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Editorial

Welcome to the December 2023 edition of A₹tha! This issue of our peer-reviewed e-Journal, published by the Finance Research and Trading Laboratory at IIM Calcutta, is a testament to our commitment to promoting insightful articles from both academicians and practitioners. With a focus on Accounting, Finance, and Governance, A₹tha aims to contribute to a deeper understanding of recent developments in these dynamic fields.

We express our sincere gratitude to our readers for their unwavering support. The growing subscription base reflects the increasing popularity and influence of our platform. In this December 2023 issue, we are excited to present five articles that span a diverse array of topics within the realms of Accounting, Finance, and Governance. We hope that these contributions captivate your interest and provide valuable insights.

The first article, titled 'De-SPAC Transactions,' conducts a thorough review of deal activities related to de-SPAC transactions announced between January 2021 and mid-December 2023. The analysis covers both cross-border operating companies and domestic deals, revealing a decline in SPAC interest since the peak year of 2021. The article sheds light on the dynamics and trends within the SPAC landscape during this specified period.

The second article, 'Fifty Years of Black-Scholes and the Quant Revolution: A Viewpoint,' pays homage to the groundbreaking work of Black and Scholes, emphasizing its pivotal role in laying the foundation for the theory of option pricing. The author not only recognizes the historical significance but also explores contemporary trends and new avenues of research in quantitative finance, including discussions on high-frequency trading, sustainable finance, and the impact of FinTech.

The third article, 'Stewardship of Mutual Funds/Asset Management Companies – Strengthening Corporate Governance, Safeguarding Investors' Interests,' delves into the critical role of corporate governance in the mutual fund industry. The author explores the fundamental principles of the Stewardship code proposed by SEBI, examining whether mutual funds prioritize governance, climate and natural capital, and the impact of companies on people.

Moving on to the fourth article, "Corporate Governance," the author explores key aspects related to corporate governance, outlining intended objectives, pathways to achievement, and challenges faced in the ever-evolving corporate landscape. The potential benefits of efficient corporate governance practices are highlighted, alongside examples set by business leaders who have achieved significant milestones in this field.

The fifth article, titled "Wealth Creation Using Mutual Funds," focuses on the role of mutual funds in wealth creation for investors. The author provides insights into performance evaluation measures, historical returns, risk-adjusted returns, and the potential benefits of incorporating efficient mutual fund practices. Additionally, attention is given to the risk associated with leveraged strategies such as intraday trading and the use of derivatives.

We trust that you will find enjoyment in reading all the articles in this issue, and we extend our sincere gratitude to the authors for their valuable contributions. We invite you, our esteemed readers, to consider A₹tha as a platform for publishing your own articles. Feel free to send us your contributions and feedback at artha@iimcal.ac.in. We eagerly anticipate the continued support and engagement of our readers and contributors in the future.

Vivek Rajvanshi
Chief Editor

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De-SPAC Transactions

Radha M. Ladkani

A significant phase in the life of a Special purpose acquisition companies (SPACs, also termed as blank check companies) is the stage where it engages in a de-SPAC transaction, also termed as a De-SPAC merger. De-SPAC is a transaction which is often structured as a reverse merger between an already-listed acquirer (i.e., a SPAC) and a privately held target firm (i.e., an operating company which is also the surviving entity after the merger is consummated). The reverse merger enables the privately held target firm to get listed on a stock exchange. Therefore, De-SPAC transactions offer an alternative route to private businesses seeking to go public (Kolb and Tykvová 2016; Newman and Trautman 2021). This article reviews the deal activity of de-SPAC transactions that were announced between January 2021 and mid-December 2023.

De-SPAC Deal Activity

De-SPAC transactions peaked in 2021 in terms of numbers and average deal sizes, whereas the subsequent periods have witnessed a substantial decline in the deal activity (table 1). The average deal size in 2021 was USD 1.99 billions, whereas the deal sizes in the subsequent periods were less than one-third in value as compared the peak year.

Table 1: Summary De-SPAC Deal Activity

Year of Announcement	Number of Deals Announced	Average of Deal Value (USD, Millions)	Completed Deals	Withdrawn Deals	Pending Deals
2021	304	1992.41	236	48	20
2022	174	643.44	84	43	47
2023	138	571.70	22	16	100

Note: M&A deals announced from 1st Jan 2021 to 15th Dec 2023, with deal value greater than or equal to USD 1 million, and where acquirer business description mentions SPAC or Blank Check Company and the listing status of the acquirer is 'Public'. The data includes announced M&A deals with the following deal status: withdrawn, pending and completed. Form of the deal excludes: buyback, exchange offer, and recapitalization. The values above are the deal values (not the value of gross or net proceeds) for the total percentage acquired in a de-SPAC deal. The table is compiled by the author. Data source: Refinitiv Eikon.
Disclaimer: The data used in this article is filtered as per the criteria stated in the notes above. The use of this analysis is only for academic purposes.

The majority of De-SPAC transactions were domestic deals, however, a significant proportion for De-SPAC mergers included cross-border operating companies (table 2). Approximately one-fourth of the deals announced in 2021 were deals that enabled an operating company to list itself on a foreign country stock exchange with the help of a de-SPAC merger. Our preliminary analysis indicates that although the average deals sizes of cross border De-SPAC transactions deals do not mirror the valuations paid in the domestic deals, the percentage of deals withdrawn was not more than the numbers observed for domestic deals.

Table 2: Cross-Border De-SPAC Transactions

Year of Announcement	Number of Deals Announced	Average of Deal Value (USD, Millions)	Completed Deals	Withdrawn Deals
2021	80	637.58	67	9
2022	63	284.25	28	17
2023	56	377.28	6	6

Note: M&A deals announced from 1st Jan 2021 to 15th Dec 2023, with deal value greater than or equal to USD 1 million, and other details (incl. filtering criteria are as per table 1). The table is compiled by the author. Data source: Refinitiv Eikon.

Disclaimer: The data used in this article is filtered as per the criteria stated in the notes above. The use of this analysis is only for academic purposes.

The Nasdaq and the New York Stock Exchange (NYSE) have had the largest number of listings of operating companies through a de-SPAC process (table 3). Although the number of de-SPAC deals is larger for Nasdaq as compared to NYSE, the average deal sizes were larger for SPACs listed on NYSE as compared to Nasdaq. Other notable exchanges that witnessed de-SPAC deals of significant value were Euronext AM, Euro Paris, Toronto Stock Exchange and London Stock Exchange.

Table 3: De-SPAC Transactions by the Listing Exchange		
Acquirer's Primary Exchange	Number of Deals	Total Deal Value (USD, Millions)
Panel I: Jan to Dec 2021		
EuronextAM	3	3078.32
Nasdaq	174	366933.10
New York Stock Exchange	103	226513.77
Toronto Stock Exchange	3	870.36
Panel II: Jan to Dec 2022		
Euro Paris	2	1914.676119
EuronextAM	1	4095.332587
Nasdaq	123	72515.73
New York Stock Exchange	32	31824.73
Panel III: Jan to mid-Dec 2023		
EuronextAM	3	663.39
London	4	1279.96
Nasdaq	81	38799.91
New York Stock Exchange	30	34120.56
Note: M&A deals announced from 1st Jan 2021 to 15th Dec 2023, with deal value greater than or equal to USD 1 million, and other details (incl. filtering criteria are as per table 1). The table reports the details on the number of deals and the total deal value for select exchanges only (this is not an exhaustive list). The table is compiled by the author. Data source: Refinitiv Eikon.		
Disclaimer: The data used in this article is filtered as per the criteria stated in the notes above. The use of this analysis is only for academic purposes.		

The largest number of de-SPAC transactions during our sample period (Jan 2021 to mid-Dec 2023) have targeted operating companies in the high technology industry (table 4). The total value of de-SPAC deals in this industry was more than USD 238 billions for 173 transactions during the three year sample period. Target firms operating in the sectors broadly classified as 'industrials' (includes aerospace and defense, automobiles and components, machinery, etc.) and 'financials' (includes insurance, brokerage, asset management, etc.) also received significant interest from SPACs with deal values totaling over USD 166 billions and USD 114 billions, respectively, in the two sectors. The healthcare industry witnessed 114 transactions with the deal value of over USD 82 billions.

Table 4: De-SPAC Transactions by Industry of the Target Firm

Target Industry	No. of Deals	Total Deal Value (USD, Millions)
High Technology	173	238011.80
Industrials	88	166494.05
Financials	46	114023.76
Healthcare	114	82520.77
Media and Entertainment	36	52334.61
Energy and Power	48	37957.33
Consumer Products and Services	39	30931.29
Others	72	74273.40

Note: M&A deals announced from 1st Jan 2021 to 15th Dec 2023, with deal value greater than or equal to USD 1 million, and other details (incl. filtering criteria are as per table 1). The table reports the summary of the number of deals and the total deal value for the macro industry classification for target firms. The table is compiled by the author. Data source: Refinitiv Eikon.

Overview of Large De-SPAC Targets and their Stock Market Performance

SPAC firms generally underperform on de-SPAC deal announcements and also generally post poor long-term performance (Datar et al., 2012; Kolb and Tykvová, 2016; Kiesel et al., 2023). In fact, SPACs also have higher post-merger failure rates as compared to failure rates in post-IPO firms (Vulanovic, 2017). Empirical research also indicates that lower quality and more risky operating companies often taken the route of merging with a SPAC for public listing (Gahng et al., 2023). I summarize the details of the top three de-SPAC transactions by the industry of the target firm in table 5 and describe the performance of select deals (with deal value greater than USD 10 billions) in terms of their stock market valuations (data source for stock prices: Refinitiv Eikon).

Grab Holdings Inc., a super app. company with ride hailing, food delivery and payments services and operating in over eight countries in the Southeast Asia, was the target firm involved in the largest de-SPAC transaction of 2021 with deal value of over USD 34 billions (Daga and Aravindan 2021). The stock price of the Grab

Holdings which was trading around USD 13.31 when the deal was announced (April 2021) has witnessed a steep decline during the sample period, and it is currently trading at USD 3.04 (Nov 2023).

The second largest de-SPAC deal in the High Technology space was for an Israel-based software publisher Ironsource Ltd. Ironsource, a mobile advertising firm, that develops software for app monetization, was valued at USD 10 billions in the de-SPAC merger announced in March 2021. In July 2022, a little over a year after its debut on NYSE, Ironsource announced its merger with Unity Software Inc. in a stock swap deal that valued the former at USD 4.42 billions only.

VinFast Auto Ltd. was the target firm acquired in the largest de-SPAC transaction announced in 2023 and also in the automobiles and the components industry during the three years (2021 to 2023). VinFast Auto, an electric vehicles manufacturer based in Vietnam was valued at USD 23 billion. The firm listed on Nasdaq on the completion of its De-SPAC process in August 2023. The stock was trading at USD 10.36 when the de-SPAC merger was announced in May 2023, and peaked at USD 82.35 in late August 2023, and is currently trading at USD 7.88 in mid-Dec 2023.

Polestar Performance AB, an electric car racing brand and also a subsidiary of Polestar Automotive Holdings Ltd. was one of the largest de-SPAC deals in the automobiles and auto parts sector in 2021 (Ohnsman 2021). The company was listed on Nasdaq and was valued at USD 20 billion at the time of the de-SPAC merger. The merged entity was named Polestar Automotive Holding UK PLC has recorded a massive drop in its stock market valuation from USD 10.45 (Sep 2021) when the deal was announced to USD 2.46 as on mid-Dec 2023.

The reverse merger of Lucid Motors USA Inc. (later renamed Lucid Group Inc.) with a SPAC valued the former at USD 11.75 billion when the transaction was announced in February 2021. Lucid Motor's stock price dropped to USD 35.21 from the high of USD 57.37 on the day after the deal was announced, therefore, recording a significant negative reaction from the market (Wayland, 2021).

MSP Recovery Inc., a US-based reimbursement recovery firm operating in in insurance sector, listed on Nasdaq in a de-SPAC transaction valued at USD 32.50 billions. The listing of the target also received a severe negative reaction. It recorded a drop of 53% on the first day of its trading (Aliaj, and Gara, 2022). The stock which was trading at USD 10.78 on 23rd May 2022 closed at USD 5.06 on the next day. The stock recorded its lowest price in mid-Sep 2023 at USD 0.06 and is trading at USD 2.36 in mid-Dec 2023.

Ginkgo Bioworks Inc. (renamed as Ginkgo Bioworks Holdings Inc. after the reverse merger), a biotechnology and medical research company based in Boston, was valued at USD 16.86 billions in the largest de-SPAC transaction in the healthcare space in the 2021. The stock was trading at USD 11.15 per share when the target started trading on NYSE in mid-Sep 2021. However, the stock has suffered a similar fate experienced by other de-SPAC targets, and is currently trading at USD 1.61 per share in mid-Dec 2023.

Table 5: Largest De-SPAC Transactions By Industry

Month of Announcement	Target Full Name	Deal Value (USD, Billions)	Target Nation	Acquiror Primary Stock Exchange
Panel I: High Technology				
Apr 2021	Grab Holdings Inc	34.26	Singapore	Nasdaq
Mar 2021	Ironsource Ltd	10.00	Israel	NYSE
Sep 2021	Pagaya Technologies Ltd	7.97	Israel	Nasdaq
Panel II: Industrials				
May 2023	VinFast Auto Ltd	23.00	Vietnam	Nasdaq
Sep 2021	Polestar Performance AB	20.00	Sweden	Nasdaq
Feb 2021	Lucid Motors USA Inc	11.75	USA	NYSE
Panel III: Financials				
Jul 2021	MSP Recovery LLC	32.50	USA	Nasdaq
Jan 2021	Social Finance Inc	6.57	USA	NYSE
Mar 2021	Hippo Enterprises Inc	5.52	USA	NYSE
Panel IV: Healthcare				
May 2021	Ginkgo Bioworks Inc	16.86	USA	Nasdaq
Feb 2021	23andMe Inc	3.60	USA	NYSE
Apr 2021	LumiraDx Ltd	3.00	UK	Nasdaq

Note: M&A deals announced from 1st Jan 2021 to 15th Dec 2023, with deal value greater than or equal to USD 1 million, and other details (incl. filtering criteria are as per table 1). The table reports the summary of the largest deals as per select industries (based on macro industry classification for target firms). The table is compiled by the author. Data source: Refinitiv Eikon.

Time from an IPO to an Acquisition

SPACs often have 18 to 24 months from the date of their initial public offering to identify a suitable target firm to acquire. Therefore, the blank check companies operate under firm deadlines with respect to the time period within which they have to identify a merger target. Moreover, longer the duration is between the key milestones of a SPAC, the larger will be the operating costs, ceteris paribus. If a SPAC fails to find a suitable target to merge, then it must dissolve (or seek extension of the deadline) and redeem the shares which can result in significant liquidation losses. Additionally, when SPACs (which are yet to find a target) draw closer to the 2-year deadline they must feel the pressure of finding a suitable target or face liquidation losses, which might impair their judgement in evaluating target firms.

Interestingly, the De-SPAC deals announced in 2021 took shortest time from the date of their IPO issue to the announcement of the merger deal (table 4). The acquisition companies that announced de-SPAC mergers in 2021 had taken only 234 days to do so since the time their IPO was issued. The waning interest SPAC mergers is also reflected in the longer average durations observed for de-SPAC deals announced in 2022 and 2023.

The deals that involved larger targets in terms of deal values had taken the shortest time to announce the de-SPAC transaction. In fact, as the transactions that involved the smallest target firms in terms of deal value had taken the longest to announce their mergers. This pattern is also reflective of the fact that the deals announced in 2021 had reported larger deal values (as per average deals sizes reported in table 1). Thus, the shorter time taken between an IPO and the acquisition announcement for deals with larger target firms triangulates well with the data on the average time taken for deals announced in 2021.

Table 6: Number of Days Between An IPO and the Acquisition Announcement	
Panel I: Year-wise Average Number of Days between an IPO and the Acquisition	
2021	234

2022	389
2023	567
Panel II: Average Number of Days as per Deal Size	
USD 1 to 100 Millions	462
USD 100 to 500 Millions	407
USD 500 to 1000 Millions	331
USD 1000 to 5000 Millions	237
Greater than USD 5000 Millions	208
Panel III: Average Number of Days for Domestic versus Cross Border Deals	
Domestic	322
Cross Border	355
Panel I: Average Number of Days As Per the Primary Exchange of the Acquirer	
Euro Paris	409
EuronextAM	324
London	506
Nasdaq	312
New York Stock Exchange	338
Note: M&A deals announced from 1st Jan 2021 to 15th Dec 2023, with deal value greater than or equal to USD 1 million, and other details (incl. filtering criteria are as per table 1). The table reports the details on the number of days (average) from the issue date of the IPO to the date of the announcement of deal. The data for the number of days (used in the table above) is available only for 517 deals out of 616 deals in the filtered sample. The table is compiled by the author. Data source: Refinitiv Eikon.	

The average duration between the IPO and a merger of a domestic deal was 322 days as compared to 355 days for cross border transactions. The complexities associated with the due diligence, deal design, compliance and other aspects of a cross-border transaction might lengthen the average duration between an IPO and the merger announcement of such deals.

The exchanges that attracted the largest number of De-SPAC deals also recorded the shortest duration between the listing of a SPAC and the announcement of merger target. The acquisition companies that were listed on

Nasdaq and NYSE announced a merger in 312 days (average for 321 de-SPAC deals between 2021 and mid-Dec 2023) and 338 days (average for 140 de-SPAC deals between 2021 to mid-Dec 2023), respectively.

Conclusion

The interest in SPACs has witnessed a decline ever since the peak-year of deal activity in 2021 and the same is reflected in the number and the value of deals announced for SPAC targets in the sample period considered in this article. Most of the large SPAC targets highlighted in the article have witnessed enormous drop in valuations as reflected in stock prices. SPACs operate under a deadline of 18 months to 2 years for finding a suitable merger target, and the peak year of De-SPAC activity witnessed shortest duration between the key milestones (i.e., IPO issue and merger announcement) for a SPAC.

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Fifty Years of Black-Scholes and the Quant Revolution: A Viewpoint

Siddhartha Pratim Chakrabarty

ABSTRACT

As the world of quantitative finance celebrates fifty years of the seminal work of Black-Scholes, I take an overview of how this area has emerged in terms of reach, applicability and sophistication, and provide my take on the way forward. Black-Scholes had laid the foundation of pricing and risk management practices which has driven the unprecedented innovation in the financial markets, over the last five decades, which I discuss in the first half of this article. In the second half of the article, I present forth my views in what would constitute the thrust areas of research and innovation in financial engineering in the near future, identifying and dwelling upon high-frequency trading, sustainable finance and FinTech.

INTRODUCTION

The year 1973 is arguably the most notable timepoint in the history of quantitative finance, due to the two seminal papers on option pricing, authored by Black-Scholes and Merton. The former is hailed as turning point, which led to a rapid and unprecedented expansion of the quantitative finance industry, attaching hordes of mathematicians and physicists into the fold of "quants". While theories of option pricing predate the work of Black-Scholes, what propelled their work into prominence was the establishment of the option pricing formula in a precise and rigorous manner, offering a scientifically credible framework for not only pricing of options, but also pricing theory in general, including derivatives, credit instruments and insurance.

The theory of Black-Scholes also brought into the mainstream the asset pricing modelling approach of geometric Brownian motion and the thesis of Louis Bachelier. The approach of option pricing has found great relevance in financial risk management practices, as a consequence of the identification of return and risk being the two foundational pillars of investment theory, due to Markowitz in 1952. In fact, Markowitz's modern portfolio theory is still widely used, bearing testimony to the resilience and robustness of the approach.

The fifty years of Black-Scholes has seen many milestones beyond the realm of what might have been envisioned at that point of time. Accordingly, in this article, I will highlight some of the important progress in the area of quantitative finance, followed by a narrative on what in my view represent the current trends in financial engineering.

DEVELOPMENTS IN QUANTITATIVE FINANCE

In order to have a clarity on option pricing mechanism, we highlight the key characteristics of option as a financial derivative, namely, that it provides the holder (or buyer) of the option the right (but not the obligation) to buy or sell an underlying asset (such as a stock) from or to the writer (or seller) on or before a pre-determine future data, for a pre-specified price. The right to buy or sell the underlying asset constitute a call or a put option, respectively. Further, if the option can be executed (or exercised) any time on or before the pre-determine future date (expiration) then it is called an American option, while execution being permitted only at the expiration is called a European option. It is evident that in all scenarios the writer of the option is placed at a disadvantageous position given that they are under obligation without any concurrent right. This begets the question as to why one would want to write an option (in the first place) in such a seemingly losing proposition. And the answer lies in that the leverage enjoyed by the holder of the option comes at an up-front premium (known as the price of the option) which has to be paid to the writer of the option.

This is precisely the genesis of the work due to Black-Scholes, in that they were able to provide a closed form formula for determine the price of European type options, in terms of parameters known at the time of initiation of the option contract itself. What is more interesting, both from mathematical perspective as well as hedging (a risk-management approach) is the notion of replication strategy, which essentially means that the pricing of the option is done in such a manner (using the replication strategy) that the contingent liability for the writer of the option at the time of expiration will always equal the value of a "replicating portfolio" created and continuously reshuffled by the writer of the option using an initial investment which is exactly equal to the price of the option, which they receive upfront from the holder of the option.

An important mathematical idea that emanated from the option pricing theory (also as a result of the concept of the replicating strategy) is the risk-neutral probability (a direct application of the measure theory). The option pricing was then obtained using the evaluation of the expectation of contingent claim in a risk-neutral probability space.

Another important (and natural ally) of the concept of pricing is the portfolio theory. Portfolio theory provides the template for not only asset picking, but also asset allocation and a continuous process of performance analysis. This area initiated by the seminal work of Markowitz saw significant contribution from the likes of Sharpe, Lintner and Tobin. The mathematical framework for portfolio theory is very accessible, relying on mathematics at basic undergraduate level, including matrix theory and optimization, which leads to the concepts of the efficient frontier and the Capital Asset Pricing Model (CAPM). As markets mature, asset management practices adopted by quants tend to become more passive, relying on the fundamental concepts of modern portfolio theory. In fact, the Sharpe ratio remains an important benchmark in the performance analysis practices.

Given the ever-expanding universe of financial derivatives and the concurrent shift of banking systems from the traditional commercial banking (with primary activities of accepting deposits and extending loans) towards investment banking, a robust (and continuously adaptive) risk-management framework is an integral part of the modern banking system. The key component of the global financial risk management practices are the Basel regulations. These regulations which began with capital structure in case of credit risk, progressively included capital provisions in case of market as well as operational risk, both resulting from the expanding scope of investment banking practices and consequent evolving risk factors. The 2008 financial crisis resulted in recognition and introduction of regulations pertaining to both liquidity and leverage. Currently, the Basel-III regulations are in effect, with Basel-IV regulations being rolled out from January 2023, and by 2027 banks will be required to hold at least 72.5% of the amount evaluated based on the standardized model, as capital, notwithstanding what is suggested by the internal models of the bank.

CURRENT TRENDS IN QUANTITATIVE FINANCE

Today, quantitative finance has become very diversified in terms of both the financial innovation, as well as the mathematical approaches. In this article, I would like to focus on three areas, which in my view are representative of the current trends in “quant”, namely, high-frequency trading, sustainable finance and FinTech. The adoption of algorithmic trading (using quantitative models), as the predominant strategy can be traced back to Renaissance Technologies (with the celebrated mathematician Jim Simons at the helm), which has reportedly achieved sustained spectacular returns over the last four decades. Today many firms employ individuals from STEM background, who in turn act as the drivers of the unprecedented recent growth in high-frequency trading. The quant industry has been focusing (with a sense of urgency) on adoption of practices focused on sustainable finance, with the initiates in sustainable investment being greatly influenced by Environmental, Social and Governance (ESG) rating firms such as Morgan Stanley Capital International (MSCI), Sustainalytics and Carbon Disclosure Project (CDP). The FinTech industry is driven in continuous manner, greatly by a rapid shift to digital economy, a very successful example of which is the Unified Payments Interface (UPI), particularly in the paradigm of its wide adoption at an individual consumer level.

High-Frequency Trading

As the markets mature, one expects that it becomes more and more difficult for the portfolio performance to surpass the market performance. Fund management in such markets, consequently tend to be more passive in nature. An alternative to achieving improved portfolio performance came by the way of Hedge Funds, which managed funds comprising of a variety of instruments and strategies including derivatives, leveraging and short selling. Hedge Funds offered better returns than traditional mutual funds and Exchange Traded Funds (ETFs), while "hedging" the returns against risk factors.

The shift of the market mechanism from the open outcry system to electronic markets, ushered in an era of algorithmic trading, in general and high-frequency trading, in particular. Algorithmic trading is a trading strategy involving automated programming-based execution of trades making use of various market parameters and often relying on tools from mathematical finance. Some commonly adopted strategies for algorithmic trading include pairs trading, delta-neutral portfolios, arbitrage and mean reversion.

High-frequency trading setups rely greatly on high-speed internet connectivity and high turnover rates, requiring strong fundamental understanding of market microstructure. These include Market Orders (MO), Limit Orders (LO) and Limit Order Book (LOB). Further, the structure of exchanges plays a key role in how the orders are processed. The narrative around high-frequency trading also is contingent on the degree of transparency that exchanges offer, thereby resulting in the distinction between lit and other electronic markets. In fact, the recent emergence of many electronic markets is often attributed to the rapid growth of high frequency trading activities and the jury is still out on the matter of impact of high frequency trading on practice of market making and greater liquidity.

Sustainable Finance

The sense of global urgency when it comes to climate change and its impact, obviously has a significant impact on the financial sector, leading to rapid evolution and developments in sustainable finance. One key milestone in this direction is the Principles of Responsible Investing, whose genesis lies in a gathering of 2005, at the initiative of the then Secretary General of UN, Kofi Annan. Consequently, there has been an exponential growth in sustainable finance driven Asset Under management (AUM), which today runs into trillions of dollars. This has also been accompanied by a concurrent growth in terms of ESG regulations, globally.

ESG risk management practices is still in the process of evolution, with a variety of ESG rating entities providing their services. However, the specific ESG factors, as well as their weightage, still varies significantly amongst the providers of ESG scores, with the emphasis still being on corporate ESG data. ESG scoring relies on tree-based algorithms followed by normalization, so as to enable comparative interpretation of ESG scores across sectors. Today well-established engineering and data science methods, such as Shannon entropy, confusion matrix, Markov chain and transition matrix, have found their presence in the ESG rating practices.

Investment theory based on modern portfolio theory is being revisited now, in the paradigm of sustainable finance. These include refining well-established notions of efficient frontier, Capital Market Line (CML), CAPM and Sharpe Ratio, through the lens of sustainable investment requirements. A huge interest is being generated in green instruments, such as green bonds, sustainability bonds and transition bonds. Investment linked risk management strategies are increasingly coming into the mainstream risk management practices, relying on physical environmental parameters, making it imperative that risk measures and capital requirements become a part of the Basel framework, at the earliest. There is a highly diverse set of thought process being engaged in now, when it comes to determination of a universally accepted risk measure, including carbon intensity, dynamic risk measures and measure of greenness. Finally, the transition risk modeling needs examination to address questions pertaining to the effectiveness of carbon taxes and emission trading schemes.

FinTech

Financial Technology or FinTech is representative of the transition from traditional mechanism to technology driven methods in the delivery of financial services, relying increasingly on the usage of Data Science and Artificial Intelligence. In order to have insights into the world of FinTech, it would be prudent to delve into the structure of the global financial system and its pain points. The current financial structure is a result of legacy practices, especially when it concerns the notions of money, assets and liabilities.

One needs to examine, in particular, the characteristics of payments, both domestic, as well as cross border. In case of the former, the process of settlement is often cumbersome and consequently error prone. In case of cross border payments, the current system is hierarchal (which some may consider akin to bureaucracy), an unintended consequence of which is the existence of informal money transfer setups. A lot of these pain-points in the existing payment structure, has a potential solution in the adoption of blockchain technology, and a consequent transition from centralized to distributed ledgers. From a mathematical perspective, this area has adopted well-established cryptographic approaches, relying predominantly on abstract algebra (fields and rings) and number theory (including elliptic curves).

The most visible application of blockchain technologies, arguably, is cryptocurrencies (predominantly Bitcoin, Ethereum and Ripple). The charisma surrounding cryptocurrencies, especially when it comes to cross border transactions, acted as a catalyst in the development of Central Bank Digital Currencies (CBDCs) (used by central banks and narrow banks), as well as wide acceptance of wallets as a preferred and convenient form of day-to-day transactions. The emergence of digital currencies and wallets, notwithstanding the great interest generated, is still faced with several challenges, in terms of operability, privacy and (eventually) scalability aspects, questions which we hope would be addressed with clarity in the near future.

CONCLUDING REMARKS

The quant industry has arguably witnessed an expansion on a time-scale that is more accelerated, in comparison to other sectors of the economy, as well as other disciplines of learning. This itself bears testimony to the opportunities and also challenges this industry has to offer. The milestones, as noted in the section on "Developments" is more or less robust and well tested, thereby laying the foundation for the new innovations in the areas identified in the section on "Current Trends". In case of the former, namely the traditional well-established quantitative approaches, the educational setup (as it exists) provides for many learning resources, for individuals desirous of the joining the quant workforce. However, in case of the latter, in my opinion, three exists three main sources of challenges, namely, human resources, industry adoption and policy formulation (as well as implementation).

At this stage, the areas of high-frequency trading, sustainable finance and FinTech are still evolving, in terms of preparedness of human resources via existing educational setups. Industry adoption of these areas has resulted in challenges, due to existence of many pain points (in FinTech) and somewhat limited clarity (in Sustainable Finance), with the latter being focused on the urgency of development and adoption of universal industry practices. Finally, at the policy level, and consequent implementation, the global economic setup is working on the challenges towards realization of collective and equitable growth, especially when it comes to Sustainable Finance, within the broader scope of dialogues on climate risk mitigation.

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Stewardship of Mutual Funds / Asset Management Companies – Strengthening Corporate Governance, Safeguarding Investors Interest

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Abstract

Mutual funds /Asset Management Companies (AMCs) are in the possession of pool of funds created from the investments of varying amounts from the investors. Since myriad investors from all walks of like invest their hard earned money in varied schemes of mutual funds for both long and short term with the expectations that returns from their investments will soar and financial interests will be safeguarded. In view of this, mutual funds / AMCs have fiduciary obligation towards its investors and so they need to act as 'Stewards' to ensure that the investments made in the stocks, debentures, preference shares, other financial assets of the companies are adhering to the canons of corporate governance or not so that the probability of wealth erosion of the investors is mitigated.

In view of this, it generates paramount academic and research interests to reconnoitre the performance of select mutual funds / AMCs on vital yardsticks that is themes, priorities and engagements by teams.

Keywords: **Stewardship; Vital Yardsticks; Governance**

JEL Classification Code: G2 (Financial Institutions and Services)

Introduction

Mutual funds (MFs) / Asset Management Companies (AMCs) invest massive funds in various companies through varied financial assets. Since funds of large number of investors are involved, it is extremely important that mutual funds / asset management companies monitor the performance of investee companies on certain vital yardsticks such as board effectiveness; board diversity; shareholder rights and grievances; transparent voting and disclosure policy; strategy, purpose and financial buoyancy; financial value creation; environmental matters, i.e., climate and natural capital etc.

In light of the aforesaid facts, Stewardship Codes of MFs / AMCs plays a crucial role in ensuring corporate governance of the investee companies. As it involves exploring critical dimensions of a company where a MF/AMC invest its funds, it provides solace to the investors that their funds are safe.

In view of the paramount role the Stewardship Code plays in ensuring corporate governance and safeguarding the interests of the investors, the ensuing paragraphs delve into the significant facets of Stewardship Codes bundled into themes, priorities and engagements to comprehend its efficacy.

Literature Review

Fisch Jill E. (2020) highlighting the challenge of stewardship movement in mutual funds have stated that institutional investors comprising of big asset managers are treated as shareholders rather than intermediaries.

Varottil Umakanth (2020) have undertaken a research study to ascertain the UK's Stewardship Code possibility of being recast into other countries also in view of the fact that it was designed as per the economic, legal and political conditions prevailing in UK.

Gomstian Suren (2021) have attempted to ascertain whether activist campaigns inform and widens the spectrum of institutional investor stewardship by undertaking both empirical and theoretical analysis of the interactions between activists and institutional investors. The theoretical analysis revealed that big investment managers and a substantial chunk of activist shareholders have varying perspectives of stewardship. On the other hand, empirical observations confirmed that big asset managers do not have a free ride on the endeavours made by shareholder activists, particularly large hedge funds to expand stewardship.

Bansal Sikha and Malu Neha (2023) have defined the term "Stewardship". According to them it implies the act of safeguarding the rights of the person to whom it is acting as a steward. With reference to shareholders' governance and capital markets, the institutional investors act as a steward for their clients or beneficiaries as the funds invested by the institutional investors in various companies are owned by a mammoth number of investors who had sacrificed their savings by investing in various schemes of institutional investors and thus it can be stated that the institutional investors are not the owners rather steward of the funds.

Kochar Sumit and Gera Shivam (2023) have opined that under the patronage of an Indian Stewardship Code, efficient corporate governance and responsible shareholder investment have the potential to cajole both Indian and foreign investors to invest in Indian capital market.

Research Questions / Hypothesis

1. Whether Black Rock's Mutual Funds Stewardship approach has given same emphasis on all the themes (Governance, Climate and natural capital, and Company impacts on people) across the regions (Americas, APAC and EMEA) it serves as per the BIS Report 2022?

Null Hypothesis (H0): ***There is no significant difference in the emphasis on all the themes by Black Rock's Mutual Funds, i.e., Governance, Climate and natural capital, and Company impacts on people across the following regions- Americas, APAC and EMEA.***

Alternative Hypothesis (H1): ***There is a significant difference in the emphasis on all the themes by Black Rock's Mutual Funds, i.e., Governance, Climate and natural capital, and Company impacts on people across the following regions- Americas, APAC and EMEA.***

2. Whether Black Rock through its Stewardship have focused equally on all the Priorities (Board quality and effectiveness; Strategy, purpose and financial resilience; Incentives aligned with financial value creation; Climate and natural capital and Company impacts on people) it reconnoitres in the companies where it invests investors funds?

Null Hypothesis (H0): ***There is no significant difference in the focus on all the Priorities by Black Rock Mutual Funds.***

Alternative Hypothesis (H1): ***There is a significant difference in the focus on all the Priorities by Black Rock Mutual Funds.***

3. Whether Goldman Sach's Asset Management Stewardship approach has given same emphasis on all the engagements by teams, i.e., Global Stewardship, Fixed Income, Fundamental Equity and Multiple Teams across the regions (Americas, APAC and EMEA) it serves as per the BIS Report 2022?

Null Hypothesis (H0): ***There is no significant difference in Goldman Sachs Asset Management's engagements by teams i.e., Global Stewardship, Fixed Income, Fundamental Equity and Multiple Teams across the following regions- Americas, APAC and EMEA.***

Alternative Hypothesis (H1): ***There is a significant difference in Goldman Sachs Asset Management's engagements by teams i.e., Global Stewardship, Fixed Income, Fundamental Equity and Multiple Teams across the following regions – Americas, APAC and EMEA.***

Methodology and Data Collection

1.**Chi-Square Test**: The chi-square test is a useful measure of comparing experimentally obtained results with those expected theoretically and based on the hypothesis. It is used as a test statistic in testing a hypothesis that provides a set of theoretical frequencies with which observed frequencies are compared. In general, Chi-Square test is applied to those problems in which we study whether the frequency with which a given event has occurred, is significantly different from the one as expected theoretically.

The advantage of Chi-Square test is that it enables us to find out the degree of discrepancy between observed frequencies and theoretical frequencies and assist in determining whether the discrepancy so obtained between observed frequencies and theoretical frequencies is due to error of sampling or due to chance.

The Chi-Square test have been applied to conduct analysis of the Region-wise and Theme-wise Engagement of BlackRock Mutual Funds (please refer tables 1 and 2) to ascertain whether the company has given equal focus or not on the mentioned themes and emphasis on engagements by teams i.e., Global Stewardship, Fixed Income, Fundamental Equity and Multiple Teams by Goldman Sachs Asset Management in Americas, APAC and EMEA (please refer tables 5 and 6)

2. **F-Test (One Factor Model)**: This test is also known as Fisher's F-test or simply F-test. It refers to a test of hypothesis concerning variances derived from two samples. It is based on the F-distribution, which is defined as the ratio of two independent chi-square variates which is derived by dividing each variable by its corresponding degrees of freedom, i.e.,

$$\mathbf{F} = \frac{\Psi^2}{v_1} \div \frac{\Psi^2}{v_2}$$

The advantage of F-test is that it can be used for categorial independent variables with more than two levels.

The F-test have been applied to analyse the focus on Priorities (Board quality and effectiveness; Strategy, purpose and financial resilience; Incentives aligned with financial value creation; Climate and natural capital and Company impacts on people) by BlackRock Mutual Funds (please refer tables 3 and 4).

The data pertaining to themes, priorities and corporate engagements have been collated from the Stewardship Reports of the MF / AMC considered for the research study. The Stewardship Reports referred are – "BlackRock Investment Stewardship Annual Report, 2022" (https://shorturl.at/CDGSW) and "Goldman Sachs Stewardship Report 2022" (https://shorturl.at/gipA8).

Background and Findings

As this research study has been undertaken to have a broad idea regarding the efficacy of Stewardship of selected Mutual Funds or Asset Management Companies by engaging in various themes and priorities constituting corporate governance of the companies in which the investors funds are invested, so consistency in terms of years of Stewardship Reports of the MF /AMC that have been referred may not be considered highly significant, i.e., with reference to BlackRock's Mutual Funds, its Stewardship Reports for three years- 2020, 2021 and 2022 have been referred and for Goldman Sach Asset Management Company, Stewardship Report of only 2022 have been referred.

In case of India, the capital market regulator, Securities and Exchange Board of India (SEBI) through its Circular – CIR/CFD/CMD1/168/2019 dated December 24, 2019 came out with Stewardship Code for all Mutual Funds and all categories of Alternate Investment Funds (AIFs), in relation to their investment in listed equities.

SEBI came out with Stewardship Code after recognizing the fact that significance of institutional investors in capital markets across the globe is soaring and as custodian of investors funds they are expected to espouse higher responsibility towards their clients / beneficiaries by stoking monitoring and engagement with their investee companies. Such activities are known as Stewardship Responsibilities of the institutional investors and are intended to preserve their clients' wealth. The Stewardship Code came into effect from April 1, 2020. The Stewardship Code is based on the following principles:

Principle 1: Principle 1 Institutional Investors should formulate a comprehensive policy on the discharge of their stewardship responsibilities, publicly disclose it, review and update it periodically.

Principle 2: Institutional investors should have a clear policy on how they manage conflicts of interest in fulfilling their stewardship responsibilities and publicly disclose it.

Principle 3: Institutional investors should monitor their investee companies.

Principle 4: Institutional investors should have a clear policy on intervention in their investee companies. Institutional investors should also have a clear policy for collaboration with other institutional investors where required, to preserve the interests of the ultimate investors, which should be disclosed.

Principle 5: Institutional investors should have a clear policy on voting and disclosure of voting activity.

Principle 6: Institutional investors should report periodically on their stewardship activities.

To have an idea regarding the extent of corporate engagement by a mutual fund company, the corporate engagement data of SBI Mutual Funds referred from its Stewardship Report 2022-23 as a sample is being presented in exhibit 1.

Exhibit 1

Corporate Engagement of SBI Mutual Fund in FY23

Categories of Corporate Engagement	**Number of Corporate Engagements in FY23**	**Percentage of Corporate Engagements**
Disclosures	50	22.52%
Environmental	25	11.26%
ESG	24	10.81%
Governance	120	54.05%
Social	3	1.35%
Grand Total	**222**	

Now coming to the analysis of the performance of MF /AMC on vital yardsticks, the same have been undertaken in the following manner:

1. BlackRock's Mutual Funds Stewardship approach have been analysed region-wise (America, APAC and EMEA) and Theme wise (Governance, Climate and natural capital, and Company impacts on people) by applying Chi-Square Test. This aspect is analysed based on Black Rock's Stewardship Report of 2022.

2. To comprehend the priorities wise performance of BlackRock's Mutual Funds for a period of three years i.e., for 2020, 2021 and 2022, F-Test (One Factor Model) have been applied to ascertain whether all the priorities have received equal emphasis or not.

3. To comprehend the efficacy of Stewardship approach of Goldman Sachs Asset Management in terms of engagement by teams on the following engagements: a) Global Stewardship, b) Fixed Income, c) Fundamental Equity, d) Multiple teams, Chi-Square Test have been used.

The region-wise and theme-wise engagement of BlackRock Mutual Funds across Americas, APAC and EMEA, and the analysis of its engagements have been provided in Table 1 and Table 2 respectively.

Table 1

Region-wise and Theme-wise Engagement of BlackRock Mutual Funds

Regions / Themes	**Governance**	**Climate and natural capital**	**Company impacts on people**	**Total Engagements (Companies)**
Americas	541	142	123	**806**
APAC	318	116	109	**543**
EMEA	262	59	57	**378**
[redacted]				
	1121	**317**	**289**	**1727**

Table 2

Application of Chi-Square Test of Region-wise and Theme-wise Engagements

Observed Value (O)	**Expected Value (E)**	**(O - E)**	**$(O-E)^2$**	**$(O-E)^2/E$**
541	523.1766068	17.82339317	317.673344	0.607200972
318	352.462652	-34.462652	1187.674383	3.369646049
262	245.3607412	16.63925883	276.8649344	1.128399487
142	147.9455704	-5.945570353	35.34980683	0.23893792
116	99.67052693	16.32947307	266.6516909	2.675331406
59	69.38390272	-10.38390272	107.8254357	1.554041089
123	134.8778228	-11.87782281	141.0826748	1.046003501
109	90.86682108	18.13317892	328.8121779	3.618616498
57	63.25535611	-6.255356109	39.12948005	0.618595522
[redacted]				
				$\sum[(O-E)^2/E]=14.86$

$\chi^2 = \sum [(O-E)^2/E] =$ **14.86**

Degrees of freedom v= (r-1) (C-1) = (3-1) (3-1) **= 4**

v=4, $\chi 2_{0.01}$ = 18.465

Decision: The calculated value of $\chi 2$ i.e., 14.86 is lower than the table value, i.e., 18.465. Thus, we fail to reject the null hypothesis. Hence, all the themes, i.e., Governance, Climate and natural capital, and Company impacts on people are given equal emphasis across the following regions- Americas, APAC and EMEA.

The engagements of BlackRocks Mutual Funds priorities-wise for the years 2020, 2021 and 2022 is provided in table 3.

Table 3

Year-wise focus on Priorities

Years / Priorities	**Board quality and effectiveness**	**Strategy, purpose and financial resilience**	**Incentives aligned with financial value creation**	**Climate and natural capital**	**Company impacts on people**
2020	1593	1427	1185	1260	750
2021	2142	2038	1213	2293	1247
2022	2349	2118	1509	2115	1469

The analysis of the data provided in table 3 using F-Test (One Factor Model) is provided in table 4.

Table 4

Analysis of Priorities

Anova: Single Factor						
SUMMARY						
Groups	***Count***	***Sum***	***Average***	***Variance***		
1427	2	4156	2078	3200		
1185	2	2722	1361	43808		
1260	2	4408	2204	15842		
750	2	2716	1358	24642		
ANOVA						
Source of Variation	*SS*	*Df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1237370	3	412456.5	18.85688	0.007995	6.591382
Within Groups	87492	4	21873			
Total	1324862	7				

Decision: The computed value of F=18.85688 > Tabled value of $F_{0.05}$ = 6.591382, which implies that the null hypothesis H0 is rejected, i.e., all the Priorities are not equally focused Black Rock Mutual Funds.

The data pertaining to Goldman Sachs Asset Management's engagements by teams across the regions it serves, i.e., Americas, APAC and EMEA and analysis of its performance on the basis of its engagements is provided in Table 5 and Table 6 respectively.

Table 5

Engagements by teams in Americas, APAC and EMEA

Regions / Engagement by Teams	Global Stewardship	Fixed Income	Fundamental Equity	Multiple Teams	Total Engagements
Americas	204	329	137	98	**768**
APAC	239	72	353	99	**763**
EMEA	90	378	185	35	**688**
	533	**779**	**675**	**232**	**2219**

Table 6

Analysis of Performance in terms of Engagements by Teams

Observed Value (O)	Expected Value (E)	(O - E)	(O-E)2	(O-E)2/E
204	184.4722848	19.52771519	381.3316604	2.06714879
239	183.2712934	55.72870662	3105.688742	16.94585488
90	165.2564218	-75.25642181	5663.529024	34.27115849
329	269.6133393	59.38666066	3526.775464	13.08086415
72	267.8580442	-195.8580442	38360.37346	143.211579
378	241.5286165	136.4713835	18624.43852	77.11069101
137	233.6187472	-96.61874718	9335.182307	39.95904618
353	232.0977918	120.9022082	14617.34395	62.9792461
185	209.283461	-24.28346102	589.686479	2.817644912
98	233.6187472	-135.6187472	18392.44459	78.72846169
99	79.77287066	19.22712934	369.6825026	4.634188283
35	71.93150068	-36.93150068	1363.935742	18.96159164
[redacted]				
				$\sum[(O-E)^2/E]$=494.77

$\chi^2 = \sum [(O-E)^2/E]$= 14.86

Degrees of freedom v= (r-1) (C-1) = (3-1) (4-1) **= 6**

v=6, $\chi2_{0.01}$ = 22.457

Decision: The calculated value of $\chi2$ i.e., 494.77 is higher than the table value, i.e., 22.457. Thus, we reject the null hypothesis. Hence, Goldman Sachs Asset Management's Engagements by teams i.e., Global Stewardship, Fixed Income, Fundamental Equity and Multiple Teams are not given equal emphasis across the following regions – Americas, APAC and EMEA.

Analysis and Discussion

From the above analysis we got conversant with interesting facts. In case of BlackRock's Mutual Funds, theme wise across all the regions it serves is doing exceedingly well. As evident from the figures given in tables 1 and 2, theme-wise engagement i.e., Governance, Climate and natural capital, and Company impacts on people of BlackRock is soaring in all the regions, i.e., Americas, APAC (Asia-Pacific) and EMEA (Europe, the Middle East and Africa).

For instance, for the theme Governance in Americas is 541, APAC is 318 and EMEA is 262, thus total engagements for the Governance theme stood at 1121. Similarly, if we look at the Climate and natural capital theme it is quite heartening to note that across all the regions it is quite impressive, i.e., in Americas it is 142 and in APAC it is registered at 116, thereby exhibiting the proclivity of the BlackRock Mutual Funds towards environmental matters.

It is to be noted that climate and natural capital has gained mammoth significance across the globe in view of the growing emphasis on the concept of ESG (Environmental, Social and Governance), wherein E which relates to environment have become focal point of various international organisations like UN Framework Convention on Climate Change (UNFCCC) that conducts series of COP (Conference of the Parties) to the UNFCCC (very recently COP 28 was held in Dubai from November 30 – December 12, 2023), Global Reporting Initiative (GRI), corporate houses reporting about their environment protection initiatives under 'Natural Capital' component of Integrated Reporting etc. and the same is being reflected to a large extent in the stewardship of BlackRock Mutual Funds

Now on observing the year-wise Priorities of BlackRock Mutual Funds, it may be opined that broadly equal focus has not been given on all the Priorities. As on referring table 3, it may be stated that the following Priorities – Board quality and effectiveness; Strategy, purpose and financial resilience; Incentives aligned with financial value creation and Climate and natural capital have been high focus in comparison to Company impacts on people, as in the year 2020 its value stood at just 750 which is quite less compared with the values of other Priorities in the same year.

Further, it is interesting to note that the Priorities – Board quality and effectiveness; Strategy, purpose and financial resilience and Incentives aligned with financial value creation have exhibited an increasing trend. In case of Board quality and effectiveness it is 1593, 2142 and 2349 for the years 2020, 2021 and 2022 respectively. For Strategy, purpose and financial resilience it is 1427, 2038 and 2118 for the years 2020, 2021 and 2022 respectively and for Incentives aligned with financial value creation, the figures are- 1185, 1213 and 1509 for the three consecutive years respectively.

However, there is a silver lining that despite the focus on the Priority – Company impacts on people being less, a rising trend can be observed, i.e., it has enhanced from 750 in 2020 to 1469 in 2022.

Similarly, looking at the performance of Goldman Sachs Asset Management Stewardship approach, it is observed that its engagement by teams (Global Stewardship, Fixed Income, Fundamental Equity and Multiple Teams) for various engagements are not same (please refer table 5). As it can be observed from the figures of engagement by teams, Fixed Income is extremely well and is the highest at 779 and Multiple Teams being the lowest at 232. Global Stewardship and Fundamental Equity's performance is quite well with their engagements value being 533 and 675 respectively.

On referring table 6 in continuation to table 5, it may be stated that the difference between the Observed Values and Expected Values (O – E) is quite high resulting into huge calculated value of Chi-Square i.e., 494.77, which is significantly higher than the table value of Chi-Square i.e., 22.457, resulting into rejection of null hypothesis.

Finally, in case of India, on undertaking a descriptive study it can be opined that the Stewardship Code of SEBI is a game changer and possess the potential to usher in a renaissance in Indian mutual fund segment. Especially, looking at the six principles propounded by SEBI, it may be stated without an iota of doubt that the investors funds invested in various investee companies will be safe, thereby averting wealth erosion.

Conclusion

As business organisations are constantly influenced by ESTEMPLE factors (E-Economic, S-Social, T-Technological, E-Ecological, M-Media, P-Political, L-Legal and E-Ethical) and so mutual funds / asset management companies also needs to ensure that the companies, i.e., investee companies where investors funds are invested in equity, debt, index funds and other financial assets are safe by engaging them in various critical dimensions which assist in ascertaining the corporate governance scenario of the investee companies. Since a robust corporate governance will assist in holistic growth of an organisation as well as investors wealth.

In the past we have witnessed various financial fiascos of renowned corporate houses, thereby jeopardizing the serendipity of the investors, in light of this, the stewardship of mutual funds / asset management companies will go a long way in providing succour to the investors and refrain investee companies from embracing unfair or non-ethical business practices.

Limitations and Scope for future research

A) *Limitations*

1. This research study is based on the secondary data.

2. For comprehending the efficacy of Stewardship Codes of MF / AMC only two global mutual fund / asset management companies' data have been analysed.

3. Due to technical constraints the study of other global MFs / AMCs could not be undertaken.

B) *Scope for future research*

1. In near future, an extensive study on the efficacy of Stewardship approaches of Indian mutual funds / asset management companies may be undertaken based on their priorities or engagements to comprehend the progress made by Indian mutual funds / asset management companies in ensuring best corporate governance practices of investee companies.

2. A sustainability study of Indian mutual funds / asset management companies operating in both public and private sectors may be undertaken with reference to their Stewardship approaches to comprehend as to how stewardship codes have played an outstanding role in upholding the dogmas of corporate governance and safeguarding investors interest.

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Corporate Governance

Sumedh Anil Dange

The concept of Corporate Governance took roots in countries like US and UK and have subsequently spread to other countries. After 1990, the transition from central planning to market driven economies, particularly the privatization of state-owned companies, and the need to provide governance rules for the emerging private sector, brought the issue of corporate governance to the centre stage. As a fall out of 1997 economic and financial crisis, Asian countries too became keenly interested in the issue of corporate governance. The OECD took early initiatives to address governance issues.

The term 'Corporate Governance' has also become a focal point not only in India but worldwide. Its prominence has surged notably, particularly since the latter part of 1996. This escalation can be attributed to two principal factors: the economic liberalization and deregulation of industry and business, and the growing call for a renewed corporate ethos with stringent adherence to diverse laws, coupled with heightened accountability of companies to their shareholders and customers.

It is observed that Corporate Governance encompasses a wide range of principles and practices aimed at ensuring that a company operates in a fair, transparent, and accountable manner. It involves the processes and structures used to direct and manage the business and affairs of the company, with a focus on balancing the interests of various stakeholders, including shareholders, management, customers, suppliers, financiers, government, and the community.

In the current era of globalization and liberalization, the corporate sector, both at the national and international levels, is compelled to earnestly and consistently pursue 'Excellence in Corporate Governance' to its fullest extent. This article endeavors to illustrate the evolution of the 'Corporate Governance' concept over time, examining its trajectory at both national and international levels, and speculating on the future direction it might take.

Fundamental Components of Corporate Governance:

Corporate governance is a multifaceted system of principles, policies, and practices designed to oversee and direct the operations of a company, ensuring it operates ethically, responsibly, and in the best interests of its stakeholders. The effectiveness of corporate governance hinges on the integration of key components that collectively contribute to the organization's overall integrity, accountability, and sustainable performance. These components form the backbone of governance frameworks, guiding decision-making processes and establishing a balance between the interests of various stakeholders. Exploring the key components of corporate governance offers insight into the foundational pillars that shape organizational conduct, influence strategic direction, and foster transparency within the intricate structures of modern businesses. The fundamental components of corporate governance generally encompass:

1. **Board of Directors:** The board is responsible for overseeing the company's strategy, performance, and risk management, as well as appointing and monitoring senior management.

2. **Transparency and Disclosure:** Companies are expected to provide timely and accurate information regarding their financial performance, ownership, and governance structures.

3. **Shareholder Rights:** Corporate governance seeks to protect shareholders' rights and ensure they have a voice in key decisions affecting the company.

4. **Ethics and Integrity:** A strong corporate governance framework promotes ethical behaviour and ensures that the interests of all stakeholders are considered in decision-making.

5. **Regulatory Compliance:** Companies are required to adhere to relevant laws and regulations and effective corporate governance helps ensure compliance.

6. **Risk Management:** Corporate governance frameworks often include processes for identifying, assessing, and managing risks that could impact the company's performance or reputation.

7. **Executive Compensation:** Governance practices often address how executive and board member compensation is determined to align with company performance and shareholder interests.

These are just a few examples of the elements that fall under the umbrella of corporate governance. Here is to keep in mind that corporate governance practices can vary based on factors such as the company's size, industry, and geographic location.

Essential Components: Navigating Key Issues in Corporate Governance:

In the pursuit of transparency, accountability, and the harmonization of diverse stakeholder interests, corporate governance grapples with challenges that span from information asymmetry and conflicts of interest to agency theory and incentive structures. Each of these issues represents a critical facet of the governance framework, influencing decision-making, risk management, and the overall ethical conduct of organizations. In this complex tapestry, corporate governance emerges as a dynamic and evolving field, where addressing these issues becomes imperative for sustaining stakeholder trust, aligning incentives, and navigating the delicate balance between diverse interests within the corporate sphere. This exploration into the multifaceted challenges underscores the importance of robust governance mechanisms in fostering responsible, resilient, and sustainable business practices. Some of the pivotal issues that are integral to the domain of corporate governance include:

1. **Information Asymmetry:** Information asymmetry occurs when one party in a transaction has more or better information than the other. In corporate governance, this can lead to challenges in decision-making, particularly when executives possess information that is not adequately disclosed to shareholders or other stakeholders. Transparent communication is crucial to address information asymmetry and ensure fair and informed decision-making.

2. **Conflict of Interest:** Conflict of interest arises when individuals or entities involved in corporate governance face competing loyalties or interests that could compromise their objectivity. For instance, board members may have personal or financial relationships that conflict with the best interests of the company. Establishing clear policies, disclosure requirements, and ethical guidelines helps mitigate conflicts of interest.

3. **Agency Theory:** Agency theory is concerned with the relationship between principals (such as shareholders) and agents (such as company executives) and the potential conflicts that may arise. The interests of shareholders and executives may not always align, leading to agency problems. Corporate governance mechanisms, such as effective board oversight, are designed to mitigate these agency conflicts and align the interests of various stakeholders.

4. **Incentive Structures:** Incentive structures refer to the mechanisms and rewards designed to motivate executives and employees to act in the best interests of the company. Designing effective incentive structures is crucial to align the goals of management with those of shareholders. Issues may arise when incentives encourage excessive risk-taking or short-term focus at the expense of long-term sustainability.

5. **Board Composition and Independence:** The composition of the board of directors is a critical aspect of corporate governance. Ensuring a balanced mix of independent directors and executives helps maintain objectivity and effective oversight. Boards should be sufficiently diverse and possess the necessary skills and experience to guide the company's strategy and decisions.

6. **Shareholder Rights:** Corporate governance involves addressing the rights of shareholders, including voting rights, access to information, and the ability to voice concerns. Shareholder activism, proxy voting, and mechanisms for shareholder engagement are important elements in empowering shareholders and holding the company accountable.

7. **Risk Management and Compliance:** Effective corporate governance includes robust risk management practices and compliance mechanisms. Companies must identify, assess, and manage risks to protect the interests of stakeholders and ensure legal and regulatory compliance. A failure in risk management can lead to significant financial and reputational damage.

8. **Ethical Conduct and Social Responsibility:** Corporate governance extends beyond legal and financial considerations to encompass ethical conduct and social responsibility. Companies are increasingly expected to operate with integrity, adhere to ethical standards, and contribute positively to the communities in which they operate.

Addressing these issues is paramount for fostering a governance framework that promotes accountability, transparency, and sustainable business practices. By navigating these challenges effectively, companies can build trust among stakeholders and contribute to long-term success.

Charting the Path to Effective Corporate Governance: Navigating Critical Inquiries and Best Practices:

The establishment and adherence to a robust corporate governance framework are critical for the sustained success and ethical operation of any organization. As companies navigate an increasingly complex business landscape, numerous challenging questions arise concerning the structure, practices, and efficacy of their governance mechanisms. Addressing these questions is imperative for ensuring transparency, accountability, and the alignment of corporate strategies with the interests of various stakeholders. In exploring the intricacies of a corporate governance framework, several pressing and complex inquiries emerge, shaping the discourse around best practices and evolving standards. Here are several thought-provoking questions that often arise:

- *What are some common challenges companies face in implementing effective corporate governance?*
- *How do evolving technologies, such as AI and block-chain, impact corporate governance practices?*
- *Do Shareholders contribute to Corporate Governance? How do they help in improvement of Corporate Governance?*

- *Are there any examples of companies that have been praised for their strong corporate governance practices and the benefits they have experienced as a result?*

Delving into these challenging questions not only sheds light on the intricacies of corporate governance but also provides valuable insights into the ongoing efforts to refine and enhance governance structures in the contemporary business environment. Understanding and implementing effective corporate governance can indeed be a challenging task for many companies. Several common challenges impede the seamless adoption of robust governance practices, including:

1. **Resistance to Change:** Introducing new governance structures and practices may face resistance from internal stakeholders who are comfortable with existing ways of operating.

2. **Balancing Stakeholder Interests:** Corporate governance involves considering the interests of various stakeholders, which can sometimes be conflicting. Finding the right balance is a persistent challenge for the company.

3. **Board Diversity and Independence:** Ensuring a diverse board with independent directors can be challenging, especially in industries or regions with limited candidate pools.

4. **Regulatory Compliance:** Keeping up with evolving regulatory requirements across different jurisdictions can be complex and resource-intensive.

5. **Ethical Decision Making:** Encouraging ethical behaviour and decision-making throughout the organization can be a persistent challenge, particularly in large, decentralized companies or those with a history of unethical practices.

6. **Executive Compensation:** Designing incentive structures that align executive compensation with long-term performance and shareholder interests can be complex and contentious.

7. **Managing Risks:** Identifying and addressing risks effectively without stifling innovation and growth presents an ongoing challenge for companies.

Addressing these challenges often requires a combination of strong leadership, effective communication, ongoing education, and a commitment to transparency and accountability throughout the organization.

Elevating Corporate Governance: Pathways to Positive Influence and Enhancement:

It is also been observed that, the evolution of information and technology has become a transformative force across industries, and corporate governance is no exception. Over the years, advancements in information technology have reshaped the way companies manage, communicate, and make decisions. The integration of technology into corporate governance practices has not only enhanced efficiency but has also introduced new challenges and opportunities. From the adoption of digital communication tools to the implementation of sophisticated data analytics and artificial intelligence and block-chain, the impact of information and technology on corporate governance is profound. This evolution prompts an exploration into the ways in which technology has revolutionized governance structures, altered decision-making processes, and influenced transparency and accountability within organizations. Understanding this journey is essential for grasping the contemporary landscape of corporate governance and anticipating the future dynamics as technology continues to play a pivotal role in shaping the governance practices of today's businesses. Here are several avenues through which they can influence and enhance corporate governance:

1. **Improved Data Management:** AI and block-chain technologies can enhance the collection, analysis, and management of corporate data, leading to more informed decision-making by boards and management.

2. **Enhanced Risk Management:** AI tools can provide more sophisticated risk assessment and monitoring capabilities, helping boards and executives to understand and address potential risks proactively.

3. **Transparency and Accountability:** Block-chain's decentralized and tamper-proof ledger systems can enhance transparency in areas such as supply chain management and shareholder voting, thereby strengthening corporate accountability.

4. **Shareholder Engagement:** AI-powered chat-bots and analytics can enable more effective shareholder engagement by analysing and responding to inquiries, feedback, and concerns in a timely and personalized manner.

5. **Compliance and Reporting:** Technologies like block-chain can streamline compliance processes by providing immutable records and automation of regulatory reporting, reducing the risk of errors and enhancing trust in corporate disclosures.

6. **Cyber security and Data Privacy:** AI and block-chain technologies can play a vital role in bolstering cyber security measures, safeguarding sensitive corporate and customer data, and ensuring compliance with data privacy regulations.

7. **Board Decision Support:** AI applications can provide valuable insights and predictive analytics to support boards in strategic decision-making processes, helping them to anticipate future challenges and opportunities.

It can be observed that while these technologies offer numerous benefits for corporate governance, they also come with unique challenges, including ethical considerations, data privacy concerns, and the need for specialized expertise in deploying and managing these technologies effectively within the governance framework.

Exploring Shareholders' Impact: Contributing to Effective Corporate Governance:

Corporate governance being a system of rules, practices, and processes by which a company is directed and controlled. It involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, financiers, government, and the community. One key group among these stakeholders is shareholders, individuals or entities that own shares in a company. Shareholders, being an integral part of the corporate structure, play a significant role in shaping and influencing corporate governance. Their contributions extend beyond mere ownership, encompassing active participation and engagement in decision-making processes that impact the company's strategic direction, ethical conduct, and overall performance. Shareholders are individuals or entities that own shares or equity in a company, and they can contribute to corporate governance in several ways. Let's explore some of the ways in which shareholders can make valuable contributions to corporate governance:

1. **Active Engagement:** Shareholders can actively engage with the company by attending annual general meetings, participating in voting on key issues, and voicing their concerns or suggestions. This involvement helps hold the board of directors accountable and ensures transparency in decision-making processes.

2. **Proxy Voting:** Shareholders can exercise their voting rights by appointing proxies to vote on their behalf. By carefully considering proxy statements and voting on matters such as board

appointments, executive compensation, and major corporate transactions, shareholders can influence the direction and governance of the company.

3. **Responsible Ownership:** Shareholders can promote good corporate governance by being responsible owners. This includes conducting thorough due diligence before investing, monitoring the company's performance, and holding management accountable for their actions. Shareholders can also encourage companies to adopt sustainable and ethical practices.

4. **Shareholder Activism:** Shareholders can engage in shareholder activism, which involves using their ownership rights to advocate for changes in corporate governance practices. This can include proposing resolutions, engaging in dialogue with management, or collaborating with other shareholders to push for improvements in areas such as board diversity, executive compensation.

5. **Stewardship:** Shareholders can act as responsible stewards of the company by actively monitoring its performance, ensuring compliance with legal and ethical standards, and promoting long-term value creation. By actively participating in the governance process, shareholders can help align the interests of management with those of the company's stakeholders.

Overall, shareholders have the power to influence corporate governance practices by actively participating, voting, and advocating for transparency, accountability, and responsible decision-making within the company. Their engagement and responsible ownership can contribute to the overall improvement of corporate governance standards.

Exemplary Companies: Global Leaders in Robust Corporate Practices:

As corporate governance continues to gain prominence in the business world, example companies that prioritize and implement robust governance practices serve as beacons of success. These companies not only adhere to regulatory standards but go above and beyond to foster transparency, accountability, and ethical conduct in their operations. Recognizing and applauding such companies is essential, as they not only set benchmarks for their industry peers but also demonstrate the tangible benefits of sound corporate governance. There are several companies that have been praised for their strong corporate governance practices and have experienced notable benefits as a result. Here are a few examples of globally recognized companies known for their robust:

1. **Microsoft Corporation:** Microsoft Corporation has been recognized for its robust corporate governance practices, including a diverse and independent board of directors, transparent financial reporting, and strong ethical standards. These practices have helped the company in order to maintain investor confidence, attract top talent, and foster long-term sustainability.

2. **Johnson & Johnson:** Johnson & Johnson is often commended for its commitment to corporate governance. The company has a well-established board structure, effective risk management systems, and a strong focus on ethical behaviour. These practices have contributed to its reputation as a trusted healthcare company and have helped maintain stakeholder trust.

3. **Procter & Gamble:** Procter & Gamble is known for its sound corporate governance practices, which include a well-defined board structure, regular board evaluations, and transparent reporting. These practices have helped the company build a strong reputation for integrity, attract investors, and enhance long-term shareholder value.

4. **Unilever:** Unilever has received recognition for its strong corporate governance practices, such as a diverse and independent board, effective risk management, and transparent reporting. These practices have contributed to the company's reputation as a responsible and sustainable business, attracting socially conscious investors and consumers.

It's important to note that the benefits of strong corporate governance can vary depending on the specific context and industry. However, in general, companies with strong corporate governance practices tend to enjoy enhanced investor confidence, improved risk management, better decision-making processes, and a positive reputation among stakeholders. Secondly, there are many challenges companies go through during the year where there are laws which get amended every year. In order to survive in this competitive world, the following answers can be drawn for the same.

Guidance from Renowned Thought Leaders on International Corporate Governance:

The concept of ‘Corporate Governance’ has been defined at national and international level in various perspectives, some of which are reproduced as follows:-

Cadbury Committee Report On Corporate Governance, U.K.:

In an attempt to prevent the recurrence of business failures in countries like UK and to raise the standards of corporate governance, the Cadbury Committee, under the chairmanship of Sir Adrian Cadbury, was set up by the London Stock Exchange in May 1991. The committee, consisting of representatives drawn from the top levels of British industry, was given the task of drafting a code of practices to assist corporations in U.K. in defining and applying internal controls to limit their exposure to financial loss, from whatever cause.

In the view of ‘Sir Adrian Cadbury’, “a code of corporate governance cannot be imported from outside, it has to be developed based on the country’s experience. There cannot be any compulsion on the corporate sector to follow a particular code. An equilibrium should be struck so that corporate governance is not achieved at the cost of the growth of the corporate sector”.

The Committee investigated accountability of the Board of Directors to shareholders and to the society. It submitted its report and associated “Code of Best Practices” in Dec 1992 wherein it spelt out the methods of governance needed to achieve a balance between the essential powers of the Board of Directors and their proper accountability. The resulting report, and associated “Code of Best Practices,” published in December 1992, was generally well received.

The Cadbury Code of Best Practices had 19 recommendations. The recommendations are in the nature of guidelines relating to the Board of Directors, Non-executive Directors, Executive Directors and those on Reporting & Control. Whilst the recommendations themselves were not mandatory, the companies listed on the London Stock Exchange were required to clearly state in their accounts whether or not the code had been followed. The companies who did not comply were required to explain the reasons for that.

Organization for Economic Co-operation and Development (OECD) – Principles:

The Experts of the Organization for Economic Cooperation and Development (OECD) have defined corporate governance to mean “a system by which business corporations are directed and controlled”. According to them, the corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the Board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it provides the structure through which the company objectives are set, and also provides the means of attaining those objectives and monitoring performance.

Sarbanes - Oxley Act:

Sarbanes-Oxley Act is a US law passed in 2002 to strengthen corporate governance and restore investor confidence. The Act was sponsored by US Senator Paul Sarbanes and US Representative Michael Oxley. Sarbanes-Oxley law passed in response to a number of major corporate and accounting scandals involving prominent companies in the US. These scandals resulted in a loss of public trust in accounting and reporting practices. In July 2002, the Sarbanes- Oxley Act popularly called 'SOX' was enacted. The Act made fundamental changes in virtually every aspect of corporate governance and particularly in the matters of auditor independence, conflict of interest, corporate responsibility and enhanced financial disclosures.

SOX is wide ranging and establishes new or enhanced standards for all US public company Boards, Management, and public accounting firms. SOX contains 11 titles, or sections, ranging from additional corporate board responsibilities to criminal penalties. It requires Security and Exchange Commission (SEC) to implement rulings on requirements to comply with the new law. SOX consists of new standards for Corporate Boards and Audit Committee, new accountability standards and criminal penalties for Corporate Management, new independence standards for External Auditors, a Public Company Accounting Oversight Board (PCAOB) under the Security and Exchange Commission (SEC) to oversee public accounting firms and issue accounting standards.

Other International Developments:

Recent observations by various analysts and observers highlight several noteworthy developments:

1. **Professor Mervyn King (2002):** Known for his work on corporate governance and sustainability, Professor King has played a key role in shaping corporate governance practices globally. He has authored the King Reports on Corporate Governance in South Africa and has been involved in various international initiatives on corporate governance.

2. **Professor Jay Lorsch:** A Harvard Business School professor, Professor Lorsch has conducted extensive research on corporate governance and board effectiveness. His work focuses on the role of boards in strategic decision-making and organizational performance.

3. **Professor John Kay:** Professor Kay is an economist and author known for his research on corporate governance and finance. His book "The Kay Review of UK Equity Markets and Long-Term Decision Making" has been influential in shaping discussions on long-termism and shareholder value.

4. **Professor Lynn Stout:** Professor Stout, a legal scholar, has written extensively on corporate governance and the role of corporations in society. Her work challenges the traditional shareholder primacy model and advocates for a more inclusive and stakeholder-oriented approach to governance.

5. **Hampel Report (1998):** The Hampel Committee was constituted in UK in 1995. The task of this committee was to consolidate the recommendations of the Cadbury Report in 1992 (focusing on financial reporting) and the Greenbury Report in 1995 (focusing on directors' remuneration), and prepare a 'Combined Code' on corporate governance. The Code, published in 1998, was attached to the listing rules of the stock exchange with the requirement that in order to be listed, companies must either declare their adherence to its provisions or explain any deviation from them.

6. **Blue Ribbon Report (1999):** Blue Ribbon Committee was set up by the Securities and Exchange Commission (SEC), US, in 1998. In February 1999, the Committee published the Report on Improving the Effectiveness of Corporate Audit Committees (the Blue Ribbon Report). The recommendations of the Blue Ribbon Committee were adopted and declared to be mandatory by the NYSE, the American Stock Exchange (Amex), Nasdaq and the American Institute of Certified Public Accountants (AICPA). The recommendations are not mandatory for foreign issuers: these are subject to their own national laws.

7. **CalPERS' Global Governance Principles (1999):** With the goal of encouraging a continual debate on best governance practices globally, in 1997 CalPERS' Board adopted a set of Global Governance Principles. In late 1999, the CalPERS Investment Committee analyzed other newer global governance principles and with the goal of supporting a single set of global governance principles, the Investment Committee revised CalPERS' Global Governance Principles to parallel the International Corporate Governance Network's statement on Global Governance Principles. The International Corporate Governance Network (ICGN) was founded with the

objective to facilitate international dialogue and thereby helping companies to compete more effectively. The ICGN welcomed the OECD Principles as a remarkable convergence on corporate governance common ground among diverse interests, practices and cultures. While the ICGN considered the OECD Principles the necessary bedrock of good corporate governance, it held that amplifications were required to give them sufficient force.

8. **The European Corporate Governance Institute (ECGI) (2002):** The European Corporate Governance Institute (ECGI) was founded in 2002. It has been established to improve corporate governance through fostering independent scientific research and related activities. ECGI is founded on the ground that corporate governance is the basis of accountability in companies, institutions and enterprises, balancing corporate economic and social goals on the one hand with community and individual aspirations on the other. A proper governance framework is of fundamental importance in strengthening the performance of economies, in particular those in development and transition, and helping to discourage fraud and mismanagement. The ECGI produces high quality independent scientific research while remaining close to the concerns and interests of corporate, financial and public policy makers. It draws on the expertise of scholars from numerous countries and brings together a critical mass of expertise and interest to bear on this important subject. The ECGI intends to make a major contribution to the debate on the formulation of policy and development of best corporate governance practice, based on impartial and objective research and the collective expertise of its individual and institutional members.

9. **King Committee on Corporate Governance (2002):** The King Report on Corporate Governance for South Africa (the "King Report 2002") has been developed as an initiative of the Institute of Directors in Southern Africa. It represents a revision and update of the King Report first published in 1994, in an attempt to keep standards of corporate governance in South Africa in step with those in the rest of the world. All companies listed on the Johannesburg Stock Exchange have to comply with the provisions of the Report.

10. **ASX Corporate Governance Council Report (2003)**: On 15 August 2002: The ASX Corporate Governance Council was formed in Australia with the objective of developing and delivering an industry-wide, supportable and supported framework for corporate governance. In March 2003, the ASX Corporate Governance Council released "Principles of Good Corporate Governance and Best Practice Recommendations". Compliance with the recommendations was not mandatory, except for the recommendations dealing with Audit

Committees, but from 2004 listed entities are required to report in their annual report on whether they have complied during the year the subject of the report, or if not, the reasons for that.

11. **Higgs Report:** Review of the role and effectiveness of non-executive directors (2003) In April 2002 the Secretary of State (UK), Patricia Hewitt, and the Chancellor, Gordon Brown, appointed Derek Higgs to lead a short independent review of the role and effectiveness of non-executive directors. Derek Higgs published his report on 20th January 2003. The report reviewed the role and effectiveness of nonexecutive directors in the UK. The report includes: guidance for non-executive directors, guidance for chairmen and a proposal for a revised combined code. The Government warmly welcomed the recommendations of the Higgs Review.

12. **The Combined Code on Corporate Governance (2003):** This UK based code supersedes and replaces the Combined Code issued by the Hampel Committee on Corporate Governance in June 1998. It is derived from a review of the role and effectiveness of non-executive directors by Derek Higgs and a review of audit committees by a group led by Sir Robert Smith.

CORPORATE GOVERNANCE IN INDIA:

Corporate Governance is a phrase which implies transparency of management systems in business and industry, be it private sector or public sector - all of which are corporate entities. Corporate Governance, is a set of standards, which aims to improve the company's image, efficiency, effectiveness and social responsibilities. In the words of 'Naresh Chandra' Former Cabinet Secretary, "Maintaining governance standards requires accountability at all levels of management. Hence corporate conduct and culture, based on attributes of self-regulation and openness contribute most to the essence of corporate governance". India by implementation of various reforms and regulations to enhance transparency, accountability, and investor protection in corporate practices. The Securities and Exchange Board of India (SEBI) plays a crucial role in regulating and promoting good corporate governance practices in India. Additionally, India has adopted the Companies Act, 2013, which includes provisions related to corporate governance.

How corporate governance did not work in INDIA?

Corporate governance in India has faced challenges and instances where it did not work as intended. While there have been improvements in recent years, some key issues have hindered effective corporate governance in India. Several factors contribute to the challenges encountered by corporate governance in the country:

1. **Lack of regulatory enforcement:** In the past, there have been instances of weak enforcement of corporate governance regulations in India. This has allowed some companies to engage in unethical practices, such as financial mismanagement, insider trading, and non-disclosure of crucial information. Inadequate regulatory oversight has undermined the effectiveness of corporate governance mechanisms.

2. **Concentration of power:** Many Indian companies have a concentrated ownership structure, with a dominant promoter or family holding a significant stake. This concentration of power can lead to conflicts of interest, lack of independent decision-making, and insufficient checks and balances. It can also limit the influence of minority shareholders and weaken corporate governance practices.

3. **Inadequate board independence:** The independence of boards of directors is crucial for effective corporate governance. However, in some cases, board members may lack independence due to personal or professional relationships with the company's management or promoters. This can compromise their ability to act in the best interests of all stakeholders.

4. **Related party transactions:** Related party transactions, where a company engages in business dealings with entities connected to its management or promoters, have been a concern in India. These transactions can create conflicts of interest and raise questions about fairness and transparency. Inadequate disclosure and oversight of related party transactions have undermined corporate governance practices.

5. **Shareholder activism and minority rights:** Historically, shareholder activism and protection of minority shareholder rights have been relatively weak in India. This has limited the ability of minority shareholders to voice concerns, hold management accountable, and influence corporate decision-making. Strengthening shareholder rights is crucial for effective corporate governance.

It's important to note that while corporate governance in India has faced challenges, efforts have been made to address these issues. Regulatory reforms, such as the Companies Act of 2013 and the establishment of the Securities and Exchange Board of India (SEBI), have aimed to enhance corporate governance practices and improve transparency. Continued focus on regulatory enforcement, board independence, shareholder rights, and ethical business practices is essential for strengthening corporate governance in India.

Key Recommendations for Enhancing Corporate Governance in India:

Recognizing the significance of sound governance, regulatory bodies, industry experts, and corporate stakeholders can formulate a set of common recommendations or suggestions aimed at enhancing the governance frameworks of Indian companies. These recommendations address various facets of corporate conduct, governance structures, and stakeholder engagement. By exploring these commonly endorsed guidelines, one gains valuable insights into the concerted efforts to elevate corporate governance standards in India, ultimately contributing to the resilience and ethical functioning of the nation's businesses. Here can be some of the common suggestions:

1. **Strengthening Board Independence:** Experts emphasize the importance of having independent directors on boards who can provide unbiased oversight and challenge management decisions. They suggest enhancing the criteria for independence and ensuring that these directors have the necessary expertise and experience.

2. **Enhancing Transparency and Disclosure:** Transparency is crucial for effective corporate governance. Experts recommend improving the quality and timeliness of financial reporting, ensuring accurate and comprehensive disclosures, and providing clear explanations for business decisions. This helps build trust among stakeholders.

3. **Strengthening Shareholder Rights:** Experts suggest empowering shareholders by enhancing their rights and protections. This includes ensuring fair treatment of minority shareholders, facilitating shareholder activism, and enabling effective mechanisms for voting and participation in decision-making processes.

4. **Improving Board Effectiveness:** Experts emphasize the need for regular board evaluations to assess the performance of individual directors and the board as a whole. They also recommend enhancing the diversity of boards in terms of skills, experience, and gender representation to promote better decision-making.

5. **Enhancing Regulatory Framework:** Experts call for strengthening the regulatory framework governing corporate governance in India. This includes stricter enforcement of existing regulations, introducing new regulations where necessary, and ensuring effective oversight by regulatory bodies.

6. **Promoting Ethical Culture:** Experts stress the importance of fostering an ethical culture within organizations. This involves promoting integrity, accountability, and responsible business practices at all levels. Companies should establish robust codes of conduct and implement effective mechanisms for reporting and addressing unethical behaviour.

It is worth noting that these recommendations or suggestions are not exhaustive, and the specific advice may vary depending on the unique challenges faced by different companies and industries in India. Implementing these suggestions can help address corporate governance failures and promote a culture of transparency, accountability, and responsible business practices.

Insights from Indian Thought Leaders; Wisdom on Corporate Governance:

In order to provide smooth assistance and to concur the above situations there were various committees were been appointed and the reports provided by these committees were beneficial on the financial perspective. There were several committees that have been appointed to enhance corporate governance practices. Some notable committees include:

1. **Confederation of Indian Industry (CII):** In 1996, CII took a special initiative on Corporate Governance, the theme of such initiative was to develop and promote a code for Corporate Governance to be adopted and followed by Indian Companies, be it in the Private Sector or Public Sector, Banks or Financial Institutions, all of which are corporate entities. A National Task Force was set up with Mr. Rahul Bajaj, as the Chairman and including members from industry, the legal profession, media and academia. This Task Force presented the draft guidelines and Code for Corporate Governance in April 1997 at the National Conference and

Annual session of CII. After reviewing the various suggestions and the developments which have taken place in India and abroad, the Task Force finalized the Desirable Corporate Governance Code.

2. **N.R. Narayan Murthy Committee:** Thereafter, 'SEBI' constituted another committee called 'Narayan Murthy Committee' under the Chairmanship of N.R. Narayan Murthy comprising 23 persons, which included representatives from the stock exchanges, Chamber of Commerce, industry, investor associations and Professional bodies, for reviewing implementation of the corporate governance code by listed companies. Many of the recommendations made by such committee has been included in the revised Clause 49 of the Listing Agreement. The Narayan Murthy Committee attempted to promulgate an effective approach for successful corporate governance. The Committee submitted its final report on February 8, 2003.

The Committee observed: "Corporate governance is beyond the realm of law. It stems from the culture and mind-set of management, and cannot be regulated by legislation alone. Corporate governance deals with conducting the affairs of a company such that there is fairness to all stakeholders and that its actions benefit the greatest number of stakeholders. It is about openness, integrity and accountability. What legislation can and should do, is to lay down a common framework- the "form" to ensure standards. The 'substance' will ultimately determine the credibility and integrity of the process. Substance is linked to the mind-set and ethical standards of management."

3. **Kumar Managlam Birla Committee:** The SEBI appointed a Committee on Corporate Governance on May 7, 1999 under the chairmanship of Shri Kumar Manglam Birla, to promote and raise the standards of corporate governance mainly from the perspective of the investors and shareholders and to prepare a code to suit the Indian corporate environment. Such committee submitted its interim & final report in 1999/2000. The Committee made a number of recommendations towards corporate governance which include constitution of audit committee, composition of Board of Directors, role of independent directors, & remuneration standard and financial reporting etc. On the basis of such recommendations clause 49(pre-amended) of the listing agreement was issued by the SEBI.

Such clause dealt with a number of aspects, such as, constitution of Board of listed companies comprising executive, non-executive and independent directors, code of conduct for such Board of directors, constitution of audit committee, meetings of audit committee, powers and role of audit committee. Clause 49 of listing agreement also deals with unlisted subsidiary companies of holding companies and its management. Certain types of disclosures of corporate affairs, remuneration of directors, management discussion and analysis report, information to shareholders, CEO/CFO certification, report on corporate governance in annual reports of listed companies, compliance certificate etc.

4. **Naresh Chandra Committee:** The next development is constitution of a committee by 'Department of Company Affairs' (DCA), headed by Shri Naresh Chandra, called 'Naresh Chandra Committee' on August 21,2002, to examine various issues of corporate governance relating to statutory auditor- company relationship, rotation of statutory audit firm or partners, appointment of auditors and determination of audit fees, independence of auditing functions, certification of accounts and financial statements by management and directors role of independent directors etc. Many recommendations of the report were incorporated in the Companies (Amendment) Bill 2003, which is currently being reviewed.

5. **Ministry of Company Affairs:** The Ministry of Company Affairs has also amended Companies Act at short intervals for bringing improvements in the corporations' functioning. Various provisions concerning corporate governance has been inserted in the Companies Act, 1956 through Companies (Amendment) Act, 2000, which came into force w.e.f. 13/12/2000. The Amending Act of 2000, increased the duties and responsibilities of the directors in the companies as a step to improve the corporate governance. Subsequent to the passing of the Companies (Amendment) Act, 2000, Companies (Amendment) Act, 2002 and Companies (Second Amendment) Act, 2002 were passed. These Acts too have dealt with some aspects of corporate governance.

   Companies (Amendment) Act, 2000, brought the emerging concepts of the audit committee and it's role (sec.292A), 'Directors Responsibility Statement' in the directors report [sec217(2AA)], limitations in directorships in companies (Sec 274 & Sec 275), small shareholders to get representation through a director (Sec.252), additional disqualifications for directors, introduction of postal ballot for transacting certain items of business in the general meeting and providing for higher penalties (tenfold increase) for offences provided in various sections of the Companies act, 1956 etc.

6. **SEBI Perspective of Corporate Governance:** SEBI vide its circular no. SEBI/CFD/DIL/CG/1/2004/ 12/10, Dated October 28, 2004 has revised the existing clause 49, related to corporate governance. The above circular has also amended many of the exiting provisions of Clause 49 of the listing agreementand has introduced a number of new requirements. The major changes in the new clause 49 include amendments/additions to provisions relating to definition of independent directors, strengthening the responsibilities of audit committees, improving quality of financial disclosures, including those related to related party transactions and proceeds from public/rights/preferential issues, requiring Boards to adopt formal code of conduct and requiring CEO/CFO certification of financial statements, etc. Such a step, if properly implemented, will go a long way towards ensuring good governance practices in Indian Corporate Sector. The implementation of the new Clause 49 covers the following entities:

(a) All entities seeking listing for the first time, at the time of seeking in principle approval for such listing.

(b) All companies which were required to comply with the erstwhile Clause 49 i.e. all listed companies having a paid-up share capital of Rs.3 crores & above or net worth of Rs.25 crores or more at any time in the history of the company.

The amended clause was directed to be complied with by all the listed companies, by 1st April, 2005. However, pursuant to the fact that a large number of companies were not in the state of preparedness to fully comply with the requirements of the amended clause 49 of the listing agreement, the SEBI, by another circular no. SEBI/CFD/DIL/CG/1/2005/29 dated 29th March, 2005 extended the date for ensuring compliance with the amended clause 49 upto 31st December, 2005. So, now the revised clause 49 of the Listing Agreement is to be complied w.e.f. December 31, 2005. However, the circular dated 29/3/2005 only implies that SEBI will not take any punitive action against the companies if they are not able to comply with the amended Clause 49. Conversely, those companies which wish to comply with the amended Clause 49 can do so by the date mentioned therein.

7. **National Foundation for Corporate Governance:** Recently, the Ministry of Company Affairs has decided to have an umbrella agency of corporate governance which will set non-

binding standards in line with the principles developed by the Organization for Economic Co-operation and Development (OECD). This is to advocate the 'spirit' of governance to the industry, which sometime gets lost as companies follow the market regulator's norms by the letter. To achieve this objective, The National Foundation for Corporate Governance (NFCG) has been set up by the Ministry of Company Affairs, Government of India, in partnership with Confederation of Indian Industry (CII), Institute of Company Secretaries of India (ICSI) and Institute of Chartered Accountants of India (ICAI) with the goal of promoting good corporate governance practices in India. NFCG will act as a nodal agency and will initially evolve corporate governance principles in three areas — institutional investors, independent directors and auditing. The government is now also working on setting up national centers for corporate governance at various Indian Institutes of Management.

8. **The Institute of Chartered Accountants of India (ICAI):** In the developed nations, high quality accounting standards reduce uncertainty and increase overall efficiency and investor confidence. The Accounting Standards issued by The Institute of Chartered Accountants of India (ICAI) serve this objective. The ICAI has issued 29 Accounting Standards covering, interalia, disclosure of accounting policies, valuation of inventories, amalgamation, interim financial reporting, financial reporting of interest in joint venture, related party disclosures etc. Such accounting standards are based on the generally accepted accounting assumptions of going concern, consistency and accrual basis.

9. **The Institute Of Company Secretaries Of India (ICSI):** The vision of ICSI is to be a global leader in development of professionals specializing in Corporate Governance. For promoting good corporate governance the mission of ICSI is to continuously develop high calibre professional ensuring good corporate governance and effective management and to carry out proactive research and development activities for protection of interest of all stakeholders thus contributing to public good. ICSI defines Corporate Governance as, "the application of best management practices, compliance of law in true letter and spirit and adherence to ethical standards for effective management and distribution of wealth and discharge of social responsibility, for sustainable development of all stakeholders".

The ICSI conducts various programs throughout India covering several topics like corporate governance, company law, secretarial audit and compliances, securities laws and capital markets, financial markets etc, for development of corporate governance practices in

Indian Corporate Sector. To achieve excellence in various secretarial practices for good corporate governance ICSI has issued following Secretarial standards:

1. SS-1 Secretarial Standard on Meetings of the Board of Directors
2. SS-2 Secretarial Standard on General Meetings
3. SS-3 Secretarial Standard on Dividends

Further, to guide its members and others to comply with the Secretarial Standards and other regulations, ICSI has issued Guidance Notes on the following topics:

(a) Meetings of the Board of Directors
(b) General Meetings
(c) Passing of resolution by Postal ballot
(d) Dividend
(e) Buy Back of securities
(f) Board’s Report

The Institute regularly brings out Publications covering various aspects of Company Law and role of Company Secretary. The institute has also taken initiatives to awaken Indian Corporate Sector in Corporate Governance. For this purpose, the Institute since 2001, is conferring ‘ICSI National Award for Excellence in Corporate Governance’ annually to the participating companies in order to promote corporate governance culture in Indian corporate sector

10. **Ratan Tata:** Ratan Tata, the former chairman of Tata Sons, has emphasized the need for corporate governance practices that prioritize the interests of all stakeholders, including employees, customers, and the community. He advocates for a balanced approach that goes beyond financial performance and considers social and environmental responsibilities.

11. **Adi Godrej:** Adi Godrej, the chairman of the Godrej Group, has highlighted the significance of independent directors in corporate governance. He believes that independent directors play a crucial role in ensuring transparency, providing unbiased guidance, and safeguarding the interests of minority shareholders.

12. **Deepak Parekh:** Deepak Parekh, the chairman of HDFC Ltd., has stressed the importance of effective board governance. He emphasizes the need for a diverse and independent board, with

directors who possess the necessary skills and expertise to provide strategic guidance and oversight.

These committees have played a crucial role in shaping corporate governance practices in India. Their reports have provided valuable guidance and recommendations to companies, regulators, and stakeholder. Strong corporate governance practices can lead to improved investor confidence, better access to capital, and reduced risk perception. Companies with robust corporate governance frameworks are often seen as more trustworthy and reliable, which can positively impact their financial performance and valuation. However, it's important to note that the impact of corporate governance on financial performance can vary across companies and industries. While good governance practices can contribute to long-term sustainability and value creation, other factors such as market conditions, industry dynamics, and company-specific factors also play a significant role in determining financial outcomes.

Impactful Corporate Governance Case Studies: Learning from Notable Experiences:

There have been several prominent instances that underscore the breakdown of corporate governance. Here are a few noteworthy examples:

1. **Enron Scandal (2001):** The Enron scandal is one of the most infamous cases of corporate governance failure. Enron, an American energy company, used accounting loopholes and special purpose entities to hide debt and inflate profits. The scandal resulted in the company's bankruptcy and led to significant losses for investors and employees.

2. **WorldCom Scandal (2002):** Securities and Exchange Commission v. WorldCom Inc., Civil Action No. 02-CV-4963 (SDNY) (JSR); WorldCom Inc., a telecommunications company, engaged in accounting fraud by inflating its assets and understating expenses. The scandal eventually led to the company's bankruptcy and exposed serious deficiencies in its corporate governance practices.

3. **Satyam Scandal (2009):** Satyam Computer Services, an Indian IT company, was involved in a massive accounting fraud orchestrated by its founder and chairman, Ramalinga Raju. The scandal revealed falsification of financial statements, inflated revenues, and fictitious assets, leading to a loss of investor confidence and a significant decline in the company's value.

4. **Volkswagen Emissions Scandal (2015):** Volkswagen, a leading automobile manufacturer, was found to have installed software in its vehicles to manipulate emissions tests. This scandal highlighted a failure of corporate governance in terms of ethical conduct, transparency, and accountability.

These cases serve as reminders of the importance of robust corporate governance practices in maintaining trust, protecting stakeholders' interests, and ensuring the long-term sustainability of organizations.

CONCLUSION AND FUTURE OUTLOOK

The Culmination and Anticipated Horizons: Unveiling Insights and Tomorrow's Prospects can be stated as under:

Emphasizing the imperative for effective Corporate Governance, it is essential to recognize that its goal extends beyond safeguarding to elevating shareholder value, while considering the interests of all stakeholders. Corporate Governance is aptly described as a philosophy that permeates every aspect of a corporation's operations and its relationship with stakeholders. Rather than being an ultimate objective, it serves as a mechanism to instill and foster corporate democracy across all tiers of the corporate entity.

Given this, corporate governance is now being increasingly recognized as an important aspect of sustainable economic growth. Strong corporate governance is critical for promoting growth, improving access to low-cost capital, ensuring appropriate risk management, and increasing overall productivity and competitiveness of the economy. In a world of highly integrated capital markets, it becomes imperative for individual countries to take constant initiatives in this regard and benchmark their corporate governance practices to the best corporate governance practices. Global best practices because of their characteristics like, adequate disclosures, focused approach, compliance with the laws etc. become *sine qua non* (i.e. absolutely necessity) in the corporates for healthy growth of capital markets. Such practices increases the confidence levels of investors and in turn help corporates to access capital markets for their financial needs.

The Indian economy is undergoing a significant transformation, marked by the second phase of liberalization in the domestic market and increased globalization. While these reforms have granted greater autonomy to management, they have concurrently imposed heightened responsibilities. The current landscape necessitates a dedicated and ongoing commitment to 'Excellence in Corporate Governance,' emphasizing the continual enhancement and adoption of ethical business practices across all organizational levels.

According to Mr. Vinod Dhall, Former Secretary, Department of Company Affairs, Ministry of Finance- "The importance of maintaining high ethical standards by the corporate sector for ensuring its long term sustainable growth has been universally accepted. It is now a fact that a majority of investors factor in corporate governance when making investment decisions. This is a powerful argument for companies to seek excellence in corporate governance. It is in this context that the development of best practices of corporate governance and rating of companies is increasingly becoming very relevant".

Reflecting on the progress made in India, there has been a notable emphasis on promoting sound corporate governance practices within the corporate sector. This includes the integration of various rules and regulations into the legal framework governing the corporate sector, alongside the organization of seminars, conferences, and meetings by different forums. Numerous articles have also been published, collectively contributing to the dissemination of knowledge on the benefits of corporate governance. However, despite these commendable efforts aimed at advocating good governance practices, there remains a discernible gap between theory and practice. Many companies, while formally adhering to the stipulated rules, often fall short in translating these regulations into meaningful, spirit-driven actions. The current imperative is to undertake unilateral confidence-building measures, demonstrating a commitment to corporate governance beyond mere legislative compliance. These measures should not only enhance investor confidence but also embody courtesy, foster dedication to work and the organization, promote teamwork devoid of self-ego, and cultivate various other qualities essential for effective corporate governance.

In this connection it has been rightly said by Mr. G.N. Bajpai, Former Chairman, Securities & Exchange Board of India, that "Corporate Governance represents the moral framework, the ethical framework and the value framework under which an enterprise takes decisions. Therefore, it is necessary that the companies are not judged merely on the form part of corporate governance but also on the substance part of corporate governance. Corporates are required to be assessed on the basis of their ability of wealth creation, wealth management and wealth sharing".

To make the mission of corporate governance meaningful the Board of Directors is desired to adopt a radical change in their perceptions. Company Directors in their new role as Corporate Governors have to raise themselves above the personal urge and aptitude. They have to promote co-ordinations among various components of the organization for the long term survival, growth and prosperity of such organization. It has been rightly said that unless an atmosphere is generated to make the governing team enthusiastic and make them aspire for excellence, merely trying to ensure efficient corporate governance by amending the Companies Act or enacting clauses like Clause 49, revising and redevising it are all going to be hallow and ineffective exercise.

To sum up, the progress made so far, it can be concluded that the corporate sector has reacted in a positive and pro-active manner to the new norms of governance. However, Indian companies' pursuit towards achieving good governance is an on going process, which demands continuous adoption of best practices for ensuring truth, transparency, accountability and responsibility in all the dealings with the employees, shareholders, consumers and the community at large. The philosophy of various Indian Companies on Corporate Governance is built on a rich legacy of fair and transparent governance and disclosure practices. At the highest level, the companies should continuously endeavour to improve upon these aspects on an ongoing basis and adopt innovative approaches for leveraging resources, converting opportunities into achievements through proper empowerment and motivation.

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Wealth Creation Using Mutual Funds

Gnaneshwar Umapathy

ABSTRACT

Wealth has the ability to control human's emotions. A person's happiness will be fulfilled withexcess wealth. For building excess wealth a person must be prepared to invest for a very long time. With wealth creation, we will be gaining financial security, will be having the ability to create jobs and improve our quality of life. Investing in the right financial product like mutualfunds will pave us the way for financial freedom. When it comes to investment, two things aremandatory one is consistency and the other one is time. With these two factors we will be ableto compound our wealth. This article covers about the ideas for wealth creation using mutual funds, the ideas have been established with statistical and mathematical analysis

Keywords: Index funds, Standard Deviation, Sharpe Ratio, Annual Step-up

INTRODUCTION

Mutual fund is the most important investment vehicle across the globe. With a common objective kept in mind between a mutual fund manager/Asset management company and an investor, investments will be made across various money instruments like equities, bonds andother related securities.

Usually, a fund manager from an asset management company will manage the portfolio of mutual fund profiles. The one very important rule is to assist the investors in building an incomestream or increasing their wealth by using the opportunities available in the mutual fund market. Mutual Fund is the key player in the capital market of our economy being a solid market stabilizer by large foreign investor inflows and outflows. It has also been a saviour in terms of creating good amount of job opportunities for many employees and crucial service providers.

There are lot of mutual fund schemes available. Every scheme has an investment objective. The reason for many schemes is due to many investors with different investment thoughts andgoals. With the help of New Fund Offer (NFO), a new scheme comes up for an investment option. An investor makes his or her investments in a particular scheme with the help of Units.After an investor invests, the money will be converted to scheme's units.

A mutual fund investment portfolio is considered to be profitable if the portfolio's interest income, valuation gains, dividend income and realized capital gains are on the positivemonetary side. The mutual fund's proportion size is calculated using Asset Under Management(AUM). In simple terms it means money collected and pooled from various investors

The mutual fund industry has a tremendously grown over a long period of time. The Asset under Management (AUM) of Indian Mutual Fund industry was Rs.**5,87,000** Cr on 31st March2012. Now, the value is **Rs.47,80,422** Cr as on 31st October 2023. The growth percentage is around **714%**

INDEX FUND POWER

Index Fund is a Passive fund investment. In this, the benchmark index is replicated. The proportion of shares that are bought for an investment are same as the top benchmark indices proportion.

Going back to the history, the first Index fund was launched on the year 1976 by Mr. John Bogle, founder of the Vanguard Group. In the initial years the fund was on the inactive side will less evaluation value, but on the year 1990 the Vanguard S&P 500 Index Fund touched 1-billion-dollar mark.

Index Fund investment is always a people's investment. Passive investors can build an effective retirement portfolio without complex algorithmic trading techniques. Usually, a Low-cost Index scheme option is a natural choice for many investors

Table 1: Indian Market's Top Indices

Indian Indices	31st October 2022	31st October 2023	Variation %
Nifty 50	18012.2	19079.6	5.925
Sensex	60746.6	63874.9	5.149
Nifty Midcap 50	8690.35	11068.85	27.369
Nifty Smallcap 100	9686.10	12649.90	30.598
BSE Midcap	25359.02	31245.1	23.210
BSE Smallcap	28817.59	36919.1	28.113

Source: NSE, BSE

FLEXI CAP FUND

In Flexi cap fund, the investments can be made in different schemes and instruments. It is a very open scheme for many moderate appetite investors.

LARGE CAP FUND

An open equity scheme which mostly, invests in large cap stocks. Large cap stocks include first100 companies which are ranked based on their market capitalization. Using this investment, there are records of good wealth generation over a period of time. A person's capital would appreciate if he or she is ready to provide the time, in addition to this people should also havethe right risk appetite to understand the market conditions during stock volatility.

The investment should be in equity and equity related instruments of large-cap companies which must account to 80 percentage of the total assets according to the SEBI rules.

EVALUATING RATIOS AND FINANCIAL PARAMETERS

There are numerous numbers of mutual funds available in the Indian Financial markets. Many schemes are present to give us too much of information which will consume a lot of our time to fix an investment decision. Every Mutual Fund has some degree of risk associated to it. Using key risk parameters like the financial ratios and compounded annual returns we can assess a fund's future performance and current risk. When Risk is measurable, we can go for more firm investment decisions, based on comparing various measures

Variation in the returns is used as a measure of risk.

i. STANDARD DEVIATION

Standard Deviation is one of key statistical concepts used in finance for measuring the fluctuation in periodic returns of a mutual fund or a relevant financial product with respectto its own average return. Measures the total risk in an investment portfolio. Using this measure, we won't be able to predict future performance. High standard deviation means that the particular fund is having big volatility in returns and higher risk has been associatedwith the fund. Comparatively, choosing a low standard deviation mutual fund will be apt.

ii. ALPHA (α)

With this parameter we can measure the risk adjusted return in comparison with the overallmarket average return. In short, it is the fund manager's ability to beat the market

$$Alpha\ (\alpha) = Actual\ returns\ \% - Expected\ returns\ \%$$

Choosing a mutual fund with higher Alpha is recommended.

iii. BETA (β)

Beta is really instrumental in measuring the fluctuation of a mutual fund or financial security with respective to dynamic market movements. Measures relative volatility with respective to the bench-mark index

$$Beta\ (\beta) = \frac{Portfolio's\ return\ \% - Risk\ free\ return\ \%}{Benchmarch\ Index\ \% - Risk\ free\ return\ \%}$$

Less risk-taking investors or conservative investors can consider a low beta portfolio foravoiding high volatility

iv. SHARPE RATIO

Sharpe ratio is a very common way to measure risk-adjusted returns. It considers systematicand non-systematic risks.

$$Sharpe\ Ratio = \frac{Portfolio's\ return\ \% - Risk\ Free\ Return\ \%}{Standard\ Deviation}$$

The numerator is also considered as the excess return %

Higher Sharpe ratio indicates that an investor is receiving a higher return for the amount ofrisk taken

v. TREYNOR RATIO

Precisely this ratio helps in calculating the amount of risk premium gained per unit riskIn this ratio only systematic risk is considered.

$$Treynor\ Ratio = \frac{Portfolio's\ return\ \% - Risk\ Free\ return\ \%}{\beta}$$

Risk free return is the return we get when we invest in government securities like bonds orbills.

Treasury Bill index will be a strong measure to calculate risk free return

Higher Treynor Ratio will be correct for choosing a mutual fund

i. SORTINO RATIO

This parameter helps in overcoming the limitation of Sharpe ratio by correction of its standard deviation. In Sortino ratio standard deviation of negative returns will be considered

$$Sortino\ Ratio = \frac{Portfolio's\ return\ \% - Risk\ Free\ Return\ \%}{Standard\ deviation\ of\ negative\ returns}$$

Standard deviation of negative returns is also called as the down-side standard deviation
Higher Sortino ratio indicates that there is a lesser chance in the down-side deviation

ii. EXPENSE RATIO

Asset management companies charge a management fee for managing the mutual fund Portfolio. This fee will be essential as cover the expenses that are caused by the mutualfund like the agent fees, registrar's fee, auditor's auditing fees and many more.
Comparatively, low expense ratio should be always considered as the management fees willbe less as well

$$Expense\ Ratio = \frac{Fund\ Management\ Fees}{Total\ Investment\ in\ the\ Fund}$$

OVERVIEW OF MUTUAL FUNDS AND ITS TERMS

Starting a mutual fund investment demands the opening of a Demat account. A Demat accounthelps an investor hold their investments in terms of proper digital record. Usually mutual fundsare held in terms of units. KYC documentation must be done in the first stage to open our account. The Demat account facilitation will be done with the help of the services provided bythe National Securities Depository Ltd and Central Depository Services Ltd.

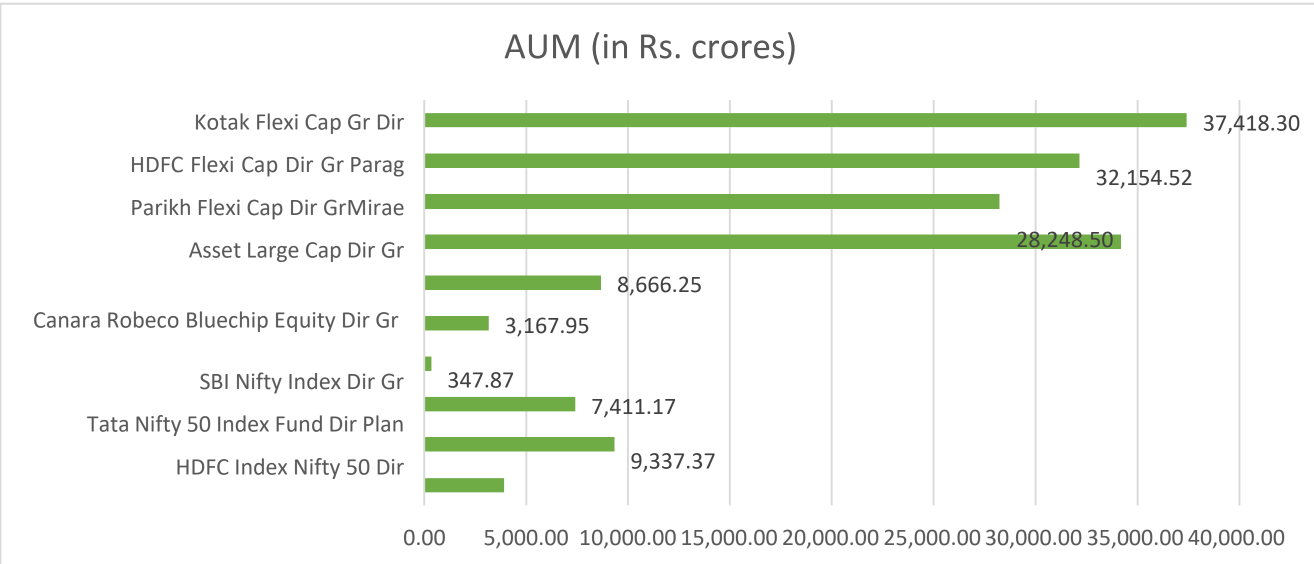
When it comes to mutual fund investment, two very important criteria must be noted. One is the Plan of the Purchase and the other one is the way of transaction.

In terms of Plan, there are two types of Plans that are Direct and Regular Plan. In direct plan, investors invest directly in a mutual fund by buying their units. It is called the direct plan because there is no distributor involved in the transaction. On the contrary, in a regular plan aninvestor will invest via a distributor/advisor. In a regular plan as a distributor is involved the expense ratio of the mutual fund would be higher compared to the expense ratio of a direct planmutual fund.

In transaction types we have three important sub-divisions that are SIP, SWP and STP.

In Systematic investment plan (SIP), an investor regularly invests in a regular period of time, this will help in regulating the volatility of the market, an investor has good possibilities to capture the peak and make profits in a long term. In Systematic Withdrawal Plan (SWP), an investor can repurchase a constant value of units over a time period. A constant amount will bepaid to the investor at the pre-specified frequency. This plan is helpful in minimising the risk of redemption, providing liquidity support at the right time. In Systematic Transfer Plan (STP)the amount withdraw will be re-invested in a different scheme of the same mutual fund. A Switch occurs between two schemes. When it is switched to the second scheme, SIP transactionwill become active. This type will be helping in balancing the portfolio and transferring the profits of the scheme during required time.

Figure 1: AUM of the considered mutual funds



Source : Groww

Table 2: Ratio Analysis of the Mutual Funds

S.No	Name of the MutualFund	Alpha	Sharpe Ratio	Beta	S.D	Expense Ratio	Sortino Ratio
1	ICICI Pru Nifty 50 Index FundDir	-0.83	0.65	1	22.21	0.17	0.79

2	UTI Nifty50 Index Dir Gr	-0.87	0.65	1.01	22.3	0.2	0.79
3	HDFC Index Nifty50 Dir	-0.96	0.65	1.01	22.28	0.2	0.78
4	Tata Nifty50 Index	-0.7	0.66	0.98	21.82	0.16	0.8

	Fund DirPlan						
5	SBI NiftyIndex DirGr	-1.11	0.64	1.01	22.38	0.18	0.77
6	Canara Robeco Bluechip Equity DirGr	2.66	0.82	0.86	19.51	0.42	0.97
7	Mirae Asset Large CapDir Gr	-0.55	0.66	0.96	21.42	0.53	0.74
8	Parag Parikh Flexi CapDir Gr	6.89	1.02	0.78	19.38	0.76	1.09
9	HDFC Flexi CapDir Gr	1.62	0.77	1.04	24.21	1.01	0.92
10	Kotak FlexiCap Gr Dir	-2.31	0.63	0.94	21.46	0.67	0.65

Source: Groww. *This platform is a SEBI registered trading platform; The ratios can slightly differ with different pre-defined values.

SHORTLISTED MUTUAL FUNDS BASED ON RATIOS

a) TATA Nifty 50 Index Fund Direct Growth

This fund's AUM is very small compared to other funds. The date of fund's allotmentwas on February 25 2003. The current NAV is Rs.**115.9874.** This fund is only holdingon to Large Cap funds. The Top three sectors of this fund are financial services (36.75 %), Information Technology (14.68%) and Oil Gas (12.16%). Its Benchmark is Nifty 50 TRI

b) Canara Robeco Bluechip Equity Direct Growth

The date of fund's allotment was on August 20 2010.The current NAV is Rs.**41.10.** ThisFund hold 93.38 % of large cap stocks and 6.62 % of mid cap stocks. This fund has beaten its benchmark in a period of 5 years.

c) Parag Parikh Flexi Cap Direct Growth

The date of fund's allotment was on May 24 2013. The fund's benchmark index will be NIFTY 500 TRI. The current NAV is Rs.**52.5308.** The fund has invested its AUM in different securities like core equity(68.15%), arbitrage, certificate of deposit, commercial paper and Overseas securities (16.35%)

CONCLUSION

Wealth creation is one of most important financial aspects of our lives. Usually, wealth in theend will be useful for fulfilling our dreams or for our close relations. Consistently saving money for a very long period of time help us accumulate impeccable monetary wealth. Time is a very important factor in this process. As you see the difference created with the increase in the amount of time. Annual Step-up percentage is mandatory because of inflation. Inflation has the ability to consume our money in regular period of time, to beat the inflation percentage we must be investing consistently.

For short term profits, we can do intraday trading, futures and options, derivatives and many more. Without getting into the complexity of big algorithms, using our precious time and investing habits we can be able to make huge profits in our lives.

Investment will give you the right financial advantage, so make use of your time and start early.

Table 3: Wealth Compounding Values

Investing Amount per month	Annual Stepup %	Average Annual Growth rate	10-yearperiod	15-year period	20-yearperiod
Rs.2000	10%	12%	Investment:Rs. 3,82,497 Total Value: Rs.6,88,270 Return: **Rs.3,05,773**	Investment:Rs. 7,62,541 Total Value: Rs.17,42,254 Return: **Rs.9,79,713**	Investment: Rs. 13,74,610 Total Value: Rs.39,22,875 Return: **Rs.25,48,265**
Rs.3000	10%	12%	Investment:Rs. 5,73,754 Total Value: Rs.10,32,413 Return: **Rs.4,58,659**	Investment: Rs.11,43,834 Total Value: Rs.26,13,415 Return: **Rs.14,69,581**	Investment: Rs.20,61,965 Total Value: Rs.58,84,411 Return: **Rs.38,22,446**

Rs.5000	10%	12%	Investment :Rs. 9,56,246 Total Value: Rs.17,20,675 Return: **Rs.7,64,429**	Investment : Rs. 19,06,356 Total Value: Rs.43,55,635 Return: **Rs.24,49,279**	Investment : Rs. 34,36,521 Total Value: Rs.98,07,179 Return: **Rs.63,70,658**

Source: SEBI Calculator

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