

Market Competition In Indian Esg Mutual Funds

Vijaya Kittu Manda,

Doctoral Research Scholar, GITAM Institute of Management, GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh, India. Corresponding author: vijaykittu@hotmail.com. ORCID: 0000-0002-1680-8210

Dr. Aruna Polisetty,

Assistant Professor, GITAM Institute of Management, GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh, India. Email: arunakovvuru@gmail.com
ORCID: 0000-0002-9391- 6442

Abstract:

Increased investor attention globally is going towards financial products that give importance to Environmental, Social, and Governance (ESG) or Sustainable Investing as prescribed by the United Nations Environment Programme Finance Initiative (UNEP FI). Indian Investors, who are always seeking more variety and flavors in financial products, are no exception. India has witnessed an exponential rise in Net Assets Under Management (AUM) because of increased investments by domestic investors. The evidence for this is the quick launch of New Fund Offers (NFO) or repackaging of old schemes by Asset Management Companies (AMCs) to tap this opportunity in the Indian mutual fund industry. This paper examines the state of ESG and Sustainable Investing concerning Indian mutual funds. The study finds that ESG investing in India is nascent but is gaining pace with the quick launch of schemes in 2020-2021. The competition and concentration show that the market is gaining perfect competition and is moderately concentrated market. Findings from this research can help AMCs in better product design. Regulators will be able to do better policymaking and investors can benefit from better understanding of ESG concept.

Keywords: sustainable investing, Sustainable mutual funds, responsible investing, ethical investing, ethical funds, ESG index

JEL CLASSIFICATION

M14, G24

INTRODUCTION

Financial institutions worldwide are rushing to comply with the United Nations Environment Programme Finance Initiative (UNEP FI) to ensure that their money is being used for sustainable development of the world. Though the initiative came out around 27 years ago, in 1992, the momentum is now faster than ever before. (UNEP FI, 2020) The UNEP FI has formulated separate principals for the financial industry (Banking, Insurance, and Investing) so that funding opportunities are increasingly made available to companies that care for the planet. The UNEP FI Investment Committee works closely with members to make tools and research for sustainable business and investment practices (UNEP FI Investment Committee, 2020). As many as 2,800 investors representing 90% of world financial assets have expressed their commitment to U.N. Principles for Responsible Investment (UNPRI, 2020).

Historically, Mutual Funds were responsible for the development of capital markets in various countries. With climate change and sustainability gaining importance like never

before, mutual funds now have once again vital tools in channalizing investor monies into companies that follow ethical and sustainable business practises.

ESG funds reported an inflow of USD 1.2 trillion as of September 2020. Europe is currently leading both in terms of the number of funds and the quantum of funds. Product development, innovation, and rebranding are happening in developed financial markets. As many as 648 schemes are rechristened, 534 changed their name in Europe alone during the last decade. Other markets are busy with new scheme launches that fostered the penetration of the ESG theme in their respective countries.

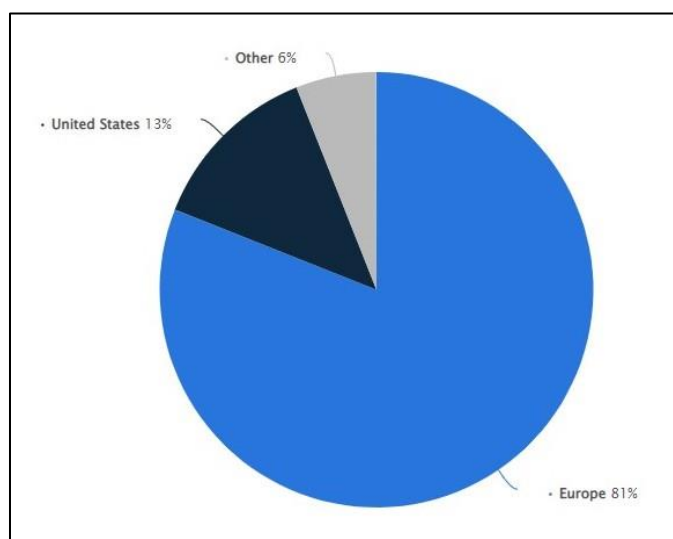
The development of new financial products requires access to data and indexes to benchmark them. Stock exchanges and index providers are busy developing newer indexes, but this was no easy task. Challenges included a lack of data to access physical risks or methods and models to measure green taxonomy. Now that data to some extent is available, the greenest of the indexes is evolving. MSCI recently released the Climate Paris Aligned Index Suite with eight indexes that are the greenest indexes available so far. There are over 1500 plus ESG equity and fixed-income indexes so far (IFR Magazine, 2020).

Increased awareness in investor interest was witnessed in ESG funds. A survey found that 39 percent of investors inquired about ESG funds with their advisors during the first six months of 2020 of COVID-19 pandemic (JFP, 2020).

ESG by itself is not a factor when examined through the lenses of the 2016 Graham and Dodd Scroll-winning article, "*Will Your Factor Deliver? An Examination of Factor Robustness and Implementation Cos*". Undoubtedly a powerful theme for the next two decades, ESG is gaining enormous interest from impact investors (particularly women and Generation X millennials) (West & Polychronopoulos, 2020).

While Indian mutual funds saw the fastest growth globally in terms of AUMs in 2021, the challenge is to retain the pace going forward. Investor awareness and empowerment towards this is the need of the hour failing which the theme will fizzle out to become just like any other thematic investment with only high risk takers considering to invest in it. Because ESG is a new theme that just started to get its inflows, it gives a good chance for researchers to study how the market dynamics play out in terms of competition and concentration. So much was the growing importance that India's largest mutual fund information portal – Value Research Online has created a separate thematic category tracking ESG funds.

Figure 1: Geography-wise penetration of ESG Investments



Data Source: Statista; Release date: March 2022

Quality of the underlying security into which the investor money is going is a critical element determining investment growth. With fund managers already engaged in searching quality securities, and when their search space is limited to companies with lower business risks and higher sustainable growth, companies with controversies can get eliminated. The fund manager, thus, will be more focused on building a scheme portfolio. When investments flow into such good quality companies that contribute to the community, they will be encouraged and give all stakeholders a win-win situation. Hence, fund manager quest and methodologies used by the AMC investment team are critical in ESG investing. In October 2020, Candriam SRI Bond Emerging Markets Fund, a top-performing emerging market bond fund, announced it would not invest in Russia, China, and Saudi Arabia because of low ESG ratings. The fund has high exposure to Mexico, Indonesia, and Chile. A regular review allows countries that improved ESG parameters to get attention and inclusion (Weekend Business Standard, 2020). Hence, the ESG theme can influence fund flows between countries in the future.

Is ESG investment is an alternative form of investing? Research shows that ESG can be complementary and not an alternative to traditional portfolio investing (Vannoni & Ciotti, 2020).

OBJECTIVES OF THE STUDY

To understand the concept of ESG and fund flows in the global and Indian context

1. To appraise various ESG-themed Indian mutual fund schemes from a competition and concentration perspective

SIGNIFICANCE OF THE STUDY

The study can help:

1. Asset management companies in designing better ESG-based mutual fund schemes

2. Regulators in designing better policies.
3. Academicians in understanding market structures and market dynamic

LITERATURE STUDY

Indian ESG stocks have the potential to give outperformance returns over bluechip stocks. A quick check shows that the Indian Nifty ESG Index has outperformed Nifty 50 over one and five year periods ending October 30, 2020 (Borate, 2020). Nifty ESG 100, with its 19.6% and 15.7% for 1-year and 5-years is outperforming Nifty 50 as of March 31, 2022 as well showing the continuation of the outperformance. A portfolio built with 50 companies with the highest ESG score is tested against the Nifty 50 from January 2008 to September 2013, shows that the ESG portfolio outperformed the benchmark index, has an aggressive portfolio and has a higher systematic and total risk (Goyal & Aggarwal, 2014). However, international evidence disagrees with this. A study on US ESG funds and benchmark indexes has found no significant difference in the performance between sustainable indexes and the traditional conventional indices (Jain, Sharma, & Srivastava, 2019). Findings in the passive investment arena are too similar. In a comprehensive study spanning 2005 to 2109 done, it is found that US Russell 3000 ETF and SPDR Global Dow ETF have outperformed the US ESG ETFs by giving higher absolute- and risk-adjusted-performance (Kanuri, 2020). However, the quantum of outperformance or underperformance is not too high to brush-off or discard the ESG theme. A study that employed controversies and combined scores on Thomson Reuters Eikon universe of 4700 companies using the Fama and French five-factor model showed that there is still potential for an investor to achieve a significant outperformance (Gregor, Christian, & Christian, 2020). There is a lot of scope and opportunity to build better ESG products.

Risk-Return and volatility analysis of S&P ESG India Index and Nifty and the S&P CNX 500 shows that though the daily returns are statistically not different, the annualized returns are better than the two significant volatility clustering in all the three indexes (Sudha, 2015). Both geographical and industrial asset allocations will play a significant role in the performance of schemes, as observed from a study on climate-themed Scandinavian mutual fund schemes (Dopierała, Mosionek-Schweda, & Ilczuk, 2020).

Investing in ESG and communicating ESG strategies has positively impact returns of only a few firms. Most of these firms are found to be operating in specific sectors like energy and utilities (Torre, Mango, Cafaro, & Leo, 2020).

Companies became more sensitive to Corporate Social Responsibility and such governance factors since 2009, particularly the post-global financial crisis, and their performance showed up in the ESG index (Singh, 2013).

ESG integration is a process that goes beyond primary ESG screening. It helps build and analyze portfolios that are better aligned to the ESG criteria by considering linkages between the ESG theme and company financial performance (Franklin, 2020). Investors should regard the concentration level of ESG-screening as a search parameter in the process. The optimal concentration of ESG-integration depends on investors' willingness to deviate from the unscreened counterpart (Jin, 2020).

Research has shown that passive funds with ESG criteria can be a more winning combination. For instance, ETF schemes that have ESG flavors could attract 2.1 to 3.5 percent more inflows (Gennadii, 2020).

In general, investors do not want lower returns, while asset managers do not want to compromise on their fees. Fortunately, socially responsible investors do not have to sacrifice returns when investing with a positive social inclination, and funds that are less expensive and having high sustainability ratings should do well (Chang, Krueger, & Witte, 2020). Even if the situation demands, ESG investors are happy to settle for lower returns (Knowledge@Wharton, 2020) (Pastor, Stambaugh, & Taylor, 2019).

Hence, the ESG model has to build an optimal policy regarding industry allocation and pollution limits imposed on portfolio companies (Landier & Lovo, 2020).

Like other forms of investing, ESG investing too comes with performance-related risks. Investors and fund managers can benefit from determining what cluster of the four-cluster framework their investment falls in (Conen & Hartmann, 2019). Funds with high ESG scores have fewer contagion effects and can work as a shield during the financial crisis (Cerqueti, Ciciretti, Dalò, & Nicolosi, 2020). However, some research points of vulnerabilities in current sustainability scores and rating methods because of financial losses during market downturns, such as during COVID-19, are inevitable (Folger-Laronde, Pashang, Feor, & ElAlfy, 2020). An event-based study done on socially responsible and conventional funds listed in the Japan Investment Trust Association (JITA) showed that socially responsible funds were more resilient to uncertainty around the 2016 U.S. presidential election. In contrast, conventional funds were more sensitive during the Brexit referendum (Arefeen & Shimada, 2020).

Fund managers can use factors (such as value, quality, momentum, and size) and ESG scores when building a fund portfolio. A substantial difference is found in funds with high ESG scores when compared to those with low-ESG scores. Funds that give higher importance to environment scores, for example, are found to be high on quality and momentum factors (Madhavan, Sobczyk, & Ang, 2020). The stock analysis of ESG schemes' fund managers shows that the ESG-ranked long-short portfolio looks more like momentum than value (Gao, Satchell, & Srivastava, 2020). However, a study by (Jin, 2022), when studying passive ESG investing, showed that the approach is more suitable for value-oriented investors and suggested that investors to seek alternative indexes with more ESG exposure deviation.

A change in investor behavior was observed during such panic times in which investors moved to low-ESG-risk funds with environmental risks remaining a top concern (Ferriani & Natoli, 2020).

Fund manager behavior in the context of socially responsible investing (SRI) is studied in Malaysian fund managers. The study found that there is a moderation effect of experience on the SRI behavior model. Further, more experienced institutional investors are influenced by personal factors only, i.e., subjective norms and perceived behavioral control. In contrast, less experienced institutional investors are affected by personal factors, such as attitude, and organizational factors, such as caring and ethical climate. Finally, the larger

size of a fund managed relates to more socially active responsible investment behavior (Talha, Salim, Jalil, & Yatim, 2020).

A study by (Akhileshwari et al., 2022) found that ARIMA model is highly accurate for forecasting NAV of Indian ESG mutual fund schemes.

In line with their stated objective, Environment and Sustainability (E.S.) funds of the U.S. are more supportive of ES proposals than non-ES funds. However, fund families' preferences are a strong determinant of fund voting leading ES funds in non-ES families to face a conflict of incentives in representing the preferences of their investors and their families (Ordenez-Calafi et al., 2022).

ESG Rating by mutual funds will be a massive opportunity for sustainable rating agencies (SRAs). A study by (Gangi et al., 2022) showed that SRAs lower the information barriers in the investment funds industry. Their study on the ESG ratings by three major SRAs (MSCI, Refinitiv, Morningstar) on European mutual funds showed low convergent validity between ratings thereby highlighting the commensurability problem among raters.

Ethical funds have more significant cash flows and this can impact scheme volatility. A study found that ethical funds were having significantly lower downside risk at the times of global financial crisis but once the crisis is over, the funds were taking higher risks than their benchmarks showing that ethical funds follow a specific volatility cycle that begins as premium assets with limited capital inflows and ends as commonly accepted assets with abundant capital inflow (Patterson et al., 2022).

RESEARCH METHODOLOGY

This study uses Mixed Research Method to gather preliminary information, *observe* the past growth and expansion experiences of ESG schemes, *measure and record* the Indian experience, and *describe* their potential in India in the context of mutual fund scheme competition.

DATA COLLECTION

Secondary data sources were used for collecting information necessary for this study. The data is collected from the stock exchange websites, official websites of AMCs, AMFI, several journals, research papers, and annual reports.

NAV data of the schemes is obtained from AMFI. Data related to scheme variables is collected from the Factsheets of the respective fund houses.

DISCUSSION

Need for ESG in India

India constitutes 17% of the world population though it hold 2.4% of the world land. Unfortunately, 11 of the 12 most polluted cities in the world are in India, highlighting the importance of environmental factors. 18% of the Indian population is below the poverty line. The country suffers from social issues like illiteracy, gender discrimination, and labor exploitation issues are rampant. Indian corporate is far behind global peers in terms of governance practices. Several frauds and illegal activities, including the financial domain, were unearthed. Improving corporate governance can improve the image of Corporate

India and the ease of doing business in India. Clearly, a country like India needs ESG at the corporate level. Investments in Indian ESG Mutual Fund schemes can be drivers towards sustainability to some extent.

Indian ESG Indices

A pivotal necessity to facilitate the launch of financial products based on the ESG theme is stock market indexes that allow them to benchmark. Some popular Indian indexes that have an ESG flavor are:

1. Nifty100 ESG Index
2. Nifty100 Enhanced ESG Index
3. Nifty100 ESG Sector Leaders
4. S&P BSE 100 ESG Index

Table 1: Basic details of India-based ETF Indices

Factor	Nifty100 ESG Index	Nifty100 Enhanced ESG Index	Nifty100 ESG Sector Leaders	S&P BSE 100 ESG Index
Methodology	Tilt Weighted	Tilt Weighted	Periodic Capped Free Float MCap	Float-adjusted market cap-weighted
No. of Constituents	88	84	48	65
Launch Date	March 27, 2018	March 27, 2018	June 15, 2020	October 26, 2017
Base Date	April 1, 2011	April 1, 2011	January 1, 2014	January 3, 1989
Calculation Frequency	End of day	End of day	Real-Time Daily	End of day
Index Rebalancing	Quarterly	Quarterly	Semi-Annually (in June & December)	Annually (in June)

Data Source: NSE Indexogram reports, S&P BSE Indexes Methodology reports

Apart from the indices offered by NSE and BSE, there are several global indices that track Indian ESG leaders. The list includes MSCI India ESG Leaders Index, S&P ESG India Index, Morningstar Global Sustainability Index, amongst others.

Indian ESG Mutual Funds

Indian Mutual Fund Schemes that follow ESG principles do not have a separate category. Hence, they are labeled as "high risk" thematic funds.

Currently, seven mutual funds targeting this category are:

1. SBI Magnum Equity ESG Fund
2. Quantum India ESG Equity Fund
3. Axis ESG Equity Fund

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4. ICICI Prudential ESG Fund
 5. Quant ESG Fund
 6. Kotak ESG Opportunities Fund
 7. Aditya Birla Sunlife ESG Fund
 8. Invesco India ESG Fund

SBI Magnum Equity ESG Fund

SBI Mutual Fund is one of the first Indian fund houses to recognize the lack of ESG products. When SEBI new recategorization norms in October 2017, SBI took the opportunity to rename its SBI Magnum Equity Fund and made it into a thematic scheme - SBI Magnum Equity ESG Fund effective May 16, 2018. Thus, the scheme became the first ESG mutual fund of India (Sulthana Banu et al., 2021). The fund house markets the schemes with the tagline, "*What's good for society is also good for your portfolio.*"

Quantum India ESG Equity Fund

The scheme started in July 2019, intending to use an 'ESG Framework' to develop a deeper understanding of company management practices and sustainability of the business and risk profile.

Axis ESG Equity Fund

Launched in February 2020, the scheme targets investors who 'make money responsibly.' The scheme is built on the philosophy of sustained companies that focus on sustained growth. This exercise's advantage is that such companies can deliver compounded returns, have a lower cost of capital, command premium valuation, and have lower volatility and reduced drawdown risk. (Axis M.F., 2020)

ICICI Prudential ESG Fund

Launched in October 2020, the fund employs an internally builds ESG scores (ranging from 0 to 10) to decide which company to be included in the portfolio (Indian and foreign companies). The scheme avoids investing in sin companies – such as those involved with tobacco, weapons, and alcohol.

Quant ESG Fund

Quant ESG Fund is slightly different from its peers. Launched in October 2020, the scheme uses a proprietary VLRT with a Quantifiable Quality framework (VLRT + Q²). V (Valuation analytics), L (Liquidity analytics), R (Risk appetite analytics), and T (Timing) factors are expected to give an ESG score that helps in better decision making concerning investing. The scheme takes a 100 percent hedging via derivative instruments to allow flexibility. Further, international exposure by way of 35 percent exposure to developed markets helps it better diversify. Finally, a dynamic money management style gives the scheme to move with agility during hyper-volatility.

Kotak ESG Opportunities Fund

Kotak Mutual Fund is the first Indian Asset Management Company to sign UNPRI. It has an active engagement with investee ESG and is already an integral part of their existing

Investment Process. The Scheme is an active implementation of 'Responsible Investment' policies for Equity and Debt. It partnered with 'Sustainalytics' - A Global Leader in ESG and Corporate Governance for ESG rating data and aims to "Invest in a Better Tomorrow".

Aditya Birla Sunlife ESG Fund

The fund maintains a market cap agnostic portfolio with 60-80% in Large Cap and remaining in Mid & Small Cap. The fund attempts to have a portfolio of 40-50 ESG compliant companies. Focus was on companies with high growth potential. The fund seems to maintain a "True to Label" portfolio by excluding non-conforming sectors/companies.

Invesco India ESG Fund

The fund tries to bring dual goals of profit and purpose together in the form of an ESG fund. The scheme believes that investing in ESG-complaint companies has increased top-line growth, lowered costs of production, gives better financing terms, Easier government support and subsidies, keeps motivated employees, and enhanced returns on capital invested. The scheme uses a bottom-up approach and is biased towards largecap stocks (63% of overall portfolio) and has limited exposure to midcap & smallcap stocks (35%).

Other Schemes

Mirae Asset ESG Sector Leaders ETF: Mirae Asset took ESG to passive investing by launching an ETF in late October 2020 that tracks the Nifty100 ESG Sector Leaders TRI.

Mirae Asset ESG Sector Leaders FoF: Launched alongside its ETF brother, this scheme is a Fund of Fund variant of the Mirae Asset ESG Sector Leaders ETF scheme. Fund houses generally launch FoF counterparts to allow investors who do not have a Demat account to invest in the scheme.

BNP Paribas Sustainable Development Fund: BNP Paribas Mutual Fund used to have a scheme called BNP Paribas Sustainable Development Fund but in August 2011, along with other schemes, it got merged into BNP Paribas Equity Fund. The fund house made another attempt by filing a draft document before SEBI for BNP Paribas India ESG Fund but before the scheme could be launched, the fund house got merged with Baroda Mutual Fund.

Disclosures, Reporting & Regulations

Investors suffer from growing dissatisfaction or lack of trust regarding existing disclosure practices – particularly involving reporting of standard financial statements and financial indicators. ESG investing by its very nature demands more disclosures and better transparency from companies. For example, companies will have to get their financial reports certified/verified/audited by multiple agencies to win ESG funds manager confidence. (Vostrikova & Meshkova, 2020) A study on UAE-based companies showed that companies having a large asset base and good liquidity disclose more. Further, the service sector is more open to giving disclosures liberally compared to the manufacturing sector. (Prince Modugu, 2020)

ESG funds and indexes are currently largely unregulated and not standardized. Fund managers and index providers are free to build fancy products, but they cannot be strictly compared with similar products. As per the SEBI scheme category classification, ESG schemes fall under the thematic category. The schemes will be marked as high risk as per Risk-o-meter.

Stronger and clear regulations and legislations will be required to make ESG products more transparent. The need increases as product maturity and depth increase over time (Reiser & Tucker, 2020). Globally, there is no specific reporting standard for ESG data. Hence, an ESG disclosure index itself is the need of the hour so that companies can be reliably measured and compared (Lokuwaduge & Heenetigala, 2017). More robust governance and regulations (using comprehensive and highly technical frameworks) can bring in standards and a fair playing field for investors and fund managers (Crabb, 2020). Index funds are found to engage in confrontational and competitive activism / escalate in their policies on ESG issues against company management (Webber, Barzuza, & Curtis, 2020).

RESEARCH FINDINGS

Market Concertation

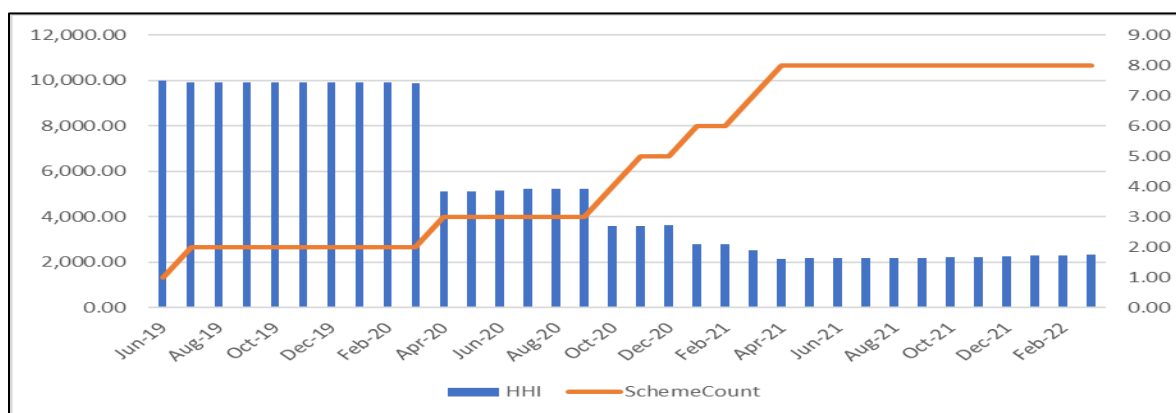
The Concentration and Competition of a market are measured using the Herfindahl-Hirschman Index (HHI) (U.S. Department of Justice, 2010). This study considered eight schemes open-ended thematic equity funds for its study. The study did not include Fund of Funds, Index Fund, and ETFs because they fall into a separate category and their scheme dynamics and functionality are different. Table 2 shows the correlation matrix between HHI and Scheme Count.

Table 2: Correlation analysis between HHI and Scheme Count

	<i>HHI</i>	<i>Scheme Count</i>
HHI	1.00	
SchemeCount	-0.91	1.00

Source: Researcher Analysis

Figure 2: ESG MF Market Concentration came down with launch of new schemes



Source: Researcher compilation

Figure 2 shows, that HHI value has come down from 10,000 (monopoly, highly concentrated market) in June 2019 to 2,328 (perfect competition; moderately concentrated market) in March 2022 with eight players. As anticipated and mentioned by previous literature, as the number of schemes began to rise, HHI value began to come down.

Table 3 summarizes the correlation analysis of scheme-specific variables (Scheme NAV, AUM, Expense Ratio, Top 10 holdings and Scheme Cash levels) captured on a monthly basis with respect to market competition (HHI value). As can be seen, some values are negatively correlated for some schemes which the same variables are positively correlated in some other schemes. The only variable that is positively and consistently strong across all scheme is the cash levels maintained by the fund manager in the scheme. Perhaps this is because that the schemes are just launched and are in nascent stages. Better clarity would come in once the schemes become more experienced and more data will become available.

Table 3: Correlation Matrix of various Scheme-specific variables

Scheme Name	HHI	NAV	AUM	Expense Ratio	Top 10 Holding	Cash
Aditya Birla Sun Life ESG Fund	1.00	0.65	0.52	-0.56	0.06	-0.01
Axis ESG Equity Fund	1.00	-0.91	-0.82	-0.84	-0.36	0.20
ICICI Prudential ESG Fund	1.00	-0.82	-0.59	-0.46	0.00	0.09
Invesco India ESG Equity Fund	1.00	-0.13	-0.07	-0.39	-0.84	0.79
Kotak ESG Opportunities Fund	1.00	-0.69	-0.73	0.53	-0.40	0.73
Quant ESG Eqt Fund	1.00	-0.74	-0.48	0.34	-0.07	0.44
Quantum India ESG Equity Fund	1.00	-0.80	-0.82	-0.82	0.04	0.64
SBI Magnum Eqt ESG Fund	1.00	-0.72	-0.79	0.86	0.83	0.27

Source: Researcher compilation

Research finding from this empirical evidence is that market competition has much to do with other factors (such as, perhaps, brand name, distribution network, amongst others) over scheme-specific variables (except for cash levels). These findings are important considering that fund houses can build in strategies to market their products better and position their schemes in the market to the right audience.

LIMITATIONS

Global fund flows based on ESG theme are happening not just in equity but also in hybrid and debt segments. Going forward, the borrowing costs of a company would depend on its ESG rankings. Even Governments issuing bonds would start showing attention on green bonds and social bonds because of their potential to attract investors easily. This study is limited to Equity-based Thematic ESG mutual fund schemes only because India's passive

investing landscape in the form of Index funds, ESG or even FoF is very nascent though several countries have already allowed them.

The biggest limitation in the present research is that the analysis is done for a brief period of time – 34 months in the case of SBI Magnum Equity ESG Fund being the highest, and the lowest being for 12 months in case of Aditya Birla Sun Life ESG Fund.

CONCLUSION

Indian Mutual Funds are following global peers in launching schemes that target investors interested in putting their money at companies that follow the ESG theme. As of March 2022, there are as many as eight ESG-themes open-ended equity schemes. The nascent stage of the schemes gave an opportunity to research on how market competition and concentration changes within the market segment. SBI Magnum Equity ESG Fund is a dominant leader and the lone scheme running in the Indian ESG Mutual Funds market before several other schemes joined the competition. Inline with the established theory, the new scheme launches have decreased market concentration and increased market competition. An observation on variables impacting the competition showed that only cash levels of the scheme are influencing while the others are either not influencing or are negatively influencing. Perhaps this is because of the schemes being too young. The research suggests that regulators bring in standardization of ESG indexes and more transparency with ESG-specific disclosures to attract more inflows.

CREDIT AUTHOR STATEMENT

All the researchers have worked on this paper over the last year at different times and in different ways, and the paper evolved dynamically over time. We are happy that overall, each author has contributed to the study.

COMPLIANCE WITH ETHICAL STANDARDS

This research did not involve any humans or animals for experimentation. The authors complied with ethical standards of research.

CONFLICTS OF INTERESTS

There is no conflict of interest to declare by the authors concerning the research, data, authorship, or publication of this article. The authors have no investment exposure to any of the schemes mentioned in this paper at the time of writing this research paper.

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