ETFs 2028:

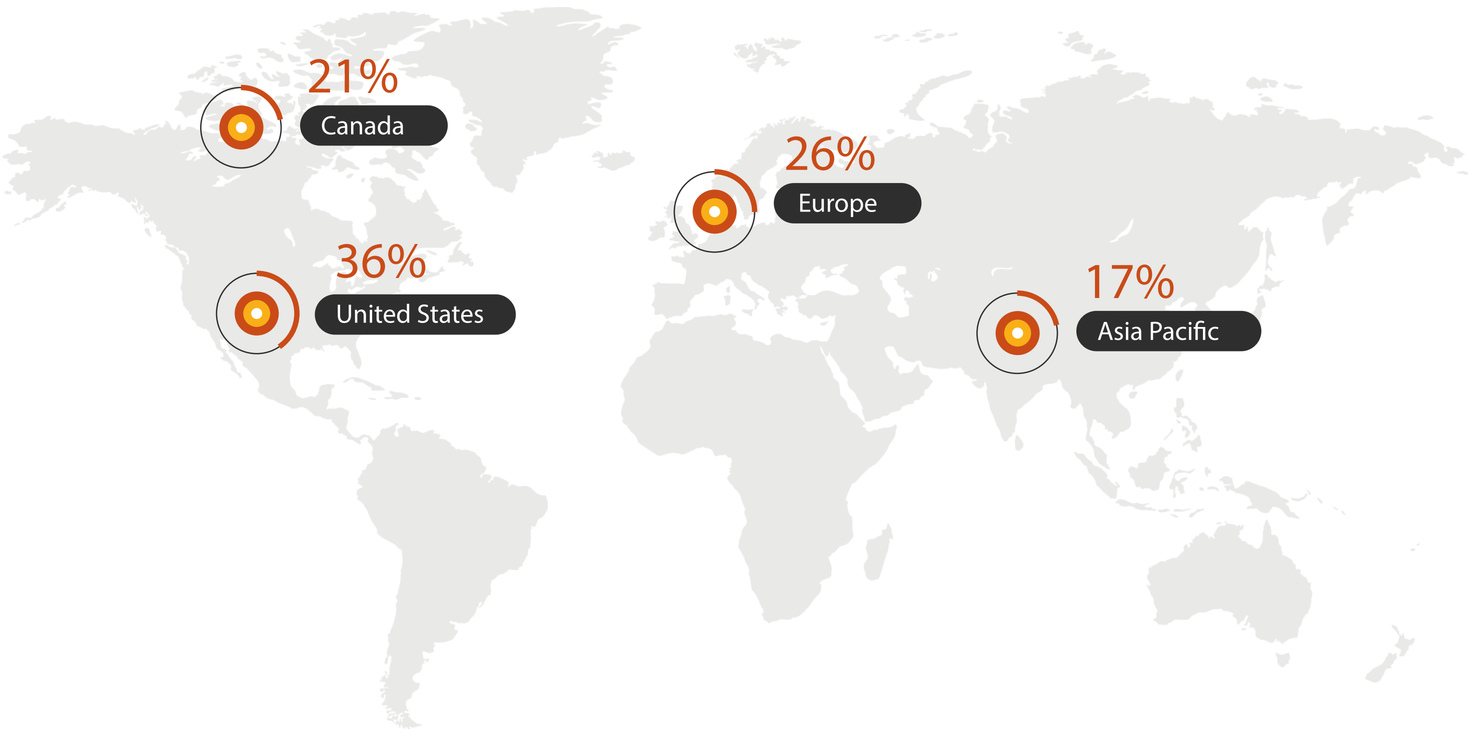
Shaping the Future

Contents

About this survey

PwC surveyed more than 70 executives from around the world in 2023, using a structured questionnaire. Over 80% of the participants were exchange-traded fund (ETF) managers or sponsors. The remaining participants were made up of service providers, market makers and other asset managers.

The participating firms come from the four main regions of the global ETF market:



The diversity of our sample allowed us to capture a broad range of views on the direction of the ETF market, both globally and regionally.

We would like to thank all the ETF managers, service providers, market makers and other asset managers who took part in the survey for sharing their valuable insights.

Unless otherwise stated:

- All figures come from PwC analysis and modelled projections using Lipper data as the primary source.
- All references to 'mutual funds' exclude ETFs.
- All monetary figures are in US dollars.

Overview

Welcome to ETFs 2028: Shaping the Future. The report explores the latest trends and future outlook in today's increasingly diverse, disruptive and fast-growing global and regional ETF markets.

It has just been over ten years since we published *The next generation of ETFs: Why every asset manager needs an ETF strategy*. Our 2013 report not only anticipated rapid growth in ETF assets under management (AuM) worldwide, but also an acceleration in innovation and diversification as investors demanded greater customisation and product choice.

The clear question for asset managers who were still reluctant to offer ETFs at the time was "how much longer can you afford to sit on the sidelines?"

Roll forward 10 years later and the number of ETF issuers has more than doubled since 2013 to reach 582, with over 60% of the world's top 100 asset managers now offering ETFs.

Exhibit 1

How the Global ETF market has changed since 2013

	2013	2023
Global ETF AuM (USD bn)	$2,376.1	$11,464.3
Number of ETFs globally	4,032	9,804
Number of ETF issuers globally	233	582

Source: Lipper Data

From strength to strength

The rapid expansion in global ETF AuM anticipated in our 2013 paper has continued at a phenomenal pace. Having recorded a compound annual growth rate (CAGR) of 17.0% since 2013 and 18.9% in the past five years, global ETF AuM grew by more than 25% year-to-year to reach a new record of almost $11.5 trillion at the end of 2023. **The continued growth and even greater opportunities ahead are reflected in our survey results, with survey participants predicting global ETF AuM to reach at least $19.2 trillion by June 2028.** This would represent a 5 year CAGR of 13.5%. While we view this number as conservative, this far outstrips the anticipated 5% CAGR projected for the *asset and wealth management* industry's AuM as a whole in the five years ended 2027.

No time to stand still

With the unprecedented pace of change due to technological disruption, climate change and geo-political environment and the increasing need to deliver sustained outcomes for stakeholders, ETF issuers need to lead the way on product innovation and business model reinvention.

Our recent *global Asset Management research* predicts that 16% of asset management firms are in danger of being acquired or going out of business in the next 3 years.

As ETF issuers operate with tight margins, technology is going to play a key role in helping firms to drive changes in their business models from operations right through to reaching new and emerging end investors.

Our survey finds that retail investors will be an increasingly important segment of future growth looking for easily understandable and accessible direct-to-market products, which can be traded via a digital interface.

The race to keep pace with today's generational shifts and demands for personalised financial solutions will divide the winners from the losers in this fast-evolving ETF and wider asset management arena. The challenges are exacerbated by the fact that, while investors demand more from ETF managers, competition on fees remains intense, making profitable growth challenging.

Section 1

Growth projections: Capitalising on global demand

Growth in ETF AuM is now soaring worldwide as the US, Canada and Europe all raise their five-year projections for regional AuM and the APAC region moves into a new phase of expansion.

United States

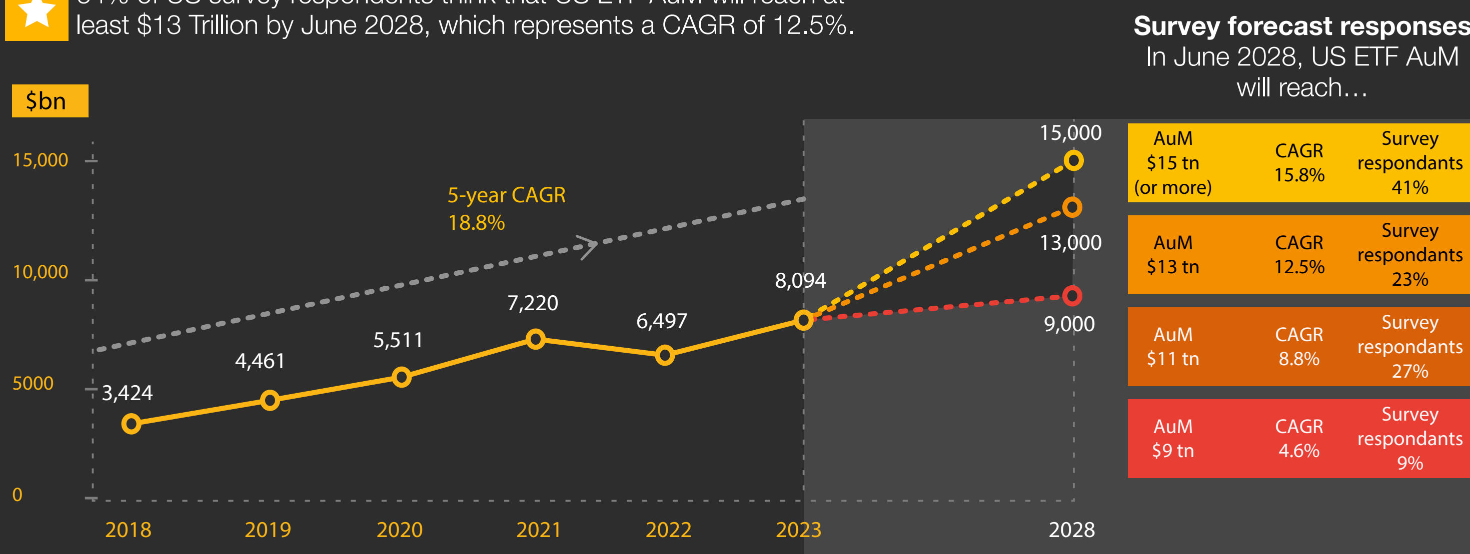
The US is the largest ETF market, with US ETF AuM surpassing $8.0 trillion in December 2023, which represents more than 70% of the global ETF AuM. The US respondents in our survey continue to be bullish about prospects for further growth. The majority of US respondents (64%) expect US ETF AuM to reach at least $13 trillion by June 2028, with a 12.5% CAGR. However, this includes 41% of US survey respondents who are even more bullish and believe that US ETF AuM would reach $15 trillion or more by June 2028, representing a CAGR of 15.8%. The highest level of ETF demand over the next few years is expected to come from financial advisors and intermediaries (76%), model portfolios (76%) and retail investors (72%) according to our survey.

Although the US active ETF market is relatively small in comparison to passive ETFs, active ETF AuM recorded a 35.4% CAGR over the last five years, reaching almost $514 billion in 2023. Over 70% of the ETFs launched in the US in 2023 were actively managed, with net inflows of $118.5 billion.

Exhibit 2

US historic and projected ETF AuM

64% of US survey respondents think that US ETF AuM will reach at least $13 Trillion by June 2028, which represents a CAGR of 12.5%.



Source: Lipper data and PwC Global ETF Survey 2023

The US ETF market has evolved significantly over the past 10 years, including new issuers, product innovation, and regulations. The launch of spot bitcoin ETFs in January 2024 is a significant development for the industry as described in more detail in Section 2. Numerous proposals to launch an ETF share class in mutual funds could create another opportunity for significant US ETF growth if approved by the regulator.

Canada

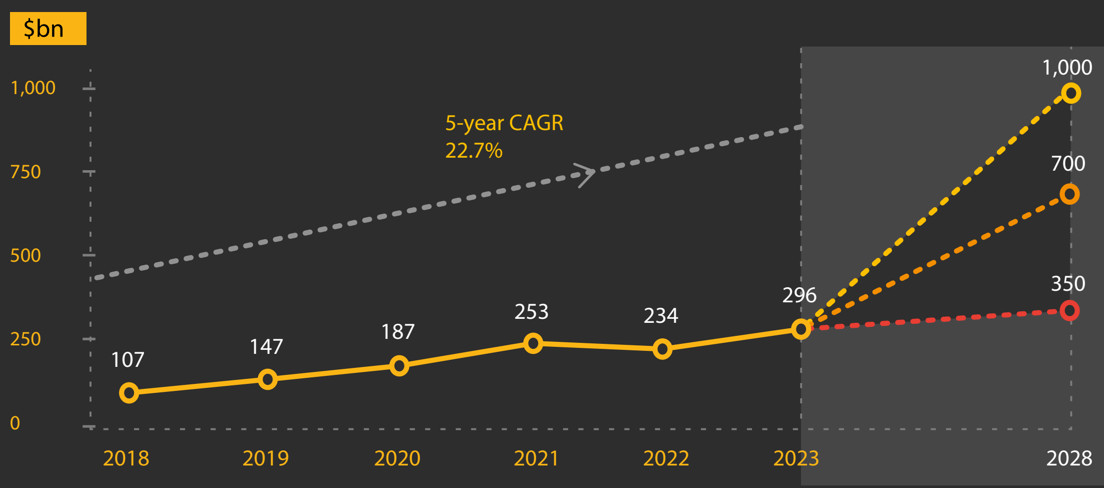
Canada recorded strong ETF inflows of $31.5 billion in 2023, which brought Canadian ETF AuM to $295.9 bn in December 2023, representing 3% of global ETF AuM. The resilience and growth of Canadian ETFs is in stark contrast to a year of low inflows to Canadian mutual funds ($4.5 billion in 2023). Canadian respondents in the 2023 ETF survey are even more optimistic about ETF growth ahead, with over 50% anticipating that Canadian ETF AuM will reach at least $700 billion by 2028, reflecting a 19.6% CAGR over that 5-year period. The highest level of ETF demand over the next few years is expected to come from retail investors (88%), financial advisors and intermediaries (76%) and model portfolios (71%) according to our survey.

More than half of the net inflows in 2023 went into active ETFs ($16.1 billion in 2023). Active ETFs now make up more than 26% of the overall Canadian ETF AuM, one of the highest proportions in the world. Canada active ETFs have had a 31.6% CAGR over the last five years. Other fast-growing products include high interest savings account (HISA) ETFs as investors look to take advantage of the increases in deposit rates.

The pace of expansion and development in the ETF market is attracting regulatory attention, with the Canadian Securities Administrators (CSA) announcing a planned review of ETFs. The review will assess whether the current ETF regulations remain appropriate, with a particular focus on secondary market trading, creations and redemptions by authorised dealers and the arbitrage mechanism.

Exhibit 3
Canada historic and projected ETF AuM

51% of Canadian survey respondents think that Canadian ETF AuM will reach at least $700 Billion by June 2028, which represents a CAGR of 19.6%.



Survey forecast responses
In June 2028, Canadian ETF AuM will reach…

AuM	CAGR	Survey respondants
$1 tn	28.4%	13%
$700 bn	19.6%	38%
$500 bn	11.8%	43%
$350 bn	4.1%	6%

Source: Lipper data and PwC Global ETF Survey 2023

Europe

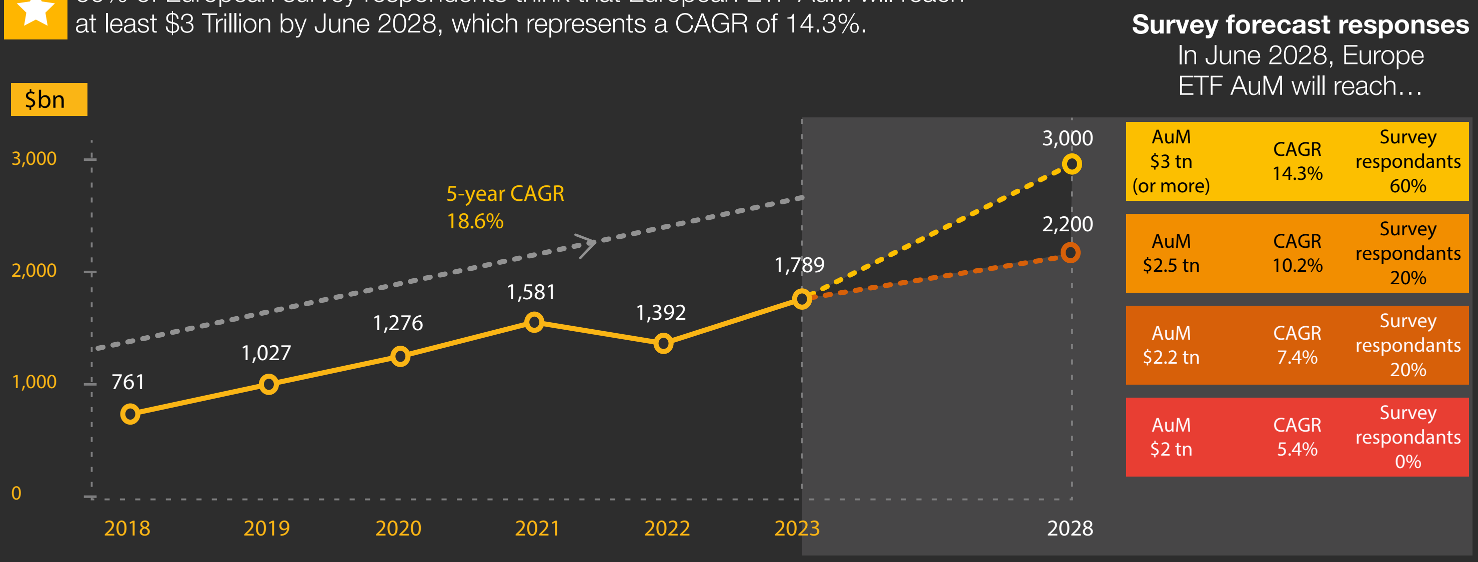
Europe is the second biggest regional market for ETFs, with 16% of global ETF AuM in 2023. European ETF inflows of $158.2 billion were the second highest on record, with European ETF AuM reaching $1,789.2 billion at the end of 2023.

Our European survey respondents see significant further potential ahead – six out of ten believe that European ETF AuM will reach $3 trillion by June 2028, with a 14.3% CAGR over that period. The highest level of ETF demand over the next few years is expected to come from retail investors (71%), model portfolios (67%) and financial advisors and intermediaries (62%) according to our survey.

Although Europe doesn't as yet have the benefits of a US-style integrated capital markets infrastructure, it is slowly moving in this direction. Plans include the central collection of real-time transaction data from all EU trading platforms as part of the proposed "consolidated tape." Greater transparency and integration would boost trading efficiency, ETF competitiveness and cross-border investment for European listed ETFs.

Exhibit 4
Europe historic and projected ETF AuM

60% of European survey respondents think that European ETF AuM will reach at least $3 Trillion by June 2028, which represents a CAGR of 14.3%.



Source: PwC Global ETF Survey 2023

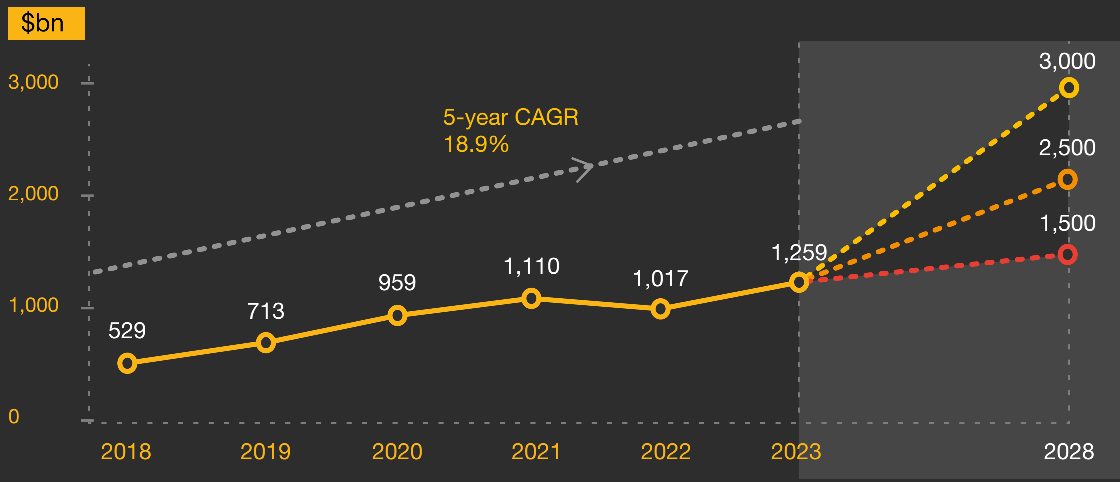
Asia Pacific

Asia Pacific ("APAC") ETF AuM has been growing at more than 22% a year since 2013 to reach a record high of $1.26 trillion in 2023. This makes APAC the third largest ETF market worldwide, with 11% of global ETF AuM. Nearly half of APAC respondents in our survey believe that regional AuM will catch up with Europe by 2028, reaching $3 trillion AuM, with a 17.8% CAGR over that period. The highest level of ETF demand over the next few years is expected to come from retail investors (86%), model portfolios (79%) and financial advisors and intermediaries (50%) according to our survey.

An example of some of the moves that will influence greater ETF adoption can be seen in Japan. The Japanese government has given ETFs a further boost as it looks to encourage citizens to move their savings to investments. The incentives include increases in investment limits and tax allowances in the popular Nippon Individual Savings Accounts (NISAs). In Taiwan, the ETF market is also experiencing significant growth driven by younger investors and media influencers.

Exhibit 5
Asia Pacific historic and projected ETF AuM

77% of Asian survey respondents think that APAC ETF AuM will reach at least $2.5 Trillion by June 2028, which represents a CAGR of 17.8%.



Survey forecast responses
In June 2028, APAC ETF AuM will reach…

AuM	CAGR	Survey respondants
$3 tn (or more)	22.2%	46%
$2.5 tn	17.8%	31%
$2 tn	12.7%	15%
$1.5 tn	6.4%	8%

Source: PwC Global ETF Survey 2023

The maturity of the respective ETF markets and regulations in each of the four major regions will continue to have a significant impact on the growth and innovation of ETFs. Throughout this paper we highlight developments which will shape the future of ETFs over the next few years.

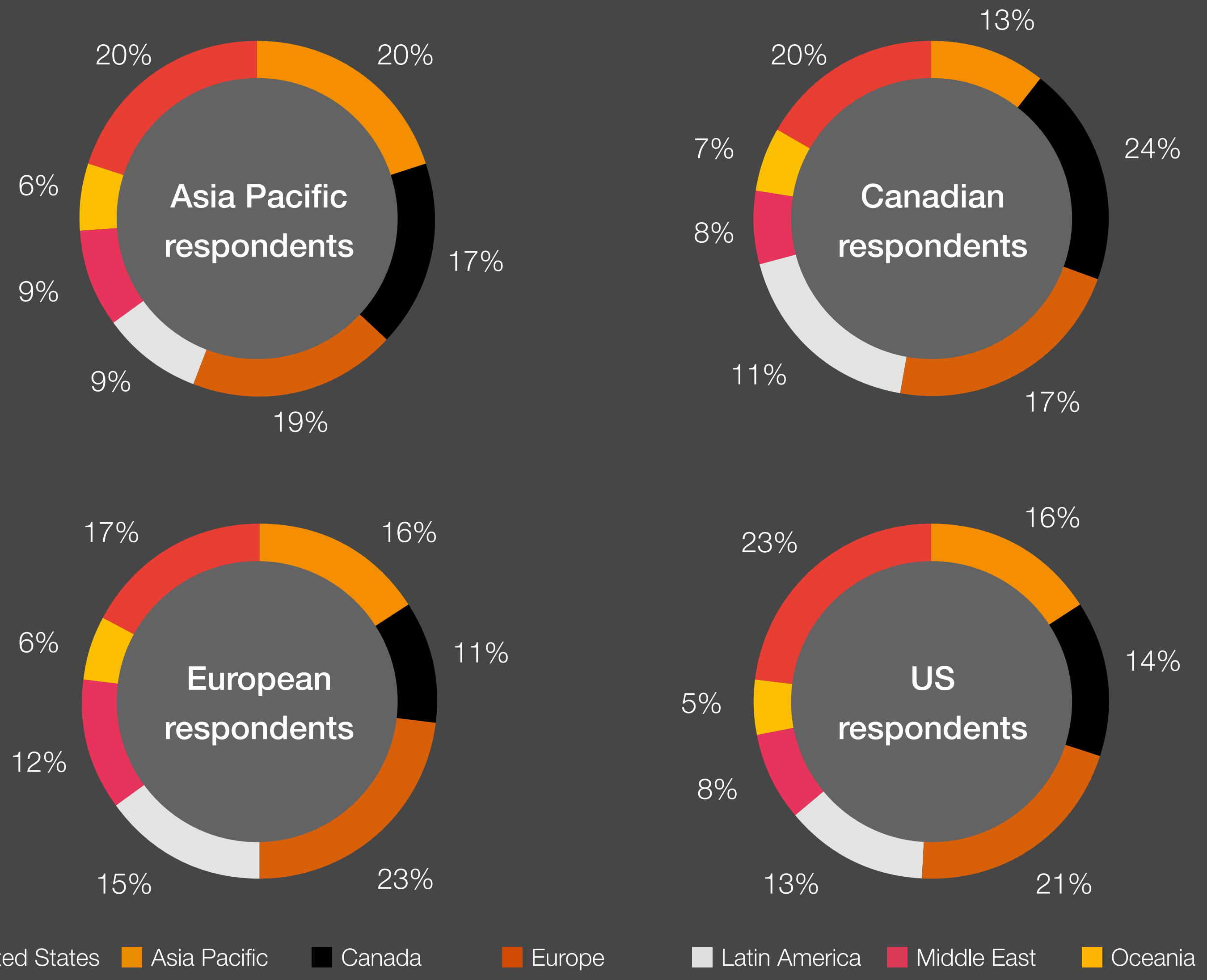
New markets targeted for growth

When we asked ETF managers which regions they were focusing their distribution efforts in, while most were focused primarily on their local regions and other established regions, evidencing the global nature of most ETF issuers. In addition, respondents stated that between 18% and 27% of their distribution efforts would go to Latin America and the Middle East (see Exhibit 6), which both present new opportunities for growth.

In Latin America, ETF AuM grew to $17.9 billion in 2023, up from $14.1 billion at the end of 2022, with _Chile leading the way in new registrations_. In the Middle East and Africa, ETF AuM grew to $8.2 billion in 2023, up from $7.1 billion at the end of 2022, with _Saudi Arabia attracting the most registrations_.

Exhibit 6

Regions earmarked for growth - Markets in which survey respondent's organisations are focusing their distribution efforts in the next 12 months



Source: PwC Global ETF Survey 2023

Section 2

Product trends: Active and innovative

Although traditional passive equity and fixed income ETFs continue to make up the bulk of ETF AuM, ETF managers keep innovating and diversifying their product ranges as investors seek out new investment opportunities and ways to balance their portfolios.

On the rise

Active ETFs

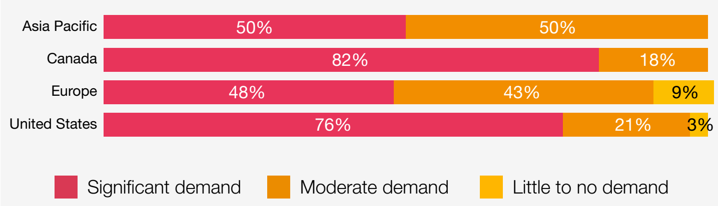
Our survey results show that each of the regions expect significant demand for active ETFs over the next two to three years, led by Canada (82%) and the United States (76%).

Canada and Australia are setting the pace, with active ETFs accounting for more than 26% of ETF AuM in each of these regions. While the market share of active ETFs in the US is comparatively modest at 6%, 2023 witnessed a remarkable surge in active ETF launches in the US and there has been significant growth over the past three years. The trajectory projects further accelerated growth in 2024 and beyond.

Active ETFs only represent 1% of the ETF AuM in Europe and APAC (excluding Australia). However, survey respondents expect this trend to also take hold in these regions, with approximately half of survey respondents predicting increasing investor demand for these products.

Exhibit 7

Level of demand by investors expected for active ETFs in the respondents' regional market over the next 2-3 years



Source: PwC Global ETF Survey 2023

Active ETFs offer a gateway into the ETF market for mutual fund managers with compelling investment strategies. In the US, for example, many of the recent launches have been initiated by major financial services firms that are new to the ETF market. The growth in active ETF demand has also spurred a wave of mutual fund to ETF conversions. A fifth of the asset managers taking part in our *Asset and wealth management revolution 2023: The new context* survey signalled that they are planning to convert part of their mutual fund offerings to ETFs over the next 12 to 24 months.

Alternative strategies could also receive a boost from the growth in active ETFs. As we've seen in markets such as Canada and Australia, adding an ETF class or series to an existing alternative product can offer a compelling and efficient distribution option for these products. Other regions continue to consider operational and regulatory challenges in order for this to be a feasible option.

Some mutual fund managers are still deterred by the costs and complexities of establishing greenfield ETF capabilities or converting existing mutual funds, especially given the risks of cannibalising their own business for lower margins. As institutional investors increasingly come to expect an ETF option and self-directed retail investors embrace ETFs, weighing up the risks versus reward of making the leap is a constant debate.

Fixed income ETFs

2023 was a bumper year for fixed income ETFs, attracting $308.4 billion of investment worldwide, a 24.4% year-on-year increase.

The surge looks set to continue as investors rush to take advantage of current high yields ahead of anticipated reductions in interest rates. More than eight out of ten survey respondents expect significant demand for fixed income ETFs over the next two to three years. But longer term demand will depend on movements in inflation and interest rates.

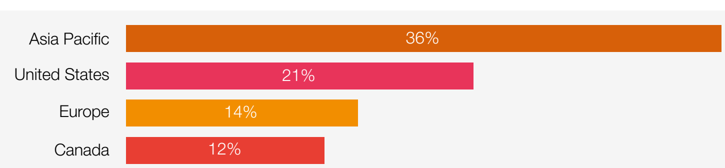
Digital assets

According to our survey results, digital assets are coming more to the fore. One in five of our survey respondents expect significant investor demand for Bitcoin ETFs over the next two to three years, with APAC out in front.

US respondents in our survey were less confident. However, sentiment may have evolved as our survey was conducted prior to the US Securities and Exchange Commission (SEC) approval of 10 firms with spot Bitcoin ETFs in January 2024. After an almost ten-year push for some of those firms to secure approval from the SEC, this is not only a significant development for these US firms, but also for the ETF industry as a whole, as yet again the ETF wrapper is the vehicle of choice for this asset class. More than a third of respondents plan to launch digital asset ETFs if regulators allow it in their respective regions.

Exhibit 8

Percentage of respondents expecting significant demand for Bitcoin ETFs



Source: PwC Global ETF Survey 2023

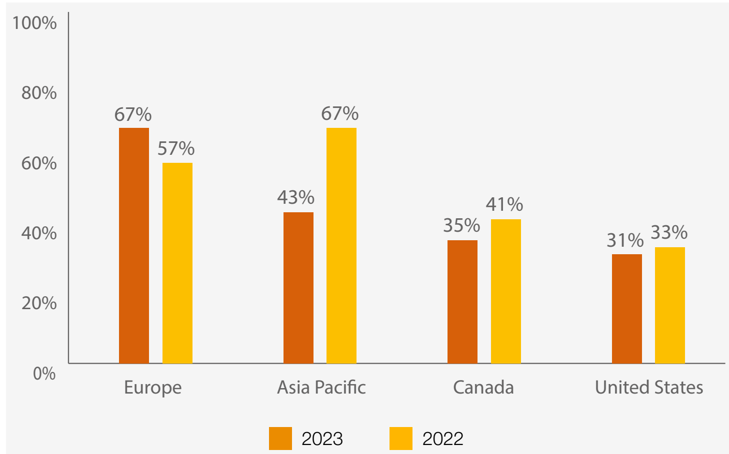
Mixed prospects

ESG ETFs

The prospects for ESG ETFs continue to diverge, with demand in Europe forging ahead, Asia falling back and the US and Canada stalling.

Exhibit 9

Percentage of survey respondents expecting significant opportunities for growth for ESG ETFs



Source: PwC Global ETF Surveys 2023 and 2022

The contrast is even more marked when looking at product launch plans. Almost 70% of European respondents expect more than half of their launches over the next 12 months to be ESG-focused, compared to just 15% of their US counterparts.

Embracing personalisation

As the ETF sector continues to mature, niche products are becoming more mainstream. The broad extension of product ranges proposed to investors may not be enough in itself given the importance of offering customised and personalised investment products and solutions to attract and retain investors.

This shift from sales to solutions is likely to be accelerated by heightened regulatory scrutiny on outcomes and value for money.

The resulting solutions are likely to include a mix of ETFs, mutual funds and other investment products. Firms that don't include ETFs within their solutions may be at a marked disadvantage.

Section 3

Distribution trends: Getting closer to end-investors

Most ETF firms are still relying on organic growth and traditional routes to market. But moves into retail and new emerging growth markets are likely to require a broader set of distribution channels, capabilities and partnerships.

No surprise that 85% of survey respondents believe that developing distribution channels is the most significant factor in the success of their business.

Gaining access to broker dealer platforms, having sufficient tools and resources as well as hiring, training and retaining strong ETF specialists will continue to be important in reaching new investors and delivering more personalised solutions. These have been identified as some of the biggest challenges for ETF distribution across all regions by our survey participants (see exhibit 10). There are significant differences in the distribution of ETFs by region. Firms will need to adapt their distribution strategies as they look to expand in new regions.

Exhibit 10

Distribution challenges (1 represents the area with the biggest challenges and 6 represents the area with the least challenges)

	Europe	Asia Pacific	Canada	United States
Gaining access to broker dealer platform	1	4	1	1
Providing sufficient financial compensation to provide incentives for broker dealers, financial advisors, etc.	4	1	3	2
Having sufficient tools and resources, including online platforms, customised reporting, ETF model portfolios, etc	2	2	6	3
ETF education, both internally and externally	5	5	2	4
Ability to hire and retain strong ETF specialists to help develop the best solutions for ETF investors	3	6	4	5
Direct marketing to targeted audiences	6	3	5	6

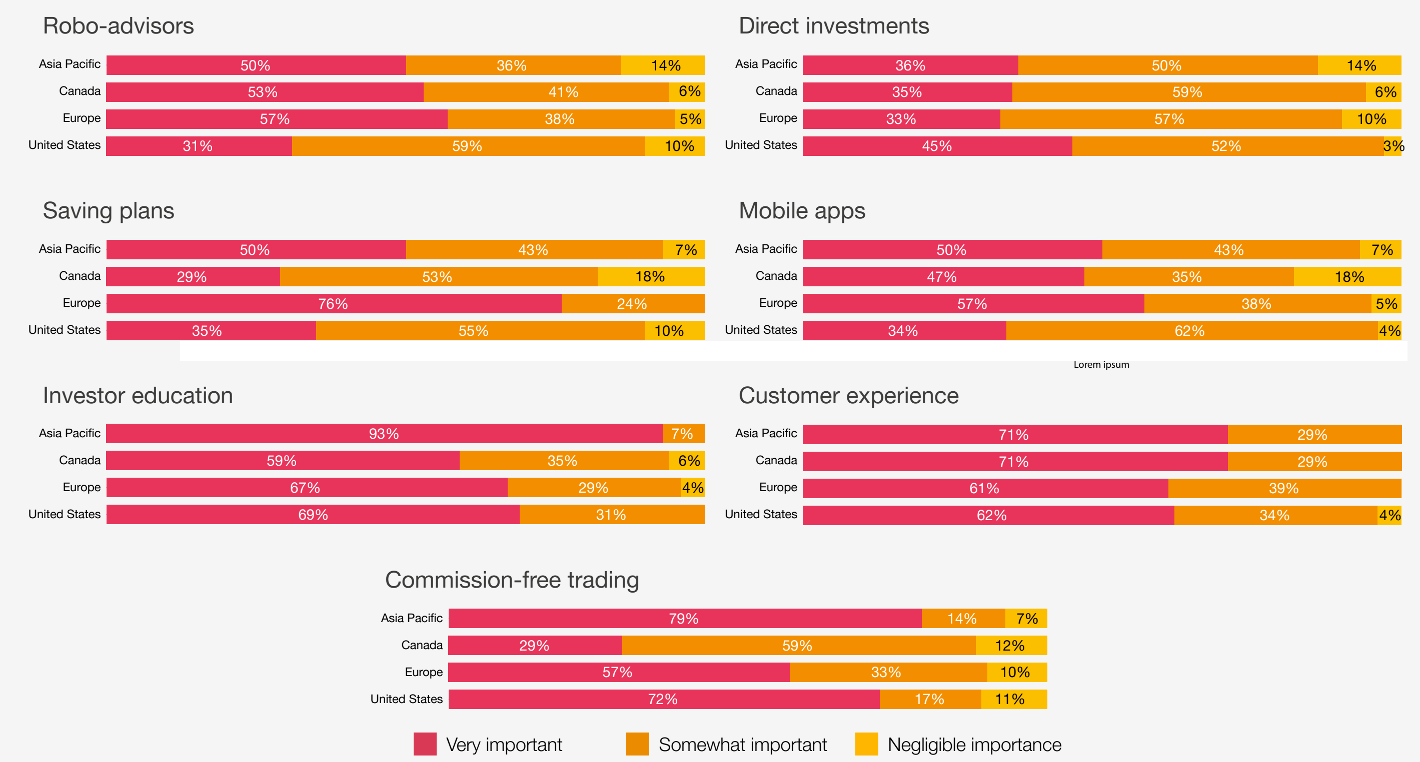
Source: PwC Global ETF Survey 2023

Looking specifically at the unfolding retail market, most respondents are prioritising investor education and customer experience. European respondents also recognise the value of ETF savings plans for retail investors, an investor segment that has been growing at a significant pace in Europe over the last few years.

Robo-advisors, mobile apps and direct investments are also considered important as firms seek to strengthen end-investor engagement and improve understanding of their financial goals without the need for a costly intermediary. Failure to develop effective mobile and other digital channels could also make it harder for managers to connect with younger investors into the future.

Exhibit 11

Attracting retail investment - factors to secure retail investor inflows



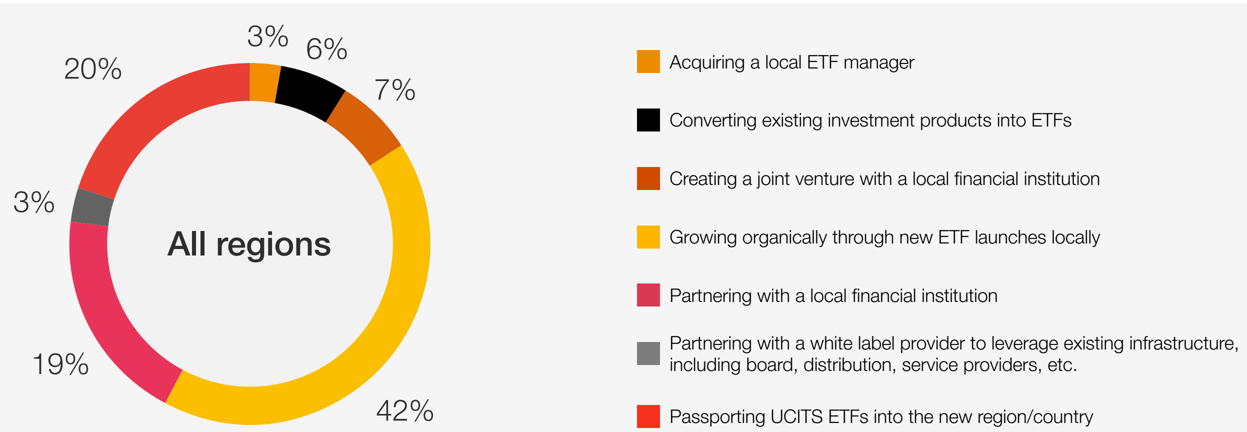
Source: PwC Global ETF Survey 2023

Reaching into new markets

Respondents' preferred route to market entry is by organic means. This can have its challenges where access to customers is dominated by local private banks or intermediated channels. Only around one in five are prioritising partnership with a local financial institution.

Exhibit 12

Preferred routes to new markets



Source: PwC Global ETF Survey 2023

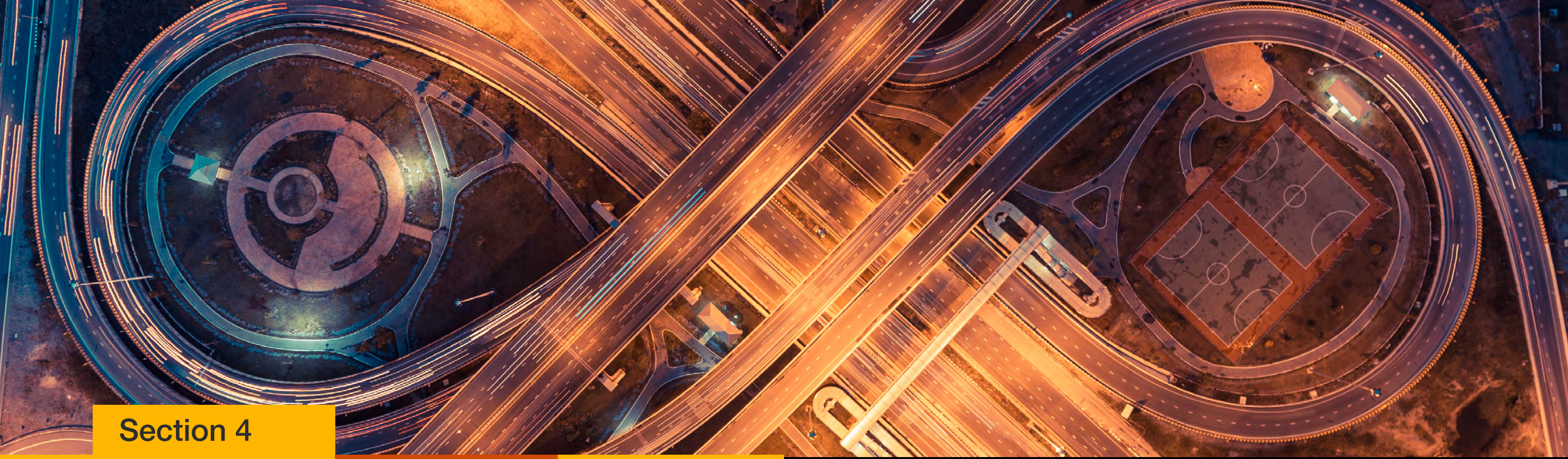
Joint ventures or partnering with a digital platform provider could offer an effective option for mutual fund managers seeking to enter the ETF market or ETF managers looking to gain a foothold in new territories.

Reshaping incentives

In the US and APAC, more than 70% of survey respondents believe that commission-free trading will be very important in attracting retail investment.

While the EU is considering a ban on commissions as part of its Retail Investment Strategy, the European Fund and Asset Management Association (EFAMA) is pressing for a more qualitative approach that focuses on assessing investor needs and the delivery of value for money[1].

[1] "EFAMA proposes alternative solutions to benefit investors within the Retail Investment Strategy"



Section 4

Operational trends: Delivering more for less

Technology transformation not only holds the key to bolstering margins but also to opening up new distribution channels and developing personalised solutions.

As an ETF manager, the pressure to deliver more for less is intensifying the squeeze on what are already tight margins. US and European ETFs which have a total expense ratio (TER) of less than 50 basis points hold more than 90% of the total ETF AuM in these regions.

One example where the operational demands are increasing is the move to a shortened T+1 settlement cycle in the US and Canada effective May 2024. With timing disparities in settlement across worldwide markets, significant focus will be required on a number of operational areas including redemptions, trading, collateral and cash management.

Technology holds the key to addressing increasing operational demands, cutting costs and sustaining returns. Building on the foundations of versatile plug-and-play *cloud platforms*, developments in disruptive technologies like artificial intelligence (AI), big data and blockchain could also help your business to strengthen investor engagement, better understand their needs and accelerate product development.

Survey respondents in most regions see robo-advisors, online platforms and mobile apps as the technology that is likely to have the biggest impact on the ETF industry over the next few years. The exception is the US, where big data, machine learning and AI top the list. Many US firms have scaled back on robo-advisors and online platforms due to uncertain regulations and the inability to obtain scale.

Exhibit 13

Ranking the areas of technology with the biggest impact on the ETF industry over the next two to three years

(with 1 having the most impact, 5 the least impact)

	Europe	Asia Pacific	Canada	United States
Robo-advisors, online platforms and apps	1	1	1	3
Big data and machine learning	2	3	2	1
Artificial intelligence	3	2	3	2
Blockchain and distributed ledgers	4	4	4	4
Metaverse	5	5	5	5

Source: PwC Global ETF Survey 2023

Rethinking everything

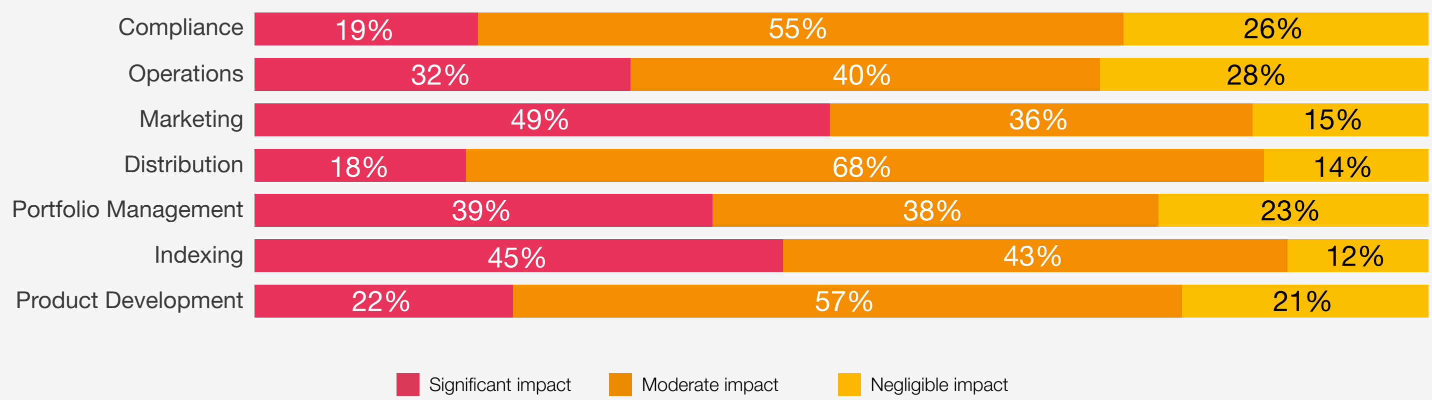
The rise of AI has added fresh urgency to digital transformation. PwC has predicted that AI could contribute as much as $15.7 trillion to the global economy by 2030.

AI can not only improve decision-making and speed up time-consuming tasks, but also provide a powerful catalyst for transforming entire processes, functions, and business models.

The areas where respondents believe that AI will have the most impact over the next two to three years are marketing, indexing and portfolio management. Operations is next on the list. Harnessing AI could give your business a decisive edge as you look to get closer to end-investors and tailor solutions.

Exhibit 14

Areas impacted by AI - Expected impact of AI over ETF functions in the next 2 to 3 years



Source: PwC Global ETF Survey 2023

Section 5

The way forward: Judging where and how to compete

This report highlights both the risks of standing still and the opportunities to strengthen innovation and ensure future relevance as investor expectations evolve and retail investor markets open up across the globe. How can your business get out in front? Four priorities stand out:

Think bigger and bolder

If you already offer ETFs, the pressure is on to move further and faster as you strive to develop new offerings and position your business for the renewed surge in growth ahead. This could include expanding into new investment strategies, distribution channels and new territories.

Larger and better resourced managers clearly have a head start in modernising operations, reaching into new markets and diversifying their product range. But there is still a place for managers of all sizes in a market where innovation and specialist expertise are more prized than ever. This could include partnering with an existing ETF provider, using a white-label provider and/or outsourcing some of the middle and back office functions to third parties.

Millennial investor opportunity

More than $68 trillion could be passed from baby boomer parents to millennials by 2030 as outlined in our paper *Asset and wealth management revolution 2023*. Millennials highly favour ETFs according to various investor studies over the past few years. Firms will need to find ways to reach those millennial investors who typically manage their own investments. Marketing through social media platforms, podcasts and apps will be important to target these millennials who prefer real-time information.

Balance ambition with pragmatism

While thinking bigger and being bolder, you should still be pragmatic. It is important to identify and focus resources on what your firm is good at, while driving operational efficiencies and rationalising sub-scale offerings.

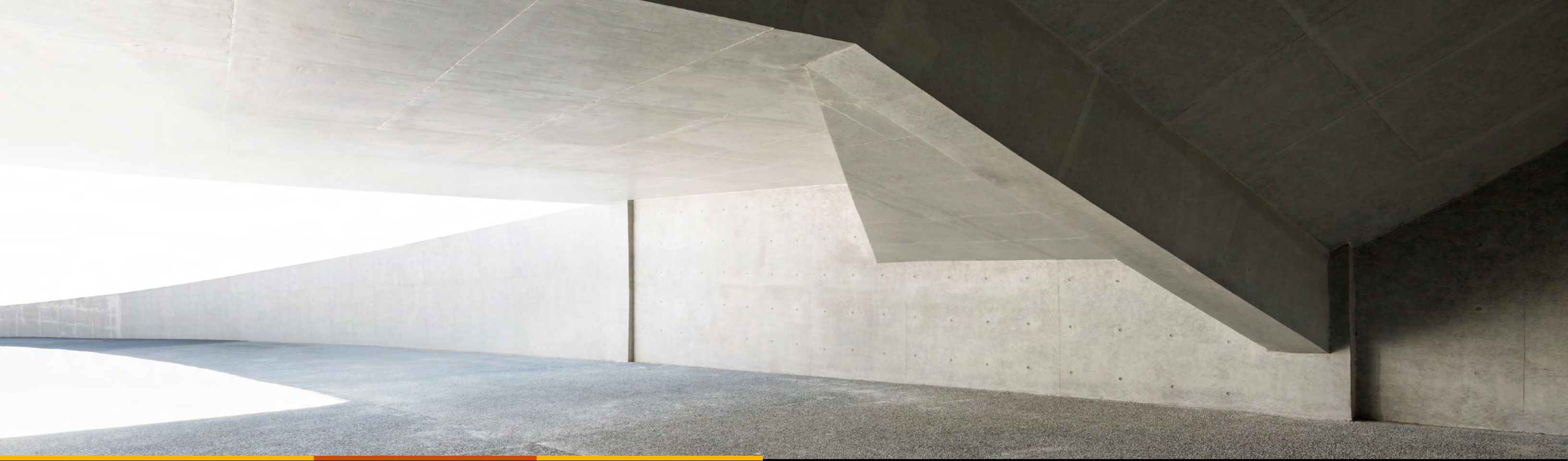
From a portfolio perspective, this pragmatic approach includes taking advantage of infrastructure and distribution partnerships to extend your capabilities and reach without overstretching your resources.

From a technology perspective, moving forward on multiple fronts is neither feasible nor advisable. So it's important to be clear about your most pressing strategic priorities – driving down costs or connecting with digital native investors, for example. You can then focus investment on the specific tools and technology needed to deliver. Other priorities can be addressed further down the line. You can also partner with service providers where in-house development is too costly or inefficient. Generative AI could help to increase the speed and productivity of your business helping to save time and money.

Strengthen purpose and trust

The challenge of building and sustaining trust is increasing as what have been relatively easy to understand ETF products become more sophisticated and diverse. The bar has been raised even further by the focus on ESG and increasing use of AI in marketing and analysis of investor needs.

This underlines the need to embed purpose, trust and customer outcomes in your strategy and operations even if this comes at the cost of short-term returns. This includes taking a clear and consistent line on diversity, sustainability and social inclusion. As product suites diversify, technology advances and new environmental reporting requirements come on stream, it's also important to develop the culture and governance needed to make sure you're living up to your promises.



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