

Indices- Global Trends and Advantages/Disadvantages of Trading in Index Futures vs ETFs

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Abstract

Indices have been a consequence and incident of human and market sentiments. The stakeholders pertaining to the markets have their way of influencing the buying and selling decisions of individuals in general, also called the traders. The traders' community consists of two types of personas: Active and the Passive traders. This paper is a reference for the individuals who have a perfect understanding of the tools required as the active traders and as a guide for the people whose major buying or selling decision is dependent on the active trader's prediction: the passive ones. Triggering of major events and policy decisions lead to changes in markets and how technology, social media and current pandemic is facilitating these changes is a major cause. This paper will highlight major global trends with regards to Indices and list the advantages and disadvantages in trading in Index futures and ETFs that can become a handbook for future traders leading to a smooth transition from passive to active traders. The second part includes the influence of social media and current Covid19 situation trends in the market. The final phase describes the analysis done by a research paper titled- "Equity ETFs versus Index Futures: A Comparison for Fully Funded Investors" by Ananth Madhavan, Ursula Marchioni, Wei Li, and Daphne Yan Du [1] and the current work will leverage the work given in the mentioned paper.

Keywords: Index futures, ETFs, trends, Trading, Social Media, Measures

Introduction

The Union Budget 2020, the Govt. of India proposed to expand by floating a new debt-ETF consisting primarily of Govt. securities. This will pave way for retail investors the access to Govt. securities as much as giving an attractive investment for pension funds and long-term investors. The question that is triggered here is whether investment in ETF lead to better profits or not? Most of the literature is available in best readable format in the internet. Internet has been a repository to major topics but choosing the right source helps with the best reliable content.

Global Trends

There are majorly eight trends that affect the markets:

Social Media and Technological disruption:

Since the onset of Trump's tenure in the USA, there have been major changes in the market indices sharpening the trend line, reaching peaks for some time, and then dropping sharply. Speculations say that the movers earn at the backend as it causes a change for a small span of time which helps with the earnings. The market elements have changed over time. Having Forex and other market indices in place and elements like Bitcoins with the overall inclusion of block chain has caused major disruption in the way markets are moving.

Government and governing institutions:

Governments have a larger influence over free markets of their respective countries. The fiscal and monetary policies drafted by the central institutions like RBI in India have an amplified impact on the country. These institutions determine the increasing and decreasing factors like the interest rates, inflation rates, repo rates which can either pace up or pace down the economy and can mitigate the unemployment problem in the country and finally stabilize the prices for the market.

Policy amendments and budgets:

Major policy decisions by the governing institutions lead to a cultural, global and an unexpected change in the market and workplace. These change the organizational culture leading to major structural changes within an organization. The Companies Act 2013 took a stance for women to be on board of the companies which again lead to major structural changes in the organizations. Budgets have two effects: one before the announcement (expectation) and other is post- budget repercussions. Deviation from the speculated trend leads to changes in the sentiments of the market causing changes in the indices.

Speculation and Expectation:

These two elements work in integration. All major stakeholders: Consumers, investors and politicians hold different views about the economy and the future. The financial and trading tools help to reason out the speculations and expectations and eventually help in predicting the trend in the market.

Supply and Demand:

The supply and demand for products, services, currencies, other investments, machineries, technology, automobiles, aviation, and fuel creates push-pull dynamic in prices and rates which keep changing as the supply or demand changes. If the volume shrinks, the prices inflate and if the volume is surplus, the prices reduce. (Price elasticity)

International transactions:

Imports and exports are pivotal aspects of international transactions which direct the changes in balance of payments (deficits) and have forex implications. Usually imports and exports are affected by the demand and supply fluctuations with the changes in the global value chain. International trade policies, inter-continental taxation laws and commodity flux causes sentimental biases to trade in the markets. It has been noticed that higher interest rates and taxes usually lead to a contraction and a fall in the market prices and in the short term can cause major fluctuations in prices.

Global and financial crisis, disasters, epidemic and pandemic:

The financial crisis of 2008 saw a major crash in exchange markets of the world which was a domino effect of internal failures of major financial institutions loans, and insurances. Post the crisis, the market took time to revive as the period has seen a major layoff of human capital and intellectual property. The recent outbreak of Coronavirus pandemic in Wuhan, caused a domino effect in trade, import, export has caused a scare of affecting the a global economic powers reboot (China, Japan, South Korea in the Asian continent and few countries in the West as well), has seen a rapid fluctuation in the markets. A similar effect can be seen when a disaster or an epidemic is hit a city or a state or a country. (Amazon and Australian fires). The current situation of COVID19 is a major stimulus to cause disruption in the markets. Wars have a significant impact on the markets. Best instances from the history will be the Gulf War, Afghan War, Syrian-Palestine-Iran Wars etc.

Data localization, privacy, and sovereignty:

"Data is the new oil.", is a statement that resonates with the evolving technology. Though technology has been mentioned in point (i), 'data' alone is a reason of concern and revenue in the world of capitalism and change. The security of the same has led to major policy changes in various countries. Example: GDPR in England.

All the above factors cause effects which are integrated and have been described above: the international effect, the participant effect, the supply and demand effect, speculation and expectation effect, socio-economic effect, technological effect, the unexpected effect (caused due to disasters, epidemic and pandemic) and the burst effect (inclusive of the bubble burst of the financial crisis of 2008 etc.).

Research Methodology

The research methodology used here is a qualitative and descriptive one. This paper is a consequence of data, theories, references, and personal insights because of

rigorous reading and understanding the perceptions of economists and finance personnel. It has kept in loop the growing trends within the markets and challenge the actual trend in the market whether is it due to the investors, traders or the movers or due to mere sentiments caused by social media or technology effect.

Need of Study

With the growing macro-economic changes in the world: trade wars, policy changes, critical decisions, disasters (PESTEL aspects), it is need of the hour to understand where to invest and when to invest. Ergo, understanding of the market is of utmost importance and research is the only constant that supports the changes in the theories. Individuals don't usually understand the effect of how small statements posted on the social media platforms can cause "market disruption".

Theoretical analysis of Future Index and ETFs

Future Index [3]

A financial trader can buy or sell a financial index in the current date to be settled at a future date through futures contracts: Index futures. These are legally binding agreements between buyer and seller. Most prominently used to hedge equity positions against losses. Portfolio managers use these indices to hedge the respective equity positions. Speculators use indices to predict the market's direction. Index futures enhance the power of the traders and increase their ability to commit to deliver cash value on the undelaying index in the specified date. Index futures are derived from an underlying asset- the index and used to track the price of the asset (or a group of assets). These are used to exchange various instruments: equities, commodities and currencies and determine characteristics like: appreciation or depreciation of the index.

Future contracts require the buyer to maintain a fraction of the contract amount in their account called initial margin rather than the entire value. The prices fluctuate predominantly throughout the lifespan of the contract. It is expected that readers keep a required balance in their accounts to hold for the potential losses which is also called maintenance margin. When the value of the trade climbs before its expiration, a broker can demand surplus funds to be deposited to top-off the value of the account known as margin call.

Profits and Loss from Index Futures

The holder agrees to purchase an index at a price on a specific future date which is typically settled quarterly and there are several annual contracts as well. Profit is made

when on expiry, the price of the index is higher than the agreed-upon price in the contract. The seller also called as future writer, has suffered a loss. If the opposite is true, the buyer suffers a loss, and the seller makes a profit. Profits are determined by the difference between the entry and exit prices of the contract. In any speculative trade, there are risks that the market could move against the position. The trading account in any situation is expected to keep funds or margin and could have a margin call demand to reduce risk of further losses. Profits and losses are a consequence of the factors that determine the trend in the market.

Types of Index Futures [3]

Most popular index futures are based on equities and each product may use a different multiple for determining the price of the futures contract. The E-mini S&P 500 futures contract has a value of 50 times the value of the index. Index futures are available for foreign markets including the German, Frankfurt Exchange traded (DAX)—which is like the Dow Jones—the SMI index in Europe, and the Hang Seng Index (HSI) in Hong Kong.

Exchange-traded fund (ETF) [2]

It usually involves a collection or group of marketable securities (or stocks) that usually tracks an underlying index. The privilege is that an ETF leads to investment in any number of industry sectors to strategize the act (portfolio diversification: stocks, commodities, bonds, holdings etc.). Parallelism can be drawn with mutual funds with difference being they are listed on exchanges and trade like an ordinary stock.

A well-known ETF is SPDR S&P 500. An ETF proposes low expense ratios and lesser broker commissions that buying stocks individually (bundling).

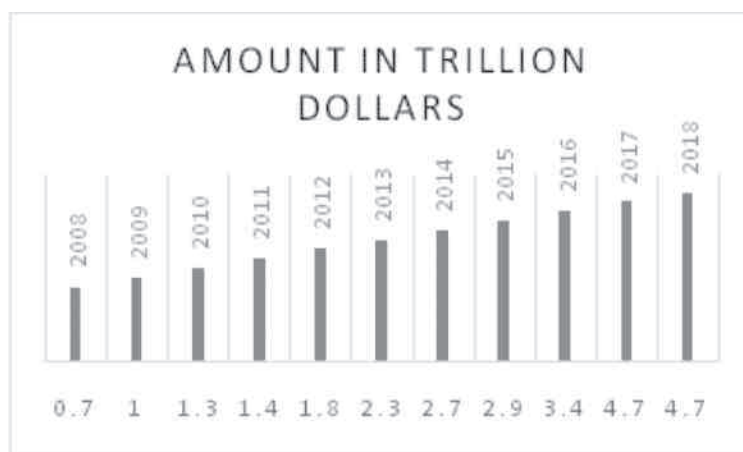


Fig.1.Represents the dollar amount in trillions invested in ETFs worldwide (Source: ETFGI (Investopedia.com)) [2]

Types of ETFs [2]

- Bond ETFs: Include government bonds, corporate bonds, and state and local bonds—called municipal bonds.
- Industry ETFs: track an industry such as technology, banking, or the oil and gas sector.
- Commodity ETFs: Invest in commodities including crude oil or gold.
- Currency ETFs: Invest in foreign currencies such as the Euro or Canadian dollar.
- Inverse ETFs: Attempt to earn gains from stock declines by shorting stocks. Shorting is selling a stock, expecting a decline in value, and repurchasing it at a lower price. (These are Exchange traded notes and not true ETFs. The investors should be aware of the same.)

Below analysis is derived from Investopedia website for ease of understanding.

Advantages of Index [3]

- Portfolio managers use index futures to hedge declines in similar holdings.
- Brokerage accounts required only a fraction of the contract's value held as a margin,
- Index futures allows for speculation on the index price movement.
- Business use commodity futures to lock in commodity prices.

Disadvantages of Index [3]

- Unnecessary or wrong direction hedges will damage any portfolio gains.
- Brokers can demand additional funds to maintain the account's margin amount

Table.1.Futures vs ETFs [5]

Indicator	Futures	ETFs	Remarks
Management (or operations) fees	There are no annual management fees	There is an annual fee involved.	On monetary basis, Index Futures is better.
Capital efficiencies	The margin is capital efficient with performance bond margins usually less than 5% of the notional amount	The Regulation T margins with stocks and ETFs are 50% of the value of the stock or ETF which is larger than futures.	Index Futures is more capital efficient as it has lesser margins compared to ETFs.

24-hour trading access	Trades nearly 24 hours, six days a week.	Few firms offer after -hours trading, but ETFs cannot be traded 24 hours a day.	Traders have 24-hour trading access in Futures
Liquidity	Primary futures contracts out-trade in dollar terms.	Fairly liquid but not as evident as futures.	Futures possess high liquidity.
Tracking to underlying	Futures track the underlying asset very closely, with little tracking error or lesser deviation.	Some ETFs have major tracking error leading to higher deviation.	Futures have high precision compared to ETFs.
Tax advantages	A profit -making short -term trade in futures will pay less taxes than in ETF.	All short -term profits with ETFs pay ordinary income rates.	Profits in Futures trade have a lesser tax slab.
Risk absorption capacity	Highly risky.	Highly secure.	Futures are risky compared to ETFs.

- c. Index futures speculation is a high-risk undertaking
- d. Unforeseen factors may cause the index to move opposite from the desired direction.

Advantages of ETFs [2]

- a. Access to many stocks across various industries
- b. Low expense ratios and fewer broker commissions.
- c. Risk management through diversification
- d. ETFs exist that focus on targeted industries

Disadvantages of ETFs [2]

- a. Actively managed ETFs have higher fees

- b. Single industry focus ETFs limit diversification
- c. Lack of liquidity hinders transactions
- d. Investor gives up potential to perform(alpha).

Size of futures markets vs. ETF market

The average daily dollar volume comparisons between futures and their corresponding ETF, futures trade multiple dollars amount of their ETF counterpart. Treasuries, crude oil, and Gold trade 20-600 times greater dollar value than ETFs per day. The E-mini S&P 500 alone out trades all ETFs around the world by a factor of 2.56 times.

Table.2. Average daily dollar volume of Primary Futures vs. Corresponding ETF**Source: CME group, Bloomberg [5]**

Futures/ETF	Futures ADV in \$	ETF ADV in \$	Ratio
E-mini S&P 500/SPY	192 billion	19.6 billion	9.8x
E-mini S&P/All 6,673 ETFs globally	192 billion	85 billion	2.56x
10-year T-note futures/IEF	146 billion	0.22 billion	669x
Crude Oil futures/USO	62 billion	0.4 billion	127x
30-year T-bond futures/TLT	29 billion	1.29 billion	22.1x
Gold futures/GLD	28.9 billion	1.09 billion	26.5x
Nasdaq 100 futures/QQQ	23 billion	2.18 billion	9x
Euro FX futures/FXE	27.1 billion	1.1 billion	24.5x
Copper futures/3 Copper ETFs	6.86 billion	0.0032 billion	2144x

The Impact of Social Media in Determining Trend

With the extensive and incessant rise in the usage of social media platforms, the decision-making power of various individuals is impacted. In an article. (Last updated on 12 September 2019) titled: "How does President Trump's Twitter use impact Forex, Markets and Stocks" by fxcm.com, a forensic analysis of the topic well debated, is given. A platform like Twitter has the presence of leaders from all over the world with a footfall of 100 million daily users, 320 million active monthly users and 500 million tweets sent per day. President Trump used the platform rigorously with no filter to thoughts flowing ignoring the effect the tweet might have on the sentiments of citizens and the businesses. Financial markets are not receptive to surprises and uncertainty is what people have been debating about but, use of social media platforms by influencers or relevant people has made the markets more volatile and sensitive to change. A paragraph from the article highlights an event that occurred in 2013. Through an unauthentic news release conducted by Twitter regarding the safety ad heath of the POTUS, said that President Obama ad other White House staffers had been injured as result of two separate explosions. The immediate effect was that, U.S. equities markets plunged and within minutes, the Dow Jones Industrial Average dropped by 143.5 points with the S&P 500 temporarily losing an estimated US \$136 billion in value. Eventually, the markets

recovered after knowing that it was a fake release. Similarly, in December 2016, Trump tweeted the following: "The F-35 program and cost is out of control. Billions of dollars can and will be saved on military (and other) purchases after January 20th." This statement caused a disruption in the aerospace industry, shaking equity valuations of the key players. Few highlights were the following:

- Shares of Lockheed Martin initially dropped 4% (estimated value of US \$4 Billion). By the end of the trading session on 12 December, losses were cut in half, closing 2%.
- Shares of Boeing initially dropped 0.72% but traded to a positive 0.43% by the end of the session.
- Shares of General Dynamics fell 2.87% before rallying to close 0.94% on session close.
- Defense industry ETFs Power Share Aerospace & Defense Portfolio and iShares U.S. Aerospace & Defense both sustained losses eclipsing 1% for the session.

Another example of a tweet by President Trump:

"Toyota Motor said will build a new plant in Baja, Mexico to build Corolla cars for U.S. NO WAY! Build plant in U.S. or pay big border tax."

The impact on Toyota is:

a. Toyota stock saw immediate devaluation, losing 1.2 billion in market cap in the five minutes of the uploading of the tweet.

b. Over the next six months, Toyota stock lost over %, around US \$12 Bn.

In March 2018, when concerns over U.S China trade wars were rising, the following tweet changes the dynamics of the markets:

“When a country (USA) is losing many billions of dollars on trade with virtually every country it does business with, trade wars are good, and easy to win. Example, when we are down \$100 billion with a certain country and they get cute, don't trade anymore-we win big. It's easy!”

The above tweet prompted for a widespread selloff in U.S. equities. On the New York Stock Exchange (NYSE) open, the Dow Jones Industrial Average (DJIA) fell 300 points reflecting the prevailing negative sentiment. However, the selloff was for a short period. International equities also showed considerable fallout amid trade war concerns and Trump's tweet. Following was the trend:

- a. Japan's Nikkei 225: -2.5%
- b. Hong Kong's Hang Seng: -1.5%
- c. France's CAC 40: -2.4%
- d. Germany's DAX: -2.3%
- e. United Kingdom's FTSE 100: -1.5%

It also caused turbulence in the currency markets as well like Forex. Following the "trade wars are easy to win" comment via Twitter, immediate losses were sustained by the United States dollar (USD). Conversely, safe-haven currencies performed well, led by the Japanese yen (JPY) and Swiss franc (CHF). (Source: www.fxcm.com)

Piece of article that signifies the causal effect of Twitter on the markets [7]

“Markets React as Trade War Tensions Escalate”

- i. On 23 August 2019, the tense situation threatened market stability during a Twitter-fueled day in the standoff.
- ii. During the pre-U.S. market hours on Friday, 23 August, China announced a broad-based collection of tariffs on US\$75 billion in American imports. Additional duties of 5% or 10% were to begin 1 September 2019 on more than 5,000 products including soybeans, crude oil, coffee, and seafood. President Trump wasted no time in responding to China's new policy, issuing several hawkish tweets hours after the announcement was made:

- a. "Our Country has lost, stupidly, Trillions of Dollars

with China over many years. They have stolen our intellectual property at a rate of Hundreds of Billions of Dollars a year & they want to continue. I won't let that happen! We don't need China and, frankly, would be far...”

b. "... better off without them. The vast amounts of money made and stolen by China from the United States, year after year, for decades, will and must STOP. Our great American companies are hereby ordered to immediately start looking for an alternative to China."

iii. Trump's calls for an American boycott of Chinese partnerships was only the start to a barrage of dialogue facing U.S. policy toward trade with China. Shortly after Wall Street's closing bell, Trump raised the tariff ante yet again, via Twitter:

a. "Sadly, past Administrations have allowed China to get so far ahead of the Fair and Balanced Trade that it has become a great burden to the American Taxpayer. As President, I can no longer allow this to happen! In the spirit of achieving Fair Trade, we must Balance this very....

b. "... unfair Trading relationship. China should not have put new Tariffs on 75 BILLION DOLLARS of United States product (politically motivated!). Starting on October 1st, the 250 BILLION DOLLARS of goods and products from China, currently taxed at 25%, will be taxed at 30%....

c. "... Additionally, the remaining 300 BILLION DOLLARS of goods and products from China, which was being taxed from September 1st at 10%, will now be taxed at 15%. Thank you for your attention to this matter!"

Trump's tweets outlining the new tariff structure on Chinese imports arrived on the heels of an extremely bearish day for U.S. stocks. For the session of 23 August, the Dow Jones Industrial Average (DJIA) lost 2.4%, closing 623 points. The S&P 500 and NASDAQ followed suit, each shedding 2.6% and 3.0% of their respective value. (Source: www.fxcm.com). Note that, there are many such instances which have caused a disruption in the markets and in economy. It is noticed that tweets have an ability to create volatility effects to equities and international currencies.

Effects of Covid19 on ETFs and Index Futures: Indian Case [8][9][10][11][12]

Best examples of ETFs and their returns- India

Equity ETFs

Table.3. Examples of Equity ETFs- India

ETF Name	Index Tracked	3 Year Returns
Nippon India ETF Nifty BeES	Nifty 50	14.46%
Nippon India ETF Bank BeES	Nifty Bank	19.11%
Motilal Oswal Midcap 100	Nifty Midcap 100	4.02%
Motiwal Oswal Nasdaq 100	Stocks listed in the Nasdaq (US tech companies)	21.59%

(Data as on December 10, 2019; Source: Value Research)

Table.4. Examples of Debt ETFs- India

ETF Name	3 Year Returns	5 Year Returns
Nippon India ETF Liquid BeES	4.90%	5.45%

(Date as on December 10, 2019; Source: Value Research)

Table.5. Examples of Gold ETFs- India

ETF Name	1 Year Returns	3 Year Returns
HDFC Gold Exchange Traded Fund	8.99%	6.13%
UTI Gold Exchange Traded Fund	9.02%	6.21%
Nippon India ETF Gold BeES	8.87%	6.16%

The best way to analyse the returns during the ongoing pandemic is analysing the 1st Jan 2020- 31st Mar 2020 period results. Three major indices and ETFs are taken into consideration (similarly can be observed for other ETFs

and Indices). Movements for some of the ETFs for the stated period are given below:

Table.6. Returns of Equity ETF for period 1st Jan 2020- 31st Mar 2020

Type of ETF	Period	Percentage Change
Motiwal Oswal ETF	1 st Jan 2020- 31 st Mar 2020	-29.87%
Reliance ETF	1 st Jan 2020- 31 st Mar 2020	-28.96%
SBI ETF Nifty	1 st Jan 2020- 31 st Mar 2020	-40.63%

Table.7. Returns of Index Futures for period 1st Jan 2020- 31st Mar 2020

Type of Index Futures	Period	Percentage Change
State Bank of India	1 st Jan 2020- 31 st Mar 2020	-41.14%
Steel Authority of India Ltd	1 st Jan 2020- 31 st Mar 2020	-46.27%
Bharti Airtel Ltd	1 st Jan 2020- 31 st Mar 2020	-2.7%

The results depict that either of the two witnessed a down trend. Though in some cases like Bharti Airtel Limited, short selling (volatility until curbs were implemented) can be witnessed but the results become inconclusive as the entire period is of the pandemic is during the period. Analysis of the result gives a better picture. The down trend was caused since there are times when trading was most

affected and gave rise to speculations and fear in the markets.

But there was one market which saw an upward trend in this scenario that is in Gold ETFs and Debt ETFs. Here are some results:

Table.8. Returns of Gold ETFs for period 1st Jan 2020- 31st Mar 2020

Type of ETF	Period	Percentage Change
HDFC Gold ETF	1 st Jan 2020- 31 st Mar 2020	12.3%
UTI Gold ETF	1 st Jan 2020- 31 st Mar 2020	10.85%
Nippon India Gold ETF	1 st Jan 2020- 31 st Mar 2020	11.23%

Interpretation of the above results

There can be a parallelism drawn in Index futures and Equity & Debt ETFs. We see that both witnessed a downward trend. The percentage change may not be the same, but the overall nature is the same. But in case of Gold ETFs an upward trend is witnessed. The percentage change is not the same, but the nature is the same during the period (Jan 2020 to Mar 2020).

Measures taken by markets all around the world to protect from intense volatility [13]

This was cited by Economic Times in an article titled: "Covid-19 impact: How stock exchanges are protecting their markets from intense volatility"

Trading rules are changing, and NYSE closed temporarily and moved entirely to electronic trading from March 23.

Greece's securities regulator banned short selling on the Athens stock exchange until April 24.

In Italy from March 17, market regulator Consob suspended short selling on the Milan Stock market for 3 months.

Spain imposed a one month ban on short selling which is expected to extend.

On March 17, France banned short selling on 92 stocks.

Turkey placed a ban on short selling since late February. This followed by an air strike killing dozens of Turkish troops.

Indian market halved position limits for certain stock futures. It restricted short selling of index derivatives and raised margin rates for some shares to curb "abnormally high" volatility.

Philippines became the first country to suspend trading on March 17.

Thailand revised its circuit breaker rules which will last till end of June. New rules impose an 8% drop trigger on a 30-minute halt in trade, a 15% fall to initiate a 30-minute halt and 20% plunge if halted for an hour.

South Korea tightened short-selling rules for 3 months from March 11. KOSPI also, activated sidecar curbs on March 12 to halt programme trading.

Indonesia tightened circuit breaker rules with 5% drop on its main stock will see trading halted for 30 minutes and similar halt for further index losses. It also imposed a ban on short selling.

Johannesburg Stock Exchange shortened its trading hours and enforced prohibitions on uncovered, or naked short selling. It lengthened the mandatory halts to trading circuit

breakers.

Shares in UAE stock exchanges will be allowed to drop a daily maximum of 5% from their previous day closing price.

According to Madhavan A, Marchioni U, Li W and Du D [1], in their paper describe that the future contracts are widely used in financial markets to implement three main investment objectives:

- a. absolute return generation by arbitraging the contract expiry and rolls.
- b. leveraging a portfolio and
- c. gaining exposure to a given benchmark.

The paper concentrates on the third aspect(c) and assumes that the investor is fully funded. The ETFs and the futures are the only solutions or alternatives that provide intraday liquidity. The paper discussed certain operational elements stating ETFs and Futures differ from a legal and operational perspective. Futures have a fixed term, usually one month or three months. The long buy and hold investors who want to hold the position beyond such time horizons will have to liquidate any future contracts approaching expiry and purchase new contracts with the cash proceeds. Thus, futures require foreign exchange management. In operational perspective futures use capital efficiently and have other benefits like liquidity and transparency. ETFs can generally be hold for long and do not need to manage the FX component. There is no counterparty risk involved in ETFs. The paper assumes a non-stochastic interest rates for simplicity and the futures price of an index (forward price) can be expressed as:

$$F_{i,T} = S_i e^{(r-d)(T-i)}$$

Costs of rolling a futures position from the near $F_{i,T}$ to the k-period far contract $F_{i,T+k}$ to maintain the exposure over the required timeframe. " r " is the break-even financing rate and dividend is d . While ETFs can develop transitory premia or discounts versus net asset value (NAV). Factors that affect the ETF pricings include dividend income, securities lending revenues, implicit financing rates and implicit yield on cash, ETF management fees and transaction costs. The paper compares the two taking two perspective- Holding and Trading. The model used here involves few case studies and would like to take the paper ahead taking other futures and ETFs.

Results

Futures and ETFs are two of the most successful instruments ever introduced, futures still form a better choice compared to ETFs in the comparison discussed above. From Table 2, Index Futures are better in all respects giving huge profits, being highly efficient, easily available to trade, highly precise and lesser tax payable. This has been a trend since the advent of Futures and ETFs. Futures has been trading since the mid-1800s ETFs came into picture in 1997. The above analysis shows that Futures are better with respect to returns. But this is situational, ETFs are much secure and less risky compared to Futures. With the relevance drawn from the article, the trends keep changing in the market and with the excessive use of social media platform might lead to either short- or long-term fluctuations in the markets as it captures the sentiments of majority of the individuals. Even during the period of lockdown and pandemic, ETFs (Gold) still have an upper hand when compared to Index Futures as interpreted in the above section.

We can understand that, though ETF tracks its underlying index, the performance of the ETF (overall: equity, debt, commodity, currency and inverse) does not perfectly replicate the performance of the index due to some time lag and its ability to diversifying portfolios. Hence, there exists a difference in returns between the two. Further, just to add that the tracking deviation or error is annualized standard deviation of daily return differences between the performance of the ETF fund and the underlying index. ETF can still give positive returns depending on the type of ETF one prefers to invest in. As we see above, Gold ETF gave positive returns even when overall market showed a downward trend.

Finally, drew major inferences from the paper titled: Equity ETFs versus Index Futures: A Comparison for Fully Funded Investors by Ananth Madhavan, Ursula Marchioni, Wei Li, and Daphne Van Du and scale the paper for future work.

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