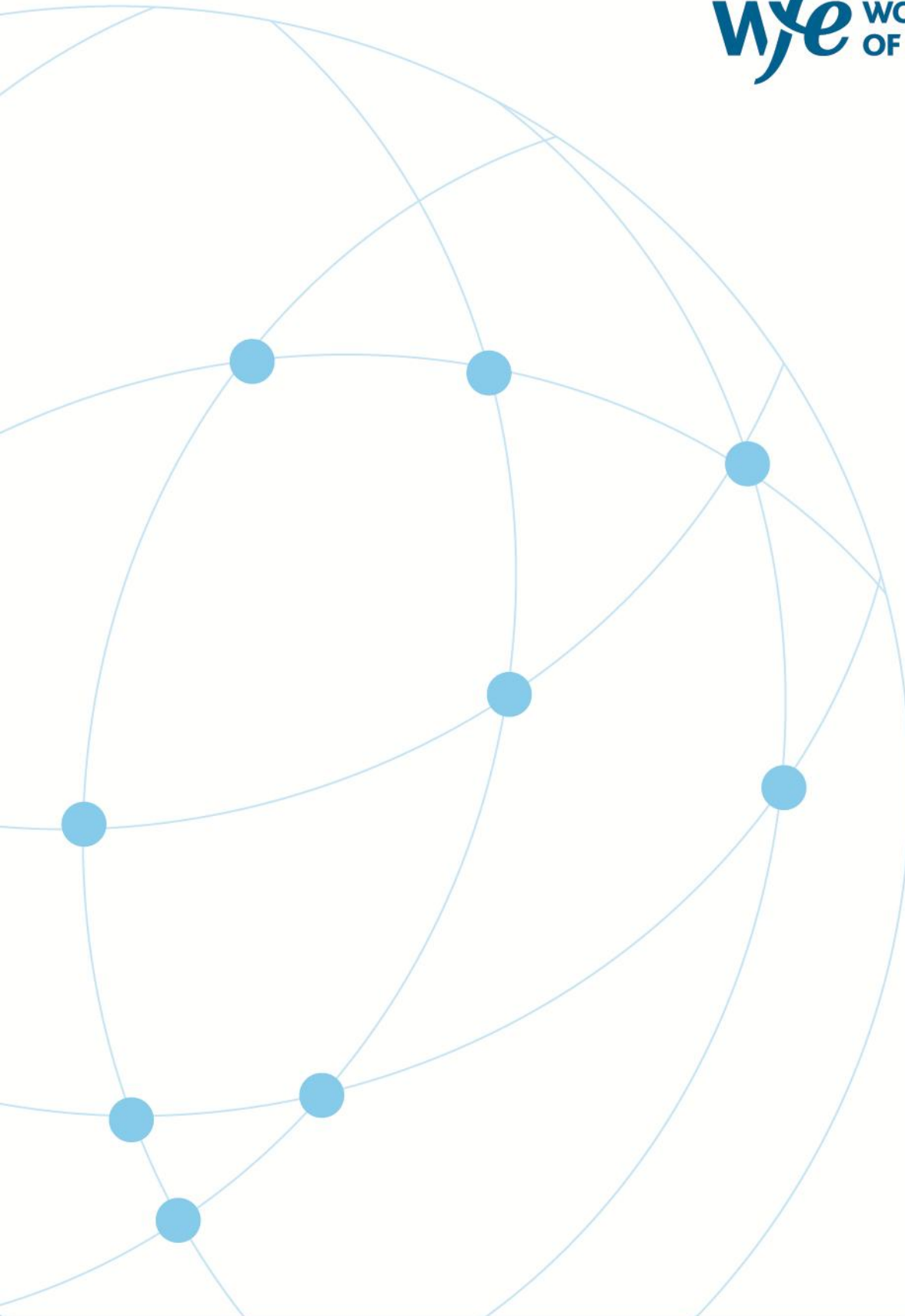




**Listing Exchange Traded Funds
10th December 2024**

Background

Established in 1961, the WFE is the global industry association for exchanges and clearing houses. Headquartered in London, it represents over 250 market infrastructure providers, including standalone CCPs that are not part of exchange groups. Of our members, 36% are in Asia-Pacific, 43% in EMEA and 21% in the Americas. WFE's 87 member CCPs and clearing services collectively ensure that risk takers post some \$1.3 trillion (equivalent) of resources to back their positions, in the form of initial margin and default fund requirements. WFE exchanges, together with other exchanges feeding into our database, are home to over 55,000 listed companies, and the market capitalisation of these entities is over \$100tr; around \$140tr in trading annually passes through WFE members (at end 2023).

The WFE is the definitive source for exchange-traded statistics and publishes over 350 market data indicators. Its free statistics database stretches back more than 40 years and provides information and insight into developments on global exchanges. The WFE works with standard-setters, policy makers, regulators and government organisations around the world to support and promote the development of fair, transparent, stable and efficient markets. The WFE shares regulatory authorities' goals of ensuring the safety and soundness of the global financial system.

With extensive experience of developing and enforcing high standards of conduct, the WFE and its members support an orderly, secure, fair and transparent environment for investors; for companies that raise capital; and for all who deal with financial risk. We seek outcomes that maximise the common good, consumer confidence and economic growth. And we engage with policy makers and regulators in an open, collaborative way, reflecting the central, public role that exchanges and CCPs play in a globally integrated financial system.

If you have any further questions, or wish to follow-up on our contribution, the WFE remains at your disposal. Please contact:

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Introduction

The aim of this paper is to describe how Exchange-traded Funds (ETFs) fit into the wider ecosystem of Exchange Traded Products (ETPs) and the wider financial market, and to explore what makes a strong ETF market. This follows on from the WFE's response to IOSCO's consultation on ETFs in 2022.¹

The structure of the paper is as below:

- 1) Define ETPs and ETFs
- 2) Recent trends in the ETF market
- 3) Advantages and risks of ETFs
- 4) Makings of a strong ETF market

For the purpose of this paper, we will focus largely on ETFs, as this is the largest segment of ETPs.

1) Definitions of ETPs and ETFs

IOSCO defines ETPs as “a wide variety of different investment products that share the feature of being traded on an exchange”.²

ETPs can come in many forms:

- ETFs: IOSCO defines ETFs as “open ended collective investment schemes that trade throughout the day like a stock on the secondary market (ie, through an exchange)”.³ Characteristics of ETFs can also be varied:
 - ETFs can be actively or passively managed.
 - ETFs can be thematic – eg, ETFs designed to invest capital in the transition towards sustainable energy sources.
 - ETFs can be physical (based on shares) or synthetic (based on derivatives).
 - ETFs can be based on equity, fixed income, commodities, or currencies.⁴
- Exchange-traded Commodities (ETCs): these are pooled investment vehicles that are primarily invested in physical commodities or other assets such as currencies, derivatives and crypto assets.⁵
- Exchange-traded notes (ETNs): these are defined by IOSCO as senior, unsecured and unsubordinated debt securities that are linked to the performance of a market index; these trade on securities exchanges.⁶
- Other names also include Exchange-traded instruments (ETIs) and Exchange-traded vehicles (ETVs).

¹ World Federation of Exchanges, Response: IOSCO ETF Consultation, 2022, <https://www.world-exchanges.org/storage/app/media/wfe-highlights-role-of-central-price-discovery-for-etfs-in-iosco-consultation-response.pdf>

² IOSCO, Principles for the Regulation of Exchanges Traded Funds Final Report, 2013, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD414.pdf> eg

³ IOSCO, Principles for the Regulation of Exchanges Traded Funds Final Report , 2013, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD414.pdf>

⁴ It is also important to note that ETFs are adaptable and can have various underlying securities. This can include bitcoin eg, bitcoin futures ETFs.

⁵ IOSCO, Good practices relating to the implementation of the IOSCO principles for Exchange Traded Funds, 2023, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD733.pdf>

⁶ IOSCO, Good practices relating to the implementation of the IOSCO principles for Exchange Traded Funds, 2023, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD733.pdf>

2) ETF market trends

ETF Assets Under Management (AUM) have risen globally from \$2.4 trillion in 2013 to \$11.5tr in 2023.⁷ Although, they remain a fraction of total global financial markets in both equities and fixed income, there is certainly a sustained global growth in the ETF markets. In 2022, the asset management sector experienced significant withdrawals of the value of \$1.4tr of net outflows from mutual funds excluding ETFs; at the same time, ETFs attracted \$779 billion of net inflows.⁸ ETFs domiciled in North America held the highest AUM in the global ETF industry; this was valued at \$8.9tr in February 2024.⁹

Actively managed ETFs have surged to around 30% of all ETF assets in some countries.¹⁰ At the beginning of 2024, passive US mutual funds and ETFs for the first time attracted more money than their actively managed counterparts.¹¹ Investors have pulled around \$258bn. from active mutual funds each year since 2015; the same time period saw passive mutual funds add an average of \$138bn each year.¹²

Looking ahead, growth in ETF markets is expected to continue.¹³ This is for various reasons. For one thing, there is expected to be an increase in the amount of retail investors interested in ETF investing globally. Additionally, a majority of ETFs are based on equity but fixed income is expected to attract an increasing share of growth.¹⁴ Barriers to entering the ETF market are lowering, for example due to access to white label platforms, allowing small managers to launch ETFs without setting up infrastructure from scratch.

There is likely to be increased demand for ETFs by retail investors; there is a general increase expected in capital market investment by retail investors, on top of which the tax advantages of ETFs and lower costs in some jurisdictions such as the US are likely to increase retail investor demand for ETFs.

There is also expected to be growth in thematic ETFs, particularly those with ESG related themes given the general increase in investment demand for ESG-focused investments. Global ESG ETF assets have grown from \$5bn in 2006 to \$480bn in 2023.¹⁵ In particular, 'smart beta', factor-based ETFs have gained significant popularity and are expected to grow further. Other novel use-cases of note include Target Maturity ETFs, such as the Bharat Bond index

⁷ PwC, ETFs 2028 : Shaping the Future, 2024, <https://www.pwc.com/gx/en/financial-services/publications/assets/pwc-etf-2028-shaping-the-future.pdf>

⁸ PwC, ETFs: 2027 : A world of new possibilities, 2023, <https://www.pwc.com/gx/en/financial-services/publications/assets/etf-2027-report.pdf>

⁹ Refinitiv, Global ETF Industry Review: February 2024, 2024, <https://lipperalpha.refinitiv.com/reports/2024/03/friday-facts-global-etf-industry-review-february-2024/#:~:text=ETFs%20domiciled%20in%20North%20America,the%20end%20of%20February%202024.>

¹⁰ Financial Times, Active ETF market share surges as growth accelerates, 2024, <https://www.ft.com/content/d67b47af-73eb-4be2-963d-217ae8ee4f94>

¹¹ Financial Times, Passive eclipses active in US fund market as assets swell to \$12.2tn, 2024, <https://www.ft.com/content/faf74f66-c4d6-45aa-bb30-0e73d523c547>

¹² Financial Times, Passive eclipses active in US fund market as assets swell to \$12.2tn, 2024, <https://www.ft.com/content/faf74f66-c4d6-45aa-bb30-0e73d523c547>

¹³ PwC, ETFs: 2027 : A world of new possibilities, 2023, <https://www.pwc.com/gx/en/financial-services/publications/assets/etf-2027-report.pdf>

¹⁴ PwC, ETFs: 2027 : A world of new possibilities, 2023, <https://www.pwc.com/gx/en/financial-services/publications/assets/etf-2027-report.pdf>

¹⁵ Statista, Global ESG ETF assets from 2006 to November 2023, <https://www.statista.com/statistics/1297487/assets-of-esg-etfs-worldwide/>

series, which measures the performance of portfolio of AAA-rated bonds issued by government-owned entities in India.¹⁶

3) Advantages and risks of ETFs for issuers, investors, and exchanges

Stakeholder	Advantages	Risks
Investor	• Transparency, because of the exchange-traded nature of the product, but also, as majority of ETFs are based on indices. • Diversified exposure to a wide range of companies across different sectors and industries, or targeted exposure to particular geographic regions, industry sectors, or asset classes such as commodities and currencies. The investor can buy a packaged product, thus facilitating diversification. • Greater trading flexibility compared to mutual funds, due to intra-day liquidity. • Lower average costs compared to buying individual stocks or non-exchange traded active funds. • Tax efficiency in some jurisdictions due to the 'buy and hold' nature of ETFs, incurring fewer taxable events such as capital gains distributions. • ETFs can be used within a wide variety of financial services contexts, such as: ○ Derivatives on ETFs ○ Lending and borrowing of ETFs ○ Using ETFs for margin and collateral as part of risk management	• Various costs can impact earnings earned from passive ETFs such as transaction costs or management fees related to active ETFs. Such costs may not be transparent for investors. • Discrepancy between the ETF's performance and that of its benchmark (tracking error) • Discrepancy between the ETF's market price and its net-asset value (may slightly differ due to intra-day changes in supply and demand). • Tax on ETF gains may be complex, particularly in some jurisdictions where the ETF is a relatively new concept, and thus is subject to an unclear tax treatment. • Novel products, such as leveraged and inverse ETFs, which may return significantly different results than their benchmarks, and require greater investor sophistication or daily monitoring. • Whilst the ETF creation and redemption process is important to ensure convergence between the ETF and underlying asset, participants should be aware that a number of trades can take place as part of the ETF creation and redemption mechanism, and that these are not entered into an order book, often leaving investors with an unclear view of inventories, and thus liquidity, in the market. Furthermore, in some jurisdictions, this mechanism is often

¹⁶ Times of India, "NSE Indices launches new Nifty Bharat Bond index", 2021, <https://timesofindia.indiatimes.com/business/india-business/nse-indices-launches-new-nifty-bharat-bond-index/articleshow/88045135.cms>

Stakeholder	Advantages	Risks
	○ For cross-country investment exposure via funds of funds or the listing of 'feeder' ETFs which link locally listed ETFs to ones listed on another exchange.	- only available in large unit sizes, and thus out of reach for some retail participants. • Finding up-to-date information on Assets Under Management for a given ETF can be a challenge.
Issuer	• Increased pool of potential investors.	• No significant risks.
Exchange	• Increased investor base.	

Also note that ETFs can be a useful tool for governmental fund raising. One notable example of this practice is the equity index created by the Indian Department of Investment and Public Asset Management (DIPAM) to facilitate the divestment of stakes in selected Central Public Sector Enterprises (CPSEs).¹⁷

4) Building a strong ETF market

Globally, the asset sizes of ETFs are growing at a healthy rate. For example, the ETF market in the US was \$5.3tr AUM in 2022, while in the UK and Europe, the ETF market was worth \$1.4tr.¹⁸ There are certain factors that can contribute to a strong ETF market:

- Retail investor participation (currently 12% of the European ETF market,¹⁹ and half of the US ETF market²⁰).
- Transparency around fees and commissions charged by trading platforms. Regulated trading platforms must have transparent fee schedules, but non-regulated exchange operators may have less transparency, and opaque cost structures can deter retail investors. One important factor to consider is that multiple ETF markets have surged following the abolition of, or increased transparency around, retrocession fees, which previously led to conflicts of interest and a lack of transparency. Overall, greater fee disclosure has made ETFs more attractive, by ensuring cost-effectiveness, and clarity.
- Distribution and reach, as there is less incentive for distributors to promote ETFs due to their lower expense ratios. Online distribution capabilities and white-label solutions may help to increase retail participation.
- Robust hedging instruments, particularly in emerging markets. Liquidity providers, such as ETF arbitrage desks, routinely trade in ETFs and futures when prices deviate too far from their fair value, and while derivative contracts are widely available, some indices lack futures contracts.
- Ensuring that the taxation of ETF gains is not overly complicated (although this is not within the control of the exchange operator).

¹⁷ <https://www.niftyindices.com/indices/equity/thematic-indices>

¹⁸ Oliver Wyman, The Renaissance of ETFs, 2023, https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2023/may/Oliver_Wyman_Exchange_traded_funds_are_fueling_market_growth_opportunities.pdf

¹⁹ Euroclear, Europe's retail investors get a taste for ETFs, 2024, <https://www.euroclear.com/newsandinsights/en/Format/Whitepapers-Reports/europe-retail-investors-get-a-taste-for-etfs.html>

²⁰ Broadridge, US Investor Study, 2024, <https://www.broadridge.com/white-paper/asset-management/investor-trends>

- Although it is ultimately the end-user interest that determines market capacity, there need to be a sufficient number of Market Makers (MMs) and Authorised Participants (APs) to meet consumer demand, increase liquidity in the ETF markets, and increase awareness amongst investors. Liquidity enhancement schemes can be used promote market making in ETFs. Some jurisdictions have instructed asset managers to appoint at least two MMs per ETF in order to provide continuous liquidity on-exchange.

Conclusion

The global ETF market has grown significantly and will likely continue to grow at a fast pace for the foreseeable future. There are clear variations amongst the rate of growth across various regions; these variations can help us identify the makings of a strong ETF market which have been laid out in this paper. The WFE will continue to monitor trends in the ETF industry, and build on its work on the ETF market.