



THE RISE OF THE EXCHANGE-TRADED FUND INDUSTRY IN INDIA

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Abstract: Passive investing has gained popularity in recent decades among institutions and individual investors. Most mutual funds fail to beat their benchmarks continuously over a long period. Exchange-traded funds (ETFs) are the next evolution of mutual funds. This study explains the evolution of the exchange traded funds industry in India and key growth drivers for the ETF industry in India. We also compute the year-on-year growth rates for ETF assets (using statistics provided by the Association of Mutual Funds of India), document the trends, and provide insight into the previous growth and expansion of the ETFs industry in India. Earlier gold ETFs dominated the Indian ETF industry, but currently, equity ETFs dominate the whole industry. Due to the notable increase in the value of the ETFs, several asset management firms started releasing more ETF schemes. The rise in trading volume suggests a strong interest of investors in the ETF schemes. The study also explains the key bottlenecks for ETF adoption in India and the role of the regulator i.e. SEBI to overcome these hindrances. There is a large potential to grow the Indian ETF market with the low expense ratio, transparency, simplicity, and ease of use of exchange-traded funds.

Keywords: Exchange-traded funds, ETFs, mutual funds, index funds, passive investment

JEL codes: G10, G23, G31, D53

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I. INTRODUCTION

In the field of asset management, investing is typically categorized as active or passive. Active investing uses market timing and stock selection to outperform benchmarks. Passive investing, on the other hand, revolves around constructing a portfolio that seeks to mimic the performance of an index. Passive investing has gained popularity in recent decades among institutions and individual investors. Countless studies have proven that most mutual funds fail to beat their benchmarks continuously over a long period. The asset prices fully reflect all available information to the market; however, as per the Efficient-Market Hypothesis (EMH) given by Eugene F. Fama, it is “impossible to beat the market” consistently on a risk-adjusted basis (Fama, 1970). Thus, researchers made efforts to understand patterns within the asset management domain and investigate their consequences for market quality (French, 2008; Stambaugh, 2014). This investigation gave rise to the concept of passive investment and the development of exchange-traded funds (ETFs). An ETF is a passive investment that usually tracks an index, commodity, bond, or other asset.

An exchange-traded fund (ETF) is a wonderful financial product innovation with a combination of mutual funds and stocks. ETFs are traded securities as they trade on the stock exchange at market prices and represent the proportional interest in pooled assets similar to mutual funds. The Association of Mutual Funds in India (AMFI) defines, “an ETF, or exchange-traded fund, is a marketable security that tracks an index, a commodity, bonds, or a basket of assets like an index fund.” The funds of an ETF are invested only in those stocks that are a part of an underlying index followed by an ETF. An ETF holds the same securities in the same proportion as they are represented on the underlying market index.

ETFs have a distinct trading mechanism as they trade in the primary market as well as the secondary market simultaneously (Charteris *et al.*, 2014). In the primary market, ETFs are created and redeemed in-kind straight from the fund house in exchange for a predetermined basket of underlying securities with the same weight as the index. Investors make real-time purchases and sales of ETF shares on the secondary market. An ETF’s net asset value (NAV) can deviate from its market price. This disparity brings profits from an arbitrage opportunity to market makers and authorized participants. (Brown *et al.*,

2021). This arbitrage mechanism brings ETF market prices close to the net asset value (NAV) (Box *et al.*, 2021).

Exchange-traded funds (ETFs) are the next evolution of mutual funds. ETFs provide numerous benefits over traditional mutual funds. Mutual funds possess higher costs than ETFs due to exit loads. The expense ratio of ETFs is only 0.5% compared to 1.5-2% of actively managed large-cap mutual funds (India Passive Funds, 2024). ETFs can be traded like stocks throughout the day at real-time prices, while mutual funds can be accessed only at the end of the day at Net Asset Value (NAV). ETFs are more transparent than mutual funds since they provide their holdings on a daily basis, whereas traditional funds only provide their holdings at the end of each quarter. Due to the distinct advantages that exchange-traded funds (ETFs) provide over actively managed mutual funds, ETFs have been increasingly popular among investors in recent times.

This study is aimed at researchers, financial experts, and policymakers who want to comprehend the dynamics and difficulties of ETF expansion within the framework of the Indian financial market. This study aims to give a thorough overview pertinent to individuals working in the financial industry and policy formation by providing insights into the development and regulatory elements of ETFs.

II. REVIEW OF LITERATURE

Most authors consider exchange-traded funds (ETFs) as a type of financial innovation. As per Gastineau (2010), exchange-traded products (ETPs) are those financial products listed and traded on stock exchanges and are one of the main categories of financial innovations. Hill *et al.* (2015) defined ETFs as “hybrid investment products, with many of the investment features of mutual funds married to the trading features of common stocks.” Dannhauser (2017) also considers ETFs as financial innovations and finds that they have a significant positive valuation impact on the systemically important underlying securities.

Exchange-traded funds (ETFs) comprised commodities in 2003. ETFs are securities that trade on an exchange like stocks but track an index, a commodity, or a group of assets similar to an index fund. The price of ETFs fluctuates because they are purchased and sold throughout the day (Dhole, 2014). Ben-

David (2017) explained that ETFs provide low-cost trades, intraday liquidity, and passive index tracking—a combination of advantages that were previously unavailable to investors. These features made exchange-traded funds (ETFs) the most widely used passive investment among professional and retail investors.

Boehmer and Boehmer (2003) observe a notable improvement in market quality and liquidity after the launch of 30 ETFs on the New York Stock Exchange. Marshall *et al.* (2015) investigated the liquidity of more than 800 exchange-traded funds, including sector equity, bond, commodity, and real estate ETFs. The findings show that the liquidity between the ETFs and underlying securities has a significant positive relationship. ETFs have experienced substantial growth due to investor demand for diversification, lower fees compared to mutual funds, and diverse investment options (Bienkowski, 2007). The findings of Clifford *et al.* (2014) imply that the naive extrapolation bias of investors has fuelled the expansion of the ETF market and also caused return chasing in both mutual funds and exchange-traded funds (ETFs). According to Madhavan (2016) and Madhavan and Sobczyk (2016), exchange-traded funds (ETFs) improve the operations of financial markets. Agarwal *et al.* (2018) demonstrate that a greater degree of similarity in the liquidity of component securities is correlated with an increase in arbitrage activity in the primary and secondary ETF markets.

Singh and Gupta (2009) evaluate the nine ETFs listed on the National Stock Exchange (NSE) of India and find that all ETFs with different tracking errors replicate the returns of their underlying indices throughout the specified periods. This shows that there is no discernible underperformance or outperformance for any ETF in terms of efficacy. However, Prasanna (2012) assessed the performance of each of the 82 exchange-traded schemes that have been floated and traded on the Indian stock markets. These findings reveal that in India, ETFs increased by 37% yearly on average between 2006 and 2011. These funds consistently produced superior returns and outperformed the market index and investors are more interested in overseas fund-of-funds and gold funds. Furthermore, Singh and Kaur (2016) look at the reasons that cause equity exchange-traded funds (ETFs) to perform differently from their target indexes and analyze the performance efficiency of ETFs in India. According to the research, when ETFs attempt to mimic the returns of their benchmark indexes, they significantly overreact to changes in market conditions. The results

also show that volatility has a detrimental effect while assets under management and volume have a positive effect on tracking efficiency of ETFs. The ETF route is also being used by the Indian government to meet its divestment goals (Polisetty & Manda, 2019).

III. OBJECTIVES OF THE STUDY

1. To study the evolution of the exchange-traded funds industry in India and key growth drivers for the ETF industry in India.
2. To study the growth and trend of the exchange-traded funds industry in India.
3. To understand the key bottlenecks for exchange-traded funds (ETFs) adoption in India and the role of the regulator in overcoming these hindrances.

IV. METHODOLOGY

Secondary data from various reputed research reports, research papers, journals, and the reports provided on the official websites of the Association of Mutual Funds of India (AMFI), Stock Exchange Board of India, Nifty Indices, National Stock Exchange, and Nifty Passive Funds are gathered for the study. The study also computes the year-on-year growth rates for ETF assets (by using statistics provided by the AMFI), documents the trends, and provides insight into the previous growth and expansion of the exchange-traded funds (ETFs) industry in India.

V. MAIN BODY

1. Evolution of ETF Investment in India

In December 2001, the first Indian ETF, the Nifty Benchmark Exchange-Traded Scheme (Nifty BeES), was introduced by the Benchmark Mutual Fund AMC (Asset Management Company). Benchmark Mutual Fund AMC was later purchased by Goldman Sachs in 2011, and then by Reliance Mutual Fund in 2015 and the name of Reliance Mutual Fund was changed to Nippon India Mutual Fund in 2019. On January 8, 2002, the ETF was listed on the National Stock Exchange, and on the first day of trading, the NSE recorded a trade of Rs. 1.30 crores. Since January 2002, Nifty BeES has been trading on

the NSE and tracks the S&P CNX Nifty Index (Nifty 50 Index). Then, Liquid BeES, the first debt ETF, came in 2003 introduced by Benchmark Mutual Fund AMC. It is a fixed-income debt ETF that provides returns similar to the returns of the Nifty 1D Rate index.

In 2007, the Finance Ministry began to permit Gold ETFs, which enable Indians to invest in paper gold through stock exchanges rather than purchasing physical gold. The Benchmark Mutual Fund AMC launched the first gold ETF called Gold BeES. Gold ETFs had a sharp increase in popularity between 2008 and 2013. The global financial crisis of 2008 forced people to seek safer investments. Since gold is a secure investment, more funds migrated into gold ETFs. In actuality, gold funds held more than half of all ETF assets from 2009 to 2014.

Furthermore, in 2015, there was an introduction of Smart Beta ETFs in India. These ETFs follow both active and passive investment strategies (Jacobs & Levy, 2014). The Smart Beta ETF tracks and follows a conventional underlying index, just like passive funds. But through the use of active techniques, it also takes into account specific factors such as “value, momentum, quality, size, low volatility, dividend yield, etc.” to improve the performance of conventional funds (Bender *et al.*, 2013).

The following key decisions were critical in achieving the remarkable growth in ETFs:

Pension Fund: The introduction of ETFs as an admissible asset class in the pension fund universe as per the Union Budget 2013-2014 was the first major reform in the ETF industry of India.

CPSE ETF: In March 2014, the Indian government raised funds by divesting its stake in public sector undertakings (PSUs) through exchange-traded funds (ETFs). It paved the ground for the introduction of the CPSE (Central Public Sector Enterprise) ETF and increased public awareness of ETFs. In March 2014, the CPSE ETF Index was introduced, consisting of ten reputable PSUs at the time. Its New Fund Offer (NFO) was oversubscribed by Rs. 1363 crore, and the government raised Rs 3000 crore of disinvestment proceeds.

EPFO: The Employees Provident Fund Organisation (EPFO) declared in August 2015 that it would invest in stock markets only via ETFs. It started with five percent of ETF incremental flows, then in 2017, it increased to

fifteen percent of ETF incremental flows. Thus, EPFO becomes the largest ETF investor.

Bharat 22 ETF: In November 2017, ICICI Prudential AMC released the Bharat 22 ETF. This ETF is a portfolio of 22 diverse companies comprising 16 central public sector enterprises (CPSEs), 3 public sector banks, and 3 private sector holdings. The government raised Rs. 14,500 crores in November 2017 from this ETF. The Edelweiss Mutual Fund also launched the Bharat Bond ETF-April 2023 and April 2030 in December 2019 which invests only in 'AAA' rated bonds of public sector companies. Later on, 3 more tranches of Bharat Bond ETF-April 2025 and April 2031 were launched in July 2020, and Bharat Bond ETF-April 2032 was launched in December 2021, which makes a total of 5 tranches of Bharat Bond ETF.

The following Table 1 shows the various kinds of ETFs launched in India and their underlying index.

Table 1: ETF Market Space In India

<i>ETF</i>	<i>Scheme Name</i>	<i>Launched Year</i>	<i>Launched AMC</i>	<i>Underlying Index</i>
First Equity ETF	Nifty BeES	2001	Benchmark AMC	Nifty 50 Total Return Index
First Debt ETF	Nifty Liquid BeES	2003	Benchmark AMC	Nifty 1D Rate Index
First Banking Based ETF	Nifty Bank BeES	2004	Benchmark AMC	Nifty Bank Total Return Index
First Gold ETF	Gold BeES	2007	Benchmark AMC	Domestic Price of Gold
First International ETF	Hang Seng BeES	2010	Benchmark AMC	Hang Seng Total Return Index
First Gilt-Based Debt ETF	Nifty 8-13yr G-Sec ETF	2014	LIC Mutual Fund AMC	NIFTY 8-13yr G-Sec Index
First Thematic ETF	CPSE ETF	2014	Goldman Sachs AMC	CPSE Index
First Smart Beta ETF	Reliance ETF NV20	2015	Reliance Mutual Fund AMC	NIFTY 50 Value 20 Total Return Index
First Corporate Bond ETF	Bharat Bond ETF	2019	Edelweiss Mutual Fund AMC	Bharat Bond Index
First Equal Weight ETF	DSP Nifty 50 Equal Weight ETF	2021	DSP Investment AMC	Nifty 50 Equal Weight Index

<i>ETF</i>	<i>Scheme Name</i>	<i>Launched Year</i>	<i>Launched AMC</i>	<i>Underlying Index</i>
First State Development Loans (SDL) ETF	Nifty SDL Apr 2026 Top 20 Equal Weight	2021	Nippon India AMC	Nifty SDL Top 20 Equal Weight Index
First Silver ETF	ICICI Prudential Silver ETF	2022	ICICI Prudential Mutual Fund	Domestic Prices of Silver
First Nifty 500 ETF	Motilal Oswal Nifty 500 ETF	2023	Motilal Oswal Mutual Fund	Nifty 500 Total Return Index
First Multi-factor ETF	Mirae Asset Nifty Smallcap 250 Momentum Quality 100 ETF	2024	Mirae Asset Mutual Fund	Nifty Small cap 250 Momentum Quality 100 Total Return Index
First Nifty Oil and Gas ETF	ICICI Pru Nifty Oil & Gas ETF	2024	ICICI Prudential Mutual Fund	Nifty Oil & Gas Total Return Index
First Electric Vehicle and New Age Automotive ETF	Mirae Asset Nifty EV and New Age Automotive ETF	2024	Mirae Asset Mutual Fund	Nifty EV and New Age Automotive Total Return Index

Source: Compiled from India Passive Funds and respective AMCs

Moreover, the National Stock Exchange (NSE) launched the first website in India dedicated to passive funds, i.e., www.indiapassivefunds.com. The goal of this new platform is to give investors a thorough resource to help them understand passive investments, such as index funds and exchange-traded funds (ETFs).

2. Growth of the ETF Industry in India

The emergence of exchange-traded funds (ETFs) for passive investing is a significant long-term trend in worldwide investments. In 1993, there was just one ETF, then around 1,000 ETFs existed in 2002, and by 2022, there were 8,744 ETF schemes globally. ETFs worldwide managed assets worth almost 10 trillion US dollars during 2022, as per the report published by the Statista Research Department (2023). In India, the ETF industry has also recently completed twenty years. In 2019, the National Stock Exchange (NSE) reported that “increasing awareness about ETFs, large-cap active funds struggling to outperform large-cap indices-based ETFs and low fund management fees of ETFs are the key factors which have helped the growth of ETFs in India.”

Initially, ETFs were not as popular in India as in other countries. In March 2002, the assets under management (AUM) in ETFs were just Rs. 7 crores (Singh and Kaur 2016). The launch of gold ETFs made the ETFs popular in India; there was huge growth in the AUM of gold ETFs from just Rs. 736 crores in March 2009 to Rs. 11,648 crores in March 2013, as shown in Table 2. Gold funds accounted for more than 50% of all ETF assets from 2009 to 2014. For the first few years, gold ETFs dominated the market, and the majority of the equity ETFs were based on important benchmark indexes like Nifty and Bank Nifty. ETFs in the debt market were also mostly limited to the gilt and liquid categories.

In 2014, things began to change, and new kinds of exchange-traded funds (ETFs) for debt and equities were launched. In the equity ETF market, thematic and strategy ETFs have been introduced. In the debt ETF market, target maturity ETFs, which use public sector undertaking bonds and state development loans (SDL) securities as underlying instruments, have also evolved. The following figure 1 also indicates 207% year-on-year growth in other category ETF assets as of March 2014. Moreover, with the key decisions taken by the government as explained earlier (pension fund, CPSE, EPFO, Bharat bond), the AMFI's statistics indicate that the 'Other ETFs' category—which does not include gold ETFs—grew around 10 times in just three years from around Rs. 8,000 crores in 2015 to more than Rs. 72,000 crores in 2018, as shown in Table 2. Moreover, the Union Budget 2013 cut the securities transaction taxes on ETFs to bring them in line with mutual funds and the Union Budget 2019 announced a tax-deductible 80C version of CPSE and Bharat-22 ETFs, which further increased investments in exchange-traded funds.

Even after COVID-19 hit, significant growth has shown in passive investment. On a global level, 2021 has been a milestone year for exchange-traded funds (ETFs), with inflows of more than 1 trillion US dollars. ETFs also had a record-breaking year in India. The AMFI's statistics indicate that in 2021, the 'Other ETFs' category saw enormous inflows totalling over Rs 70,000 crores between January and December, compared to an inflow of over Rs. 4000 crores for gold ETFs during the same time. ETF volumes are increasing on trading terminals as Indian stock markets introduce ETF categories like Smart Beta ETFs (Polisetty & Manda, 2019). These ETFs have also shown significant growth during 2021. Smart Beta ETFs have increased from 4 ETFs in October 2016 to 16 ETFs in October 2021 (Gunasekaran, 2021). During 2021, the

year-on-year growth of assets under management for other ETF categories is 88%, for gold ETFs it is 78%, and overall ETF industry assets grew by 88% as shown in Figure 1.

Despite 2023 being a great year for the Indian stock market, more than half (52%) of Indian equity large-cap mutual funds underperformed the S&P BSE 100 index, according to recent research published by S&P Dow Jones Indices (2024). There are concerns over the efficacy of actively managed funds in India. Thus, investors' interest in passive funds has increased as a result of the underperformance of actively managed funds, and fund managers found it difficult to surpass their benchmarks.

The following Table 2 shows that ETF assets have grown at a CAGR of 51.29% during the last fifteen years from Rs. 1396 crores in March 2009 to Rs. 6.95 lakh crores in March 2024. The total assets under management (AUM) of ETFs increased by around 37% from March 2023 to March 2024. The AUM of the ETF category has accounted for Rs. 6.95 lakh crore out of the Rs. 53.40 lakh crore AUM of the whole mutual fund sector as of March 2024. Thus, the proportion of assets under management (AUM) of ETFs represents nearly 13% of the overall mutual fund industry. On the other hand, the assets of passive funds kept growing as a result of institutional money flowing into exchange-traded funds (ETFs) from investors such as provident funds. In the fiscal year 2023-2024, the ETF category is about one-third, i.e., Rs. 6.95 lakh crore out of Rs. 9.34 lakh crore of the total passive mutual funds category (AMFI, 2024).

Table 2: Growth of the ETF sector in India in terms of assets under management (AUM)

<i>Year</i>	<i>AUM in Other ETFs (in Rs. Crore)</i>	<i>Year-on-Year Growth Rate</i>	<i>AUM in Gold ETFs (in Rs. Crores)</i>	<i>Year-on-Year Growth Rate</i>	<i>AUM in all ETFs (in Rs. Crores)</i>	<i>Year-on-Year Growth Rate</i>
March 2009	660	-	736	-	1396	-
March 2010	957	45%	1590	116%	2547	82%
March 2011	2516	163%	4400	177%	6916	172%
March 2012	1607	-36%	9886	125%	11493	66%
March 2013	1476	-8%	11648	18%	13124	14%
March 2014	4528	207%	8676	-26%	13204	1%
March 2015	8060	78%	6655	-23%	14715	11%

March 2016	16063	99%	6346	-5%	22409	52%
March 2017	44436	177%	5480	-14%	49916	123%
March 2018	72888	64%	4806	-12%	77694	56%
March 2019	134626	85%	4447	-7%	139073	79%
March 2020	146463	9%	7949	79%	154412	11%
March 2021	275931	88%	14123	78%	290054	88%
March 2022	411362	49%	19281	37%	430643	48%
March 2023	484280	18%	22737	18%	507017	18%
March 2024	663981	37%	31224	37%	695205	37%
CAGR (2009- 2024)	58.55%		28.38%		51.29%	

Source: AMFI for AUM Values

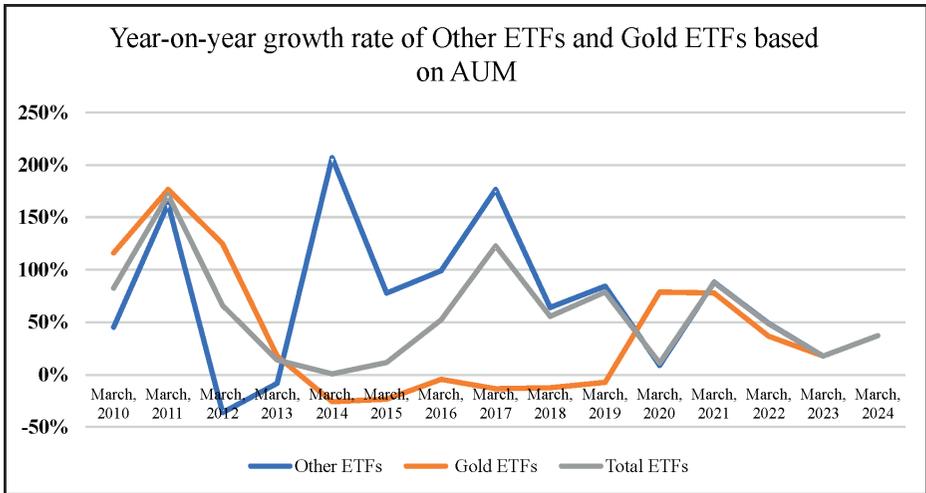


Figure 1: Year-on-year growth rate of the ETF sector in India in terms of assets under management (AUM)

Source: AMFI for AUM Values

Figure 2 shows a sharp increase in the number of ETFs, from 63 as of March 2017 to 206 as of March 2024. Equity ETFs have grown at a greater pace as compared to debt and commodities ETFs.

It is worth noting that earlier the gold ETFs dominated the Indian ETF industry, but currently equity ETFs dominate the whole industry. Table 3 shows that 155 equity ETFs comprise the largest amount of assets, i.e., 81.7%, while 29 debt ETFs comprise 12.9%, and 28 commodity ETFs comprise only 5.4% of the total assets of the Indian ETF industry.

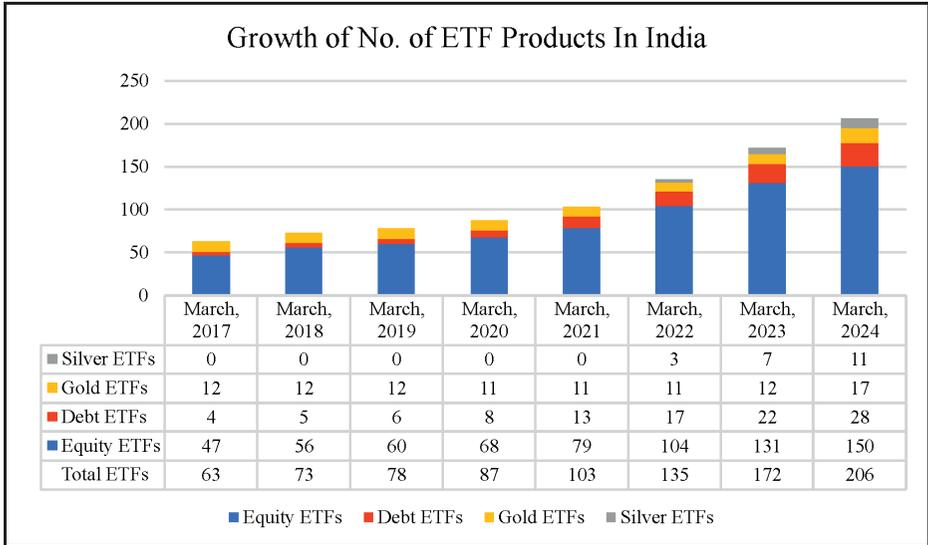


Figure 2: Growth of the number of ETF products in India

Source: Nifty Indices (2024)

Table 3: Categories of ETFs with their assets under management as of June 2024

	<i>Number of ETFs</i>	<i>Assets Under Management (in Rs. Crores)</i>
Equity ETFs	155	6,36,770 (81.7%)
Debt ETFs	29	1,00,359 (12.9%)
Commodity ETFs	28	41,822 (5.4%)
Total ETFs	212	7,78,951

Source: Nifty Indices (2024)

As per Nifty Indices (2024) report, the trading volume for the ETF category has increased dramatically from Rs. 26,139 crores in FY 2016–17 to Rs. 1,83,676 crores in FY 2023–24. Thus, the rise in trading volume suggests a strong interest of investors in the ETF schemes. Moreover, the report also stated that out of 1.37 crore total folios, 97% are retail investors and 2% are HNIs (High Net-Worth Individuals). Thus, the increase of retail investor folios in ETFs from 5.33 lakh as of March 2017 to 1.34 crore as of March 2023 indicates that individual investors are becoming more accepting and knowledgeable about ETFs. All of these data indicate that the Indian financial sector is becoming a mature market.

3. Key bottlenecks for ETF adoption in India

Exchange-traded funds are a small part of the overall Indian mutual fund industry. The penetration of ETFs amongst Indian investors remains low compared to mutual funds. The share of individual investors in total ETF assets is less than 10% in India. In the United States, both retail and institutional flows drive the majority of ETF flows, but in India, institutions namely the Employees' Provident Fund Organization (EPFO), own more than ninety percent of ETF assets. For example, the SBI Nifty 50 ETF is one of the largest ETFs in India due to the investment made by EPFO.

The retail investors irrefutably account for 97% of the total folios, but the AUM share of the various stakeholders in ETFs made the quite different narrative. Corporate investors have a staggering 90% of the entire assets of ETFs, HNIs account for 7%, and retail investors account for only 2% as per the Nifty Indices (2024) report.

On the other hand, there is little incentive for fund managers to encourage investments in ETFs, even in the face of underperformance in active mutual funds (Ramachandran & Saha, 2020). There is a vast difference between the expense ratios of active mutual funds of 1.5-2%, whereas ETFs have an expense ratio of usually up to 0.5%. Thus, ETFs normally do not pay commissions to maintain low costs, while mutual funds pay commissions. Distributors are incentivized to promote mutual funds, even if ETFs are more suitable investments for the clients. The Morningstar (2022) Investor Experience Study also stated that although there are inexpensive locally listed exchange-traded funds (ETFs) available, retail investors hardly use them, and they hardly pay for guidance when investing in ETFs. Thus, the absence of incentives for ETF distribution is one of the main challenges to ETF acceptance in India.

4. Significance of regulator (SEBI) for the growth of ETFs in India

The SEBI Mutual Fund Regulations, 1996 govern exchange-traded funds in India. In January 2019, SEBI released detailed guidelines on diversification for exchange-traded funds and index funds. According to the new ETF guidelines that SEBI released in May 2022, for ETFs to continuously offer liquidity on the stock exchange platform, asset management companies must designate at least two market makers (MMs), who are members of the stock exchanges. The new guidelines also stated that a transparent incentive structure for the

market makers must be established, and the incentives should be related to the performance of the market makers in terms of producing liquidity ETF units. Any incentives given to market makers must be charged to the scheme within the maximum total expense ratio allowable limit. Asset management companies and AMFI should carry out investor awareness programs for passive funds. The fees that apply to investor education and awareness programs from ETFs and index funds are one basis point of the scheme's daily net assets (SEBI, 2022).

VI. CONCLUSION

Even though India's ETF market is far smaller than that of developed countries, it has still experienced significant growth in terms of assets under management as well as the number of ETFs listed on stock exchanges. The number of ETFs increased dramatically from only one ETF as of March 2002 to 206 ETF products as of March 2024. The assets under management of the ETF category have been continuously growing during the last 15 years, from 660 crores in March 2009 to 6.95 lakh crores in March 2024. Due to the notable increase in the value of the ETFs, several asset management firms started releasing more ETF schemes. There are some obstacles to the penetration of ETF adoption among Indian investors, especially retail investors. However, this tendency is gradually shifting as more Indian individual investors consider adopting passive vehicles like index funds and exchange-traded funds (ETFs). Investor awareness and education about the benefits of ETF products will help to increase trading volumes and liquidity. Hence, there is a large potential to grow the Indian ETF market with the low expense ratio, transparency, simplicity, and ease of use of exchange-traded funds (ETFs).

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