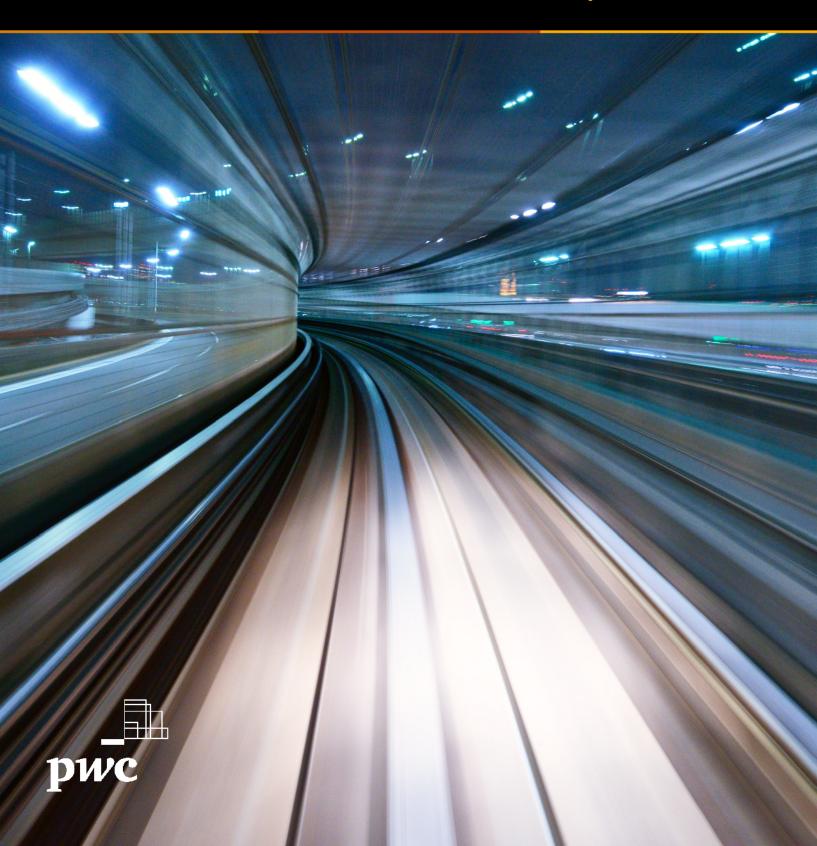
ETFs 2027:

A world of new possibilities





Contents

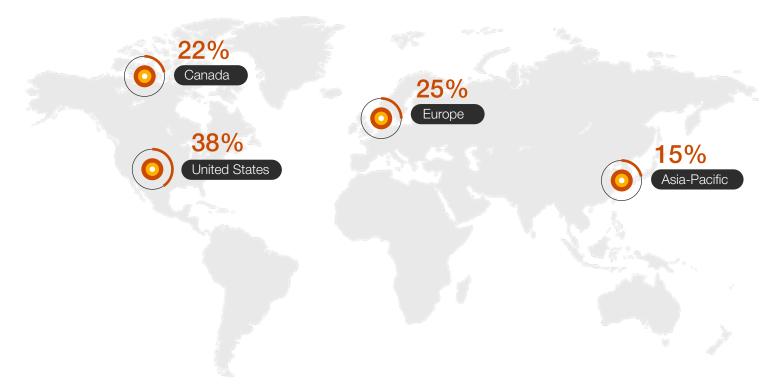
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About this survey

PwC surveyed more than 70 executives from around the world in 2022, using a structured questionnaire. Over three-quarters (76%) of the participants were exchange-traded fund (ETF) managers or sponsors. The remaining participants were made up of service providers, market makers and asset managers not currently offering ETFs.

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; and
- all references to "mutual funds" throughout the paper exclude ETFs.





Overview

Welcome to ETFs 2027: A world of new possibilities. In an otherwise bruising past 12 months for the asset management industry, ETFs have been one of the few bright spots. But with no let-up in economic turbulence expected ahead, what does the future hold for ETFs?

ETFs buck the industry trend

Much of the asset management sector experienced significant fund withdrawals in 2022. A clear sign of this was the \$1.4 trillion of net outflows from mutual funds globally.

However, ETFs bucked the trend, attracting \$779.4 billion in net inflows, the second highest net inflow on record. Inflows into ETFs were strong in all regions. In December 2022, global ETF assets under management (AuM) stood at \$9.2 trillion.

The confidence of the ETF managers participating in our survey is reflected in their upbeat projections for growth. Seven in ten respondents anticipate that global ETF AuM will increase to at least \$15 trillion by 2027. Almost three in ten (29%) expect that global ETF AuM will more than double to reach \$18 trillion or higher by 2027.

ETF managers look to stand out in a maturing and competitive market

Right now, the bulk of ETF investment and growth remain focused on traditional equity and fixed income strategies. Within that, fixed income is expected to continue to attract an increasing share of the growth.

However, over-reliance on traditional products could put ETF managers at risk of being disrupted by competitors with superior scale, technology and brand awareness. Forward-thinking managers are therefore stepping up the pace of product innovation as they look to diversify and differentiate their offerings. They are also investing in the talent, data and systems needed to support more complex and specialised types of ETFs.

The ETF market retains considerable white space for growth

Beyond the passive equity and fixed income core, ETF managers participating in our survey anticipate that active ETFs will attract the most demand. The issue of required daily portfolio transparency in some regions does not appear to have deterred market entry as many large active asset managers look to expand their product offerings to include ETFs.

Survey respondents also expect ESG ETFs to attract significant further investment, although the main focus of ESG growth is expected to be in Europe.

As ETF managers look to the future, respondents cite both alternative strategies and crypto/digital asset ETFs as the nascent markets to watch.

ETF managers are carving out new routes to market

The ETF managers participating in our survey see the development of effective distribution channels as the number one driver for success. Priorities include augmenting their online distribution capabilities as they target digital native retail investors. Digital also offers ways to reach the fast growing, but still underpenetrated, markets of Africa, Latin America and the Middle East.

The survey highlights the extent to which barriers to entering the ETF market are lowering. For example, growing access to white label platforms is allowing small and specialised managers to launch ETFs without the need to set up a new bespoke infrastructure. Other areas experiencing ETF growth include conversion of mutual funds and separately managed accounts into ETFs, distributing UCITS ETFs into new markets and online platforms.



Growth projections: Capitalising on untapped potential

The vast majority of the ETF managers in our survey expect that ETF AuM will increase from \$8.6 trillion in June 2022 to \$15 trillion by June 2027. Where is this growth going to come from?

The 28.8% ETF AuM growth and impressive \$1.2 trillion of ETF net inflows in 2021 was always going to be a hard act to follow. So it's a testament to the ETF sector's strength and potential that, despite a year of relentless economic and geo-political turbulence, 2022 saw the second highest annual ETF inflows of \$779.4 billion, with global ETF AuM at \$9.2 trillion in December 2022.

The resilience of ETFs is especially evident when the net inflows achieved by ETFs are set against the massive outflows from mutual funds of \$1.4 trillion in 2022.

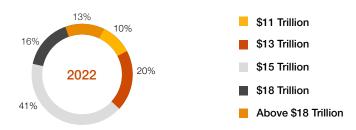
This standout performance is attracting both new fund launches and the conversion of mutual funds and separately managed accounts into ETFs. Many of the new entrants are large asset management groups that had previously shied away from the ETF market.

2027 global AuM forecast

Is this standout growth sustainable? Our survey of ETF managers was carried out at a time of mounting financial market uncertainty. Nonetheless, 70% of respondents believe that global ETF AuM will climb to \$15 trillion or more in the next five years, an increase of over \$6.4 trillion (see Exhibit 1).

Exhibit 1: Views on prospective growth

Survey respondents' growth projections for global ETF AuM by June 2027



Source: PwC 2022 Global ETF Survey

Reaching \$15 trillion in June 2027 would require a compound annual growth rate (CAGR) of 11.77%. This is lower than the 13.69% CAGR achieved during the five years ended 2022. Some tempering in the trajectory of growth is the function of a sector that has begun to mature. But it's worth noting that nearly a third of respondents (29%) expect that ETF AuM will more than double to reach at least \$18 trillion by June 2027, representing a CAGR of 15.92%.



Scope for further growth

Even with all the new entrants and recent growth in AuM, the ETF market still offers a huge amount of untapped potential. ETFs comprise approximately 11.2% of equity assets in the US, 6.1% in Europe, 5.8% in Canada and 2.2% in Asia-Pacific. The percentage share of fixed income assets is even smaller – around 2.8% in the US, 2.4% in Canada, 1.3% in Europe and 0.4% in Asia-Pacific.

Further impetus for expansion is coming from an acceleration in fund innovation and moves into new and underpenetrated markets. Four areas stand out:

Increasing ETF demand from retail investors

Survey respondents expect the biggest surge in demand over the next two to three years to come from individual investors. Retail investors represent a significant reservoir of untapped growth, especially in Europe, where ETFs are still primarily held by institutional investors.

Capitalising on the potential requires brand awareness, online platforms and investor education.

New entrants move into the market

New routes to the ETF market are opening up. This includes white label services that take care of much of the governance, compliance, distribution and operational infrastructure. This allows small and mid-size managers who had previously been put off by the operational complexities of the ETF market to move in with new offerings.

Further expansion is coming from major financial services groups looking to tap into the continued growth in ETFs and use their specialist expertise to develop a presence in segments such as active, thematic and ESG ETFs. Alongside fund launches, their inroads into the ETF market are coming from the conversion of existing funds and separately managed accounts. Nearly \$62 billion of mutual fund assets were converted to ETFs in 2021/2022 according to Bloomberg Intelligence! We expect this trend to gather pace as managers look for funds that may be better suited to an ETF wrapper.

Momentum builds behind active ETFs

Survey respondents expect significant demand from investors for actively managed ETFs over the coming two to three years.

ETF expansion into Africa, the Middle East and Latin America

Faced with increased competition in Asia, Europe and North America, a growing number of ETF managers are targeting the underpenetrated markets of Africa, Latin America and the Middle East.

We explore these products and distribution growth drivers further in the next two sections.



¹JPMorgan to Convert Another \$2 Billion of Mutual Funds to ETFs', Bloomberg UK,15 December 2022

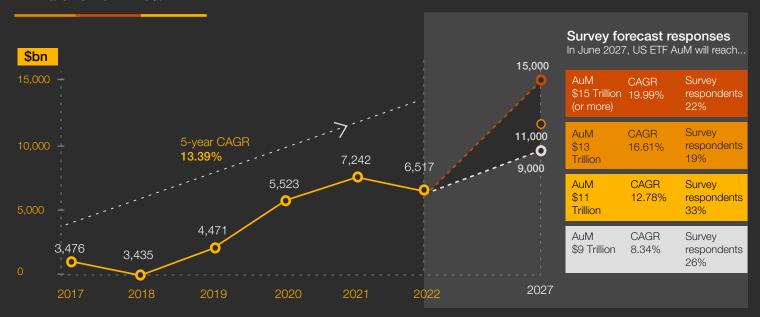
In addition to their views on global ETF AuM projections, we asked our survey participants for views on their local regions, which are depicted below.

Spotlight on the regions

United States

→

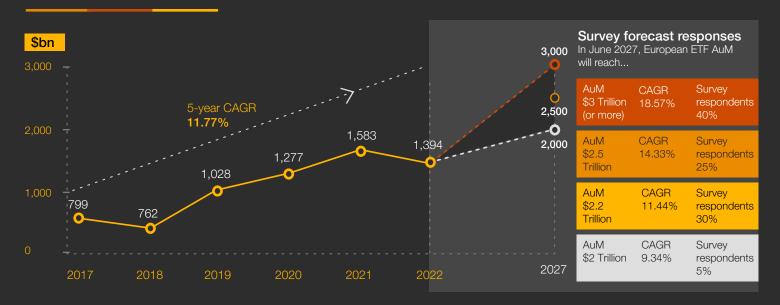
74% of survey respondents think that US ETF AuM will reach at least \$11 Trillion by June 2027, which represents a CAGR of 12.78%.



Europe



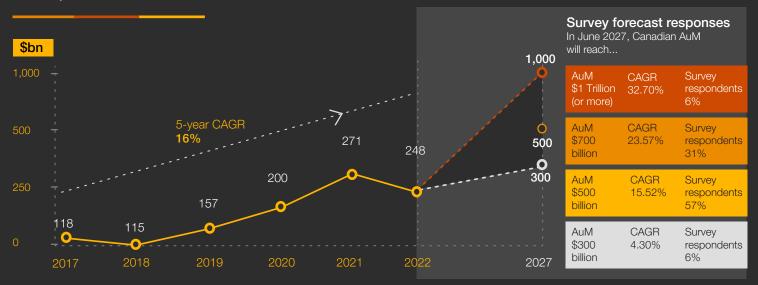
65% of survey respondents think that European ETFs AuM will reach at least \$2.5 Trillion by June 2027, which represents a CAGR of 14.33%.



Canada



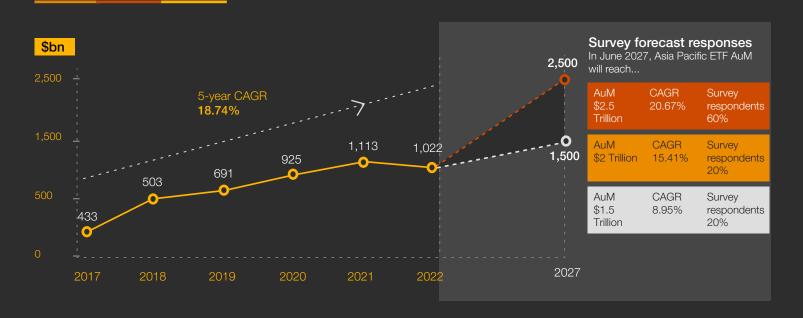
94% of survey respondents think that Canadian ETF AuM will reach at least \$500 Billion by June 2027, which represents a CAGR of 15.52%.



Asia Pacific



60% of survey respondents think that Asia pacific ETF AuM will reach \$2.5 Trillion by June 2027, which represents a CAGR of 20.67%.





Product trends: Reaching out beyond the core

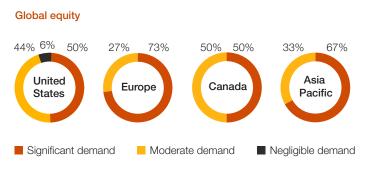
Product innovation and diversification are opening up the white space for a fresh surge in growth. What are the most promising frontier products, both now and in the years ahead?

Traditional passive equity (approximately three quarters of global ETF AuM) and fixed income (around one fifth of global ETF AuM) products remain the largest segments of the ETF market.

Fixed income

As Exhibit 2 highlights, respondents expect the significant demand for equity ETFs to continue, though less so in the more developed North American markets. In relative terms, fixed income ETFs are expected to drive growth, with at least six in ten respondents in each region anticipating significant demand.

Exhibit 2: Demand for traditional ETF products over the next two to three years





40%

60%

33%

67%

73%

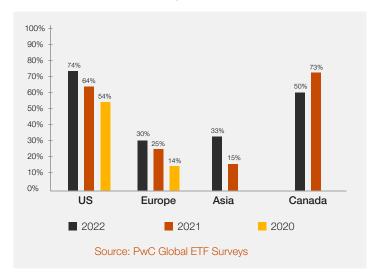
Source: PwC 2022 Global ETF Survey

Fixed income's share of ETF net inflows rose from 23% in 2021 to 32% in 2022. This continues a trend that has seen fixed income ETF AuM almost double in size over the past four years. Fixed income ETFs are generally considered more liquid and transparent than the underlying bonds, while offering lower transaction costs. This strong growth is expected to continue.

Active ETFs tipped to be the fastest growing product

Looking at the up-and-coming product lines, survey respondents expect active ETFs to lead the way. In the US, where active ETFs are already well-established (around 5% of overall ETF AuM, compared to 1.5% in Europe), ETF managers are especially optimistic about the prospects for this segment (see Exhibit 3).

Exhibit 3: Expected significant demand for active ETFs over the next two to three years



Net inflows into active ETFs were \$102 billion in 2022. This is a very different story compared to active mutual funds, which experienced net outflows of around \$1.5 trillion in 2022. This contrast in flows has encouraged a number of active fund managers to begin offering ETFs by converting or cloning existing mutual fund strategies. The big challenge for traditional managers is to sustain margins in the face of lower fees than they are generally accustomed to. This calls for a clear focus on scale, operating costs and digital distribution.

Portfolio transparency: the journey continues

One of the inhibitors to the development of active ETFs has been the requirement by certain regulators for full daily portfolio disclosure. For some active asset managers, this can be an operational challenge in addition to concerns that some active asset managers have in relation to providing real time information to the market about their entire investment portfolio. This has also resulted in asset managers being slower to adopt the ETF wrapper for their active strategies.



The marketplace continues to evolve in relation to portfolio disclosure rules, with some relaxation in the daily disclosure requirements, including the option to offer semi-transparent active ETFs in the US and Australia. In addition, the International Organization of Securities Commissions (IOSCO), the industry leading standard setting body, has been developing proposals aimed at standardising disclosure requirements around the world and balancing market expectations with active managers' intellectual property rights with their findings from the 2022 consultation expected out in the Spring 2023.

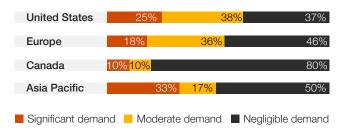
Some market indications are that certain investors prefer full daily portfolio transparency and our survey results reflect this, with only 25% of US respondents anticipating significant demand for semi-transparent active ETFs over the next two to three years (see Exhibit 4). This compares to 44% of US respondents who expect significant demand for fully transparent active ETFs.

Exhibit 4: Demand for fully transparent versus semi-transparent active ETFs over the next two to three years

Fully transparent active ETFs United States 44% 50% 6% Europe 9% 73% 18% Canada 10% 60% 30% Asia Pacific 17% 67% 16% ■ Significant demand ■ Moderate demand ■ Negligible demand

Source: PwC 2022 Global ETF Survey

Semi-transparent active ETFs

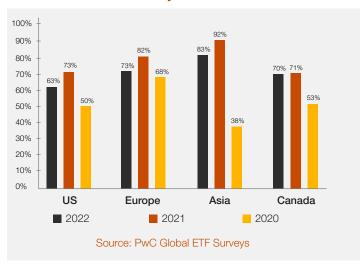


Long-term growth in thematic ETFs likely to override short-term dip

Having been the standout prospect in our 2021 survey, thematic ETFs have fallen back. The tempered expectations reflect the lower net inflows to thematic ETFs in 2022 compared to 2021. However net inflows for 2022 still outpaced pre-2021 levels.

Nevertheless, it's important to note that respondents' faith in the enduring potential of thematic ETFs remains strong (see Exhibit 5). At least 60% in each region are looking ahead to significant demand, putting thematic ETFs on par with fixed income ETFs. Moreover, thematic ETFs continue to be number one or two in the rankings for anticipated demand in each major region.

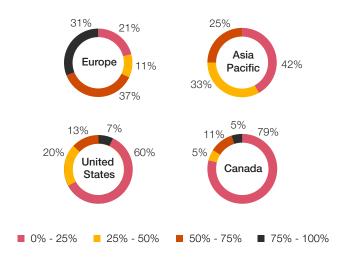
Exhibit 5: Expected significant demand for thematic ETFs over the next two to three years



ESG: Staying on top of complexity and demand

Europe continues to lead growth in ESG ETFs. ESG ETFs now make up more than 21% of ETF AuM in the region. And this expansion is set to continue – over two-thirds of European respondents (68%) expect more than half of their product launches to be ESG-focused over the next two to three years (see Exhibit 6). This compares to 25% in Asia-Pacific, 20% in the US and 16% in Canada.

Exhibit 6: Proportion of ETF launches expected to focus on ESG over the next 12 months



Source: PwC 2022 Global ETF Survey

The evolution of regulation and shifts in investor demand will ultimately drive the success of ESG ETF products in the markets outside Europe. Looking across all regions, survey respondents expect ESG regulations to impact on how and at what pace the ESG ETF market develops. Other long-term drivers shaping the ESG ETF market include the increasing prevalence of active strategies and the shift towards self-indexing.

Fresh sources of expansion

So as core ETF product lines mature, where is the white space for further innovation and expansion?

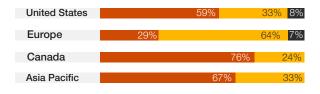
Survey respondents see digital asset ETFs and funds that offer exposure to alternative assets as offering the biggest untapped potential for innovation and growth. Notably, however, far fewer European respondents are targeting alternative strategies than their counterparts in the other regions (see Exhibit 7).



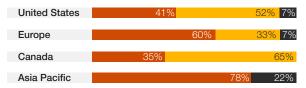
Exhibit 7: Openings for white space innovation and expansion

Where do you think there is white space/opportunity for more product innovation/growth for ETFs?

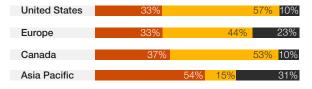
Alternative Strategies



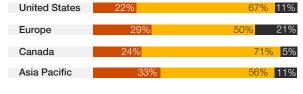
Digital assets



Derivative Strategies



Commodities



■ Significant demand
■ Moderate demand
■ Negligible demand

Source: PwC 2022 Global ETF Survey

Crypto/digital asset markets have been shaken by recent failures and falls in valuation. But these jolts don't appear to have affected respondents' appetite for developing and strengthening their presence in the crypto/digital asset ETF segment. Nearly 40% plan product launches in this area if regulation allows (see Exhibit 8), which is up compared to our previous survey (34%). But the focus varies quite considerably by region. A large proportion of Asian (78%) and European (60%) respondents anticipate significant demand for digital asset strategies in their region. While the US respondents are less upbeat, the Canadian ETF market is showing some restraint after their early adoption in crypto/digital space.

Exhibit 8: Regulatory relaxation would open doors

If Digital Assets are permitted in your primary geographic location, do you have plans to launch Digital Assets/ Crypto-ETFs?





- Yes, within the next 12 months after local regulator approval
- Yes, sometime between the next 12 to 18 months after local regulator approval
- Our firm has no plans to launch a Digital Assets/ Crypto-Currency ETF

Source: PwC Global ETF Surveys

The ETF managers participating in our survey see less potential in derivatives strategies and commodities ETF products than alternatives or crypto/digital. But around a third do anticipate significant demand in these areas, with an innovation-receptive Asia-Pacific out in front. The evolution of the market and regulations for these strategies in each region will need to be monitored to determine which ones will effectively translate into growth opportunities for ETFs.





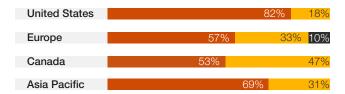
Distribution trends: Opening up new routes to market

ETF managers are seeking out both new markets and new ways to access them. How can they best take advantage of these opportunities?

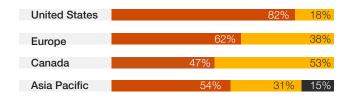
Survey respondents see developing distribution channels as the number one driver for success. At the forefront of their current plans is the development of retail channels to attract individual investors (see Exhibit 9).

Exhibit 9: Gauging the key sources of demand

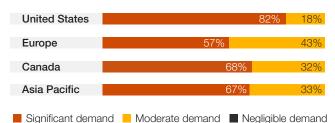
Individuals



Financial Advisors and Intermediaries



Model Portfolios



Source: PwC 2022 Global ETF Survey

The digitisation of ETF distribution can lower costs, improve accessibility and attract new investors.

To realise the potential of the retail market, it will be important to raise investor awareness and understanding. Respondents see lack of ETF education as one of the two biggest challenges they face, alongside increased regulation.

In regulators' sights

European respondents see intermediaries as the primary retail distribution channel. The EU's proposed removal of fund sale commissions could impact the European distribution landscape, increasing opportunities of growth for low cost products such as ETFs. However, the overall impact of such proposals will need holistic consideration. It still remains to be seen if an absolute ban on fund sale commissions will pass the approval stage by the EU parliament.

In Europe, as in other regions, the other key source of business is model portfolios. These offer the benefits of diversification and customisation in line with risk appetites and defined goals. However, the growth of ETF model portfolios is attracting attention from regulators who are looking into fees, controls, disclosures and the use of algorithms. Firms will need to keep abreast of evolving regulatory focus around model portfolios and adapt their processes and controls in response to regulations.

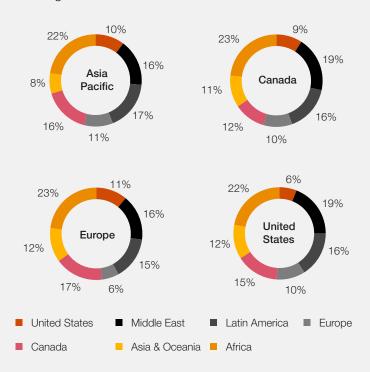
The announcement in February 2023 by 14 European exchanges of plans to collaborate on a joint venture to develop a consolidated tape for European equities and ETFs has the potential to significantly improve the transparency with respect to pre and post trade data information on a real-time basis. ETFs listed on European exchanges would benefit from the enhanced transparency a consolidated tape would offer, to ensure that they become more globally competitive.

Spotlight on regional and local markets

ETF managers in maturing markets are increasingly targeting untapped opportunities in Africa, Latin America and the Middle East (see Exhibit 10).

Exhibit 10: New markets targeted for growth

New markets in which survey respondents' organisations are focusing their distribution efforts in the next twelve months



Source: PwC 2022 Global ETF Survey

ETF AuM in Africa, Latin America and the Middle East is relatively small, highlighting the capacity for market development and growth. The Johannesburg Stock Exchange (JSE)² is the largest ETF centre in these regions, with around \$7 billion market capitalisation and 95 ETFs listed at the end of 2022. Brazil, Chile, Israel, Mexico and South Africa are also top cross-border listings for UCITS ETFs as outlined in PwC's annual European ETF listing and distribution report.

ETF managers are gauging the best distribution options in each of those regions. Alongside digital platforms, the possibilities include building their own distribution channels, partnering with local financial institutions and/or distributing existing ETF products into those regions.

Within Europe, Germany is one of the fastest growing and biggest potential markets. Growth is being driven by the rise of self-directed investors and ETF savings plans. Many ETF sponsors are expanding into Germany and establishing relationships with financial advisors and online platforms.

The ETF retail market is also expanding in Italy with investors particularly focused on low-cost investment opportunities. ETFs distributed through online platforms are gaining lots of traction in Italy as an alternative to much more expensive investment products where up to 70% of the management fees pay for fund distribution.

In terms of <u>listing expansion</u> of top European Stock Exchanges, London is ahead (listings of EU-domiciled ETFs increased by 19% over the past year), followed by Italy (16%) and Germany (13%).



²JSE Market Statistics, January 2023, accessed 17 February 2023





The way forward: Pushing back the frontiers of innovation and growth

Our survey findings and market analysis highlight the standout performance of the ETF sector and its still untapped potential. How can you put your business in the strongest position to capitalise? Drawing on the key messages coming out of our survey and wide-ranging work with ETF managers, four priorities stand out:

Drive innovation to sustain margins and growth

As core ETF markets become increasingly commoditised, the need to step up new product development and transform business operations has become more pressing. Further impetus for innovation is coming from investors' desire for greater choice and diversification in their ETF portfolios. Additionally, as noted in PwC's 26th Annual Global CEO
Survey, asset and wealth management companies are also investing in the future through automation (76%), upskilling (72%) and deploying the cloud, artificial intelligence and other advanced technologies (69%).

Active ETFs, increased innovation in fixed income ETFs, alternative strategies and digital assets could help to attract new customers and increase margins. As you look to the long-term, many of these niche offerings could eventually move into the mainstream alongside more traditional ETFs.

Develop distribution channels to tap into retail markets

Developing new distribution channels such as online platforms and apps will help you to strengthen your presence among self-directed investors, a market that is expanding rapidly now and could become core as digital native investors become dominant.

Further benefits of digital distribution include helping firms to gain a foothold within emerging markets without necessarily needing offices or partners on the ground.

The businesses out in front are not only looking at how to develop the digital capabilities, but also the talent, brand awareness and retail marketing needed to support this. Moves into retail markets are bound to attract increased scrutiny from regulators. Rather than looking at this as simply a compliance challenge, it's important to bolster investor education and understanding, with digital content geared to a new and often younger client base.

Explore fast and cost-effective new market entry points

There's no longer any need to set up a new bespoke structure to enter ETF markets. A range of options exists, including white label platforms, conversion of mutual funds, acquisition of an existing ETF business and distributing UCITS ETFs into new countries.

Sharpen data quality and assurance

Stakeholder trust in ETFs is one of the key reasons why they continue to attract new inflows. Reliable information for decision making and disclosure is vital in sustaining that trust. ETF products are becoming more complex and the expectations of investors, regulators and tax authorities are increasing. Ensuring that the quality and breadth of the data supply is up to the standard required has never been more challenging.

The automation and rationalisation of data feeds would provide an important step forward, but may not be enough on their own. In especially complex and contentious areas such as ESG, there is an increasing need for ongoing due diligence of index providers and data suppliers, along with independent assurance over reporting.

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