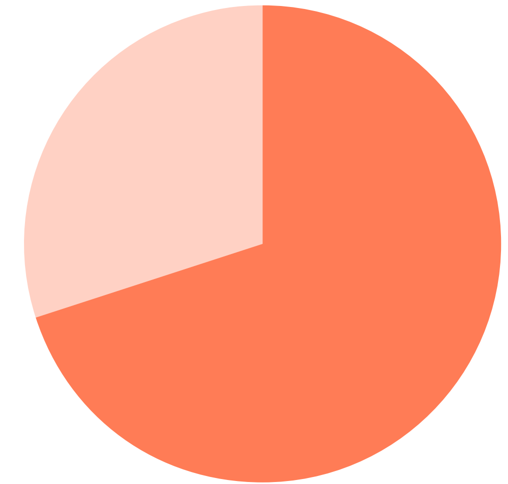
60%

of survey respondents predict that European ETF AUM will eclipse US$3 trillion by June 2028.[43]

ETF prospects look strong in Asia Pacific, too; 77% of survey respondents predicted that APAC ETF AUM will reach at least US$2.5 trillion by June 2028, driven by increasing interest from retail investors and integration into model portfolios.[44]

Legislation should support inflows, too. In Japan, for instance, policymakers are incentivising citizens to invest some of their savings through increased investment limits and tax allowances in Nippon Individual Savings Accounts (NISAs).[45] The revamp, which took effect in January of this year, should facilitate greater investment in risk-bearing assets.

There is something to be said of social media's power as well. In Taiwan, the ETF market is flourishing thanks, in part, to influencers on social channels like YouTube promoting the accessibility and flexibility of the product. ETF usage among younger investors (between 25–34 years old) has quintupled in recent years, growing from 10% in 2018–2020 to 50% in 2022.[46] We expect continued market penetration across APAC as these trends gain momentum.



77%

of survey respondents predicted that APAC ETF AUM will reach at least US$2.5 trillion by June 2028.[47]

Prediction 4

Younger Investors Will Continue Increasing Allocations to ETFs

Likely due to the accessibility of ETFs, younger generations show a preference for ETFs over traditional managed funds. Millennials, in particular, are leading this charge. In Japan, 53% currently have ETFs in their portfolio, and the percentage of millennials in the US, Australia, and Singapore who own ETFs is even higher. And across all countries surveyed, millennial versus boomer ownership numbers are staggering (Figure 15).[48]

There's a notable disparity in ETF ownership across investor types, too. According to a US study we conducted across high-growth investor segments, nearly half of US hybrid investors — those who use a blend of self-directed and advised investment strategies — report owning at least one ETF, whereas only 27% of advised-only investors say the same.[49] The flexibility, transparency, and cost advantages of ETFs may resonate more with individual investors who take a more active role in managing their investments.

As younger generations progress professionally and accumulate or inherit wealth, we anticipate their preference for ETFs will propel growth, specifically for products that cater to the values and investment goals of younger investors, such as alternatives, thematic, and sustainability ETFs (Figure 16).

Figure 15

Percentage of Surveyed Investors With ETFs in Their Current Portfolio

		US	Australia	Singapore	Japan
ETFs	Millennials	58%	65%	67%	53%
	Gen X	47%	44%	56%	46%
	Boomers	37%	31%	48%	44%

Millennials Gen X Boomers

Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Question asked: Please indicate whether or not your current investment portfolio contains each of the following.

Figure 16

Percentage of Surveyed Investors With Sustainable Investments and Alternatives in Their Current Portfolio

		US	Australia	Singapore	Japan
Sustainable Investments	Millennials	34%	29%	43%	30%
	Gen X	13%	32%	22%	29%
	Boomers	11%	18%	27%	32%
Alternatives	Millennials	44%	51%	62%	56%
	Gen X	23%	29%	41%	40%
	Boomers	14%	8%	30%	37%

Millennials Gen X Boomers

Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Question asked: Please indicate whether or not your current investment portfolio contains each of the following.

Prediction 5

Model Portfolio Growth Will Broadly Spur ETFs

Model portfolios hold obvious appeal for advisers and wealth managers — less time spent on portfolio management and compliance work means more time spent on client relationships. And model portfolio growth is taking place at a time when demand for advisory services is poised to surge, especially as more baby boomers and their beneficiaries seek financial guidance during the greatest wealth transfer in history.

US model portfolios, which eclipsed US$5 trillion in assets in 2023, have taken in US$1.5 trillion of net flows in the last four years — a trend expected to accelerate in the next four years. Broadridge Financial Solutions projects that by 2028, assets in these pre-packaged solutions could more than double to US$11.3 trillion.

ETFs comprised 51% of model portfolio assets at the end of 2023 and have been integral to this growth. We expect the virtuous circle of growth between model portfolios and ETFs to continue. In other words, the increasing popularity and use of model portfolios should continue to fuel growth in ETF assets.

And, likewise, as the number of ETF products expands along with their use cases, we expect ETFs will in turn contribute to the growth and appeal of models tailored to specific investment goals and desired outcomes.[50]

In a similar vein, PwC survey respondents in APAC and EMEA rank model portfolios as the second most likely driver of ETF growth in the next few years (79% and 67%, respectively) behind retail investors.[51]

Figure 17

Managed Accounts Help Australian Advisers and Their Support Staff Save an Average of 22.8 Hours per Week

Averages* among current managed account advisers [n=420]

*Average calculated in hours excluding "I spend more time," and "N/A, I'm unsure."
Source: SPDR ETFs/Investment Trends 2024 Managed Accounts Report, March 2024. Question asked: In a typical work week, approximately how much less time do you (or your admin staff) spend on the following tasks as a result of using managed accounts?

Prediction 6

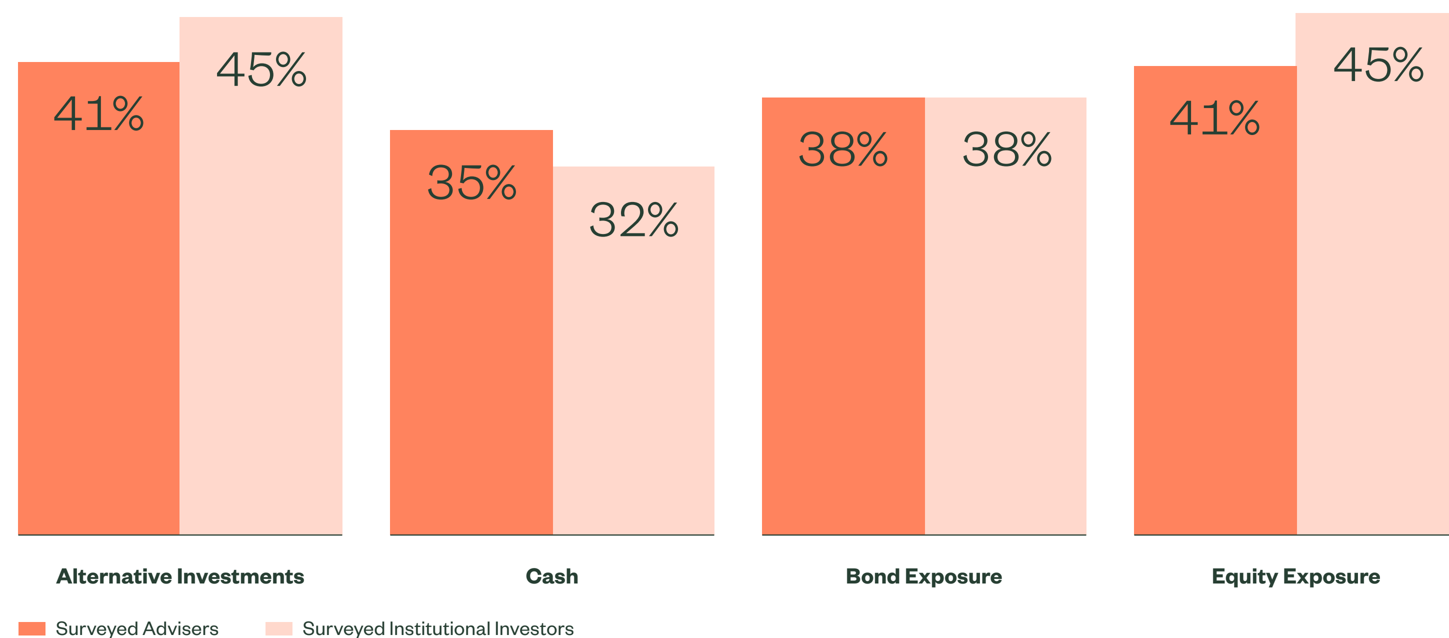
Sizable Inflows Beyond Stocks and Bonds

Portfolio diversification looks different in 2024. With stocks and bonds demonstrating historically high correlations, investors have turned to asset classes beyond the "Big Two."

Our ETF Impact Survey found that more institutional investors globally plan to increase their allocations to alternatives than bond exposures (45% versus 38%, respectively).[52] US advisers seem to be on a similar page, as we found that four in 10 US advisers plan to advise their clients to increase allocations to alternatives over the next year (Figure 18).[53] Individual investors around the globe are likely to follow suit.

Figure 18

Surveyed Advisers' And Institutions' Planned Allocation Increases in the Next 12 Months



Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Questions asked: Think about how you are advising your clients, in general, to allocate their portfolios in the next 12 months. For each of the following, please indicate whether you are recommending to decrease, stay the same, or increase the allocation; Think about how your institution is planning to allocate its investment portfolio in the next 12 months. For each of the following, please indicate whether your institution is planning to decrease, stay the same, or increase the allocation.

Structural and inflationary trends (e.g., green energy transition, geopolitical fragmentation, de-globalisation) have also facilitated a need to use real assets to hedge related risks. For instance, when asked to list their primary financial concerns, institutional investors surveyed in our 2024 ETF Impact Survey pointed to inflation as the top concern in six out of eight countries (Figure 19).[54]

Overlaying a less correlated strategy that targets alternatives, like commodities and real assets for example, can provide diversification in a volatile macro environment marked by persistent inflation. We expect alternatives and commodity ETFs to attract sizable inflows over the next year.

Figure 19

Inflation Ranks as a Top Financial Concern Among Institutional Investors Worldwide

	United States	United Kingdom	The Netherlands	Sweden	Switzerland	Australia	Singapore	Japan
Inflation	73%	67%	76%	63%	69%	78%	70%	66%
Election Outcomes	57%	61%	63%	52%	51%	64%	78%	62%
Geopolitical Instability	65%	56%	72%	55%	69%	64%	70%	50%
Risk of Recession	55%	55%	67%	45%	76%	74%	64%	44%
Interest Rate Fluctuations	66%	58%	67%	44%	73%	76%	68%	50%

Top Financial Concern

Source: State Street Global Advisors, 2024 ETF Impact Survey, April 2024. Question asked: How concerned is your institution about each of the following? (5-point scale: 1 "Not at all Concerned" to 5 "Extremely Concerned.")

One Chapter Ends, Another One Begins

Another eventful chapter of the ETF's decades-long story has been chronicled. Let's revisit some of the notable themes discussed.

A Storied Past

Over the past 31 years, since the launch of SPDR® S&P 500® ETF Trust (SPY)[1], ETFs have experienced tremendous growth and have been at the forefront of financial market innovation. ETFs now enable investors to more easily access a vast array of asset classes and strategies, fundamentally transforming how individuals and institutions invest.

A Complex Present

In today's market, complex challenges have exposed unique opportunities. Investors have had to adapt to changing structural and macro factors and new market dynamics. In turn, we've seen investing trends emerge across asset classes and strategies, from active investing, goal-oriented solutions, and diversification through alternatives to the broad integration of advanced technologies like AI, crypto, and digital assets.

A Bright Future

Looking ahead, the drivers of ETF growth are both robust and diverse. Increased adoption of ETFs in model portfolios, the ongoing shift from managed funds to more flexible and tax-efficient ETFs, and the expansion into non-traditional asset classes all point to a future where ETFs continue to democratise access, so that all investors have the ability to build wealth and achieve their goals.

What Will Your Role Be in the ETF Story?

The truth is, we don't need a crystal ball to predict that the ETF market will continue to flourish. That said, challenges — new and familiar — will undoubtedly emerge. Whatever the market environment or challenges ahead, we're here to help you better understand the power and potential of these products and how to use them, so that you can make the best possible investment decisions.

Get In Touch With Us Directly

For fresh ETF insights or investment ideas, connect with your State Street Global Advisors representative.

Or Lean on Our Existing Resources

Access key SPDR insights to stay ahead of the curve in this dynamic market.

2024 ETF Impact Survey Results
Find out how ETFs are impacting investors and wealth managers around the world.

ETF Education
Everything you need to know about ETFs.

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

About State Street Global Advisors

State Street Global Advisors serves governments, institutions and financial advisers 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[55], we are always inventing new ways to invest.

US$4.34T
in assets[56]

US$2.95T
in AUM with institutional clients[57]

US$1.38T
in AUM with financial intermediary clients[58]

1st
US's first, and world's largest, ETF[59]

45 yrs
Managing investments

57
Countries with clients[60]

10
Global investment centers

Endnotes

1 The SPDR® S&P 500® ETF (SPY) is a U.S. domiciled ETF. The Australian domiciled SPDR® S&P 500® ETF Trust (SPY) was first quoted on the AQUA market of the ASX on 13/10/2014 and offers CHESS Depository Interests over interests in the U.S. SPY fund.

2 Morningstar, as of December 31, 2023.

3 Morningstar, as of December 31, 2023.

4 Bloomberg Finance, L.P., as of December 31, 2023.

5 Morningstar, as of December 31, 2023.

6 Morningstar, as of December 31, 2023.

7 Morningstar, as of December 31, 2023.

8 Morningstar, as of December 31, 2023.

9 Morningstar, as of December 31, 2023.

10 State Street Global Advisors, 2024 ETF Impact Survey, April 2024.

11 State Street Global Advisors, 2024 ETF Impact Survey, April 2024.

12 Bloomberg Finance, L.P., as of January 19, 2024, based on SPDR Americas Research calculations.

13 Bloomberg Finance, L.P., State Street Global Advisors, as of April 30, 2024.

14 Morningstar Direct, as of April 30, 2024.

15 “Active ETFs tipped to take over as market sees significant growth,” Investor Daily. May 28, 2024.

16 Morningstar Direct, as of December 31, 2023.

17 Morningstar Direct, as of December 31, 2023.

18 Morningstar Direct, as of December 31, 2023.

19 Bloomberg Finance, L.P., as of May 22, 2024.

20 The Cerulli Report, U.S. Exchange-Traded Fund Markets 2023.

21 Morningstar Direct, as of April 30, 2024.

22 Bloomberg Finance, L.P, as of April 30, 2024.

23 Bloomberg Finance, L.P., as of May 31, 2024.

24 Morningstar, as of May 31, 2024.

25 PwC, Global NextGen Survey, 2024.

26 Bloomberg Finance, L.P., as of May 31, 2024.

27 “The State of AI in the Online Marketing Industry: 2023 Report,” Authority Hacker, January 2, 2024.

28 Statistica, Bitcoin (BTC) price per day from August 26, 2021, to May 21, 2024.

29 Morningstar, as of May 24, 2024.

30 “Asia’s Progress Toward Greater Sustainable Finance Market Efficiency and Integrity,” Asian Development Bank, 2023.

31 Morningstar Direct, as of March 2024.

32 ETFGI, as of December 31, 2023.

33 Morningstar, as of December 31, 2023.

34 Morningstar, as of April 30, 2024.

35 The Cerulli Report, U.S. Exchange-Traded Fund Markets 2023.

36 PwC, ETFs 2028: Shaping the Future, 2024.

37 Reuters, “Eagle converts separately managed account into [US]$1.8 billion ETF,” 2024.

38 The Cerulli Report, U.S. Exchange-Traded Fund Markets 2023.

39 PwC, ETFs 2028: Shaping the Future, 2024.

40 Bloomberg Finance, L.P., State Street Global Advisors, as of March 31, 2024.

41 The Cerulli Report, U.S. Exchange-Traded Fund Markets 2023.

42 PwC, ETFs 2028: Shaping the Future, 2024.

43 PwC, ETFs 2028: Shaping the Future, 2024.

44 PwC, ETFs 2028: Shaping the Future, 2024.

45 Japan Securities Dealers Association, NISA: Japan’s Tax Exemption Scheme for Investment by Individuals, 2024.

46 Chung-Hua Institution for Economic Research.

47 PwC, ETFs 2028: Shaping the Future, 2024.

48 State Street Global Advisors, 2024 ETF Impact Survey, April 2024.

49 State Street Global Advisors, 2024 Influential Investor Segment Study, September 2023.

50 Broadridge Financial Solutions, 2023.

51 PwC, ETFs 2028: Shaping the Future, 2024.

52 State Street Global Advisors, 2024 ETF Impact Survey, April 2024.

53 State Street Global Advisors, 2024 ETF Impact Survey, April 2024.

54 State Street Global Advisors, 2024 ETF Impact Survey, April 2024.

55 Pensions & Investments Research Center, as of December 31, 2022.

56 This figure is presented as of March 31, 2024 and includes ETF AUM of $1,360.89 billion USD of which approximately $65.87 billion USD is in gold assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

57 State Street Global Advisors Finance.

58 State Street Global Advisors Finance.

59 Bloomberg Finance, L.P., as of March 31, 2024.

60 As of March 31, 2024.

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 US 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 penalised.

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 popularised 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 maximise 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 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.

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.

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. 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.

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

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.

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.

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.

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 stock-market 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 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.

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.

ESG Investing, or Environmental, Social and Governmental Investing A set of criteria that socially and ethically conscious investors can use to screen investments. Environmental criteria look at how a company performs as a steward of the natural environment; social criteria examine how a company manages relationships relevant to its operations; and governance criteria deal with a company’s leadership, executive pay, audits and internal controls, and shareholder rights. An increasing number of investments, including ETFs, are now being marketed as ESG-compliant.

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 managed 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 TThe 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 stabilisation period began in late 2008 and continued until the end of 2009.

Hawk or Inflation Hawk A monetary policymaker who favors relatively high interest rates aimed at keeping inflationary pressure under tight control. Hawks would rather keep recessionary pressures in check through higher interest rates instead of embrace lower-rate monetary policies that lead to inflationary economic growth.

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.

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 organisation that has a large amount of money or assets to invest, such as a company, managed 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.

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 advisers 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.

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.

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 capitalisation-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 Treasurys 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 capitalisation.

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.

Tax Efficiency A term that describes various approaches to investing that minimise 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 wefficiency.

Treasurys The debt obligations of a national government. Also known as "government securities," Treasurys 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.

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 annualised standard deviation of returns. In modern portfolio theory, securities with higher volatility are generally seen as riskier due to higher potential losses.

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

Issued by State Street Global Advisors, Australia Services Limited (AFSL Number 274900, ABN 16 108 671 441) ("SSGA, ASL"). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: 612 9240-7600. ssga.com/au.

SSGA, ASL is the AQUA Product Issuer for the CHESS Depositary Interests (or "CDIs") created over Interests in SPY which were first quoted on the AQUA market of the ASX on 13 Oct 2014. State Street Global Advisors Trust Company (ARBN 619 273 817) is the trustee of, and the issuer of interests in, the SPDR® S&P 500® ETF Trust, an ETF registered with the United States Securities and Exchange Commission under the Investment Company Act of 1940 and principally listed and traded on NYSE Arca, Inc. under the symbol "SPY".

This material is general information only and does not take into account your individual objectives, financial situation or needs and you should consider whether it is appropriate for you. You should seek professional advice and consider the product disclosure statement available at ssga.com/au, before deciding whether to acquire or continue to hold units in an ETF. The Target Market Determination is also available at ssga.com/au. This material should not be considered a solicitation to buy or sell a security.

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

Past performance is not a reliable indicator of future performance. Performance returns for periods of less than one year are not annualised. The performance figures contained herein are provided on a gross of fees basis and do not reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates raise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investing involves risk including the risk of loss of principal.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

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

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

The views expressed in this material are the views of SPDR, Anna Paglia, Matthew Bartolini, Antoine Lesne, William Ahmuty, Anqi Dong, Daniel Braz, Ryan Reardon, and Xinting Jia through the period ended May 29, 2024 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

There can be no assurance that a liquid market will be maintained for ETF shares.

In general, ETFs can be expected to move up or down in value with the value of the applicable index. Although ETFs may be bought and sold on the exchange through any brokerage account, ETFs are not individually redeemable from the Fund. Investors may acquire ETFs and tender them for redemption through the Fund in Creation Unit Aggregations only, please see the prospectus for more details. While the shares of ETFs are tradable on secondary markets, they may not readily trade in all market conditions and may trade at significant discounts in periods of market stress.

Diversification does not ensure a profit or guarantee against loss.

Frequent trading of ETFs could significantly increase commissions and other costs such that they may offset any savings from low fees or costs.

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 specified ESG criteria may trail the returns on a portfolio of securities which include such companies. A portfolio's ESG 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.

Intellectual Property Disclosures: SPDR®, Standard & Poor's® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC, Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC, ASX® is a registered trademark of the ASX Operations Pty Ltd, these trademarks have been licensed for use by S&P Dow Jones Indices LLC and sub-licensed for use to State Street Global Advisors, ASL. SPDR products are not sponsored, endorsed, sold or promoted by any of these entities and none of these entities bear any liability with respect to the ETFs or make any representation, warranty or condition regarding the advisability of buying, selling or holding units in the ETFs issued by State Street Global Advisors, ASL.

BLOOMBERG®, a trademark and service mark of Bloomberg Finance L.P. and its affiliates, have each been licensed for use in connection with the listing and trading of the SPDR Bloomberg ETFs.

© 2024 State Street Corporation.
All Rights Reserved.
2234632-5676774.3.7.ANZ.RTL 0724
Exp. Date: 06/30/2026