Value Investing – "An Investors Friend or Foe In The Course Of A Pandemic"

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ABSTRACT

The study has attempted to judge the performance of value stocks in the bear market caused by the COVID-19 pandemic. The study has outlined two objectives namely to evaluate the performance of value stocks during the market crash and weigh the differences between value and growth strategies by analysing the value-growth valuation dispersion. The study is limited to Indian stock markets. The data was cumulated from secondary sources, namely websites like National Stock Exchange, Bombay Stock Exchange, Yahoo finance, MSN money and News articles. Further, Risk & return analysis was done on the data. The Study suggested that, value strategy tends to perform poorly when shock to the fundamentals sets up a bear market as was the case in the market downturn due to the pandemic and the value-growth valuation dispersion remained at the highest levels. "History doesn't repeat itself, but it often rhymes"- Mark Twain. What value investors can learn from this bear market is that investing in both value and growth categories can be fruitful for the overall portfolio with a potential for high returns with low volatility.

INTRODUCTION

Value strategies methodically invest in stocks with lower prices relative to strong company fundamentals. Investors presume that the price of the stock will rise reflecting true potential of the company. As the stock is fundamentally undervalued, investors anticipate that this rise in value stocks will outstrip the growth of the market. The idea is to buy a stock which has fallen in price and sell what has appreciated out of proportion. This "out of proportion rise" is meaningful during times of great economic distress. In contrast, Growth stocks are that offer substantially higher growth rate as opposed to the prevailing market and generates earnings more rapidly.

Studying previous bear market episodes its quite clear that value, quality and small cap strategies tend to perform well during recoveries regardless of the cause of the recession. But the impact of COVID-19 on the global economy is unlike any other event which has directly affected production, led to supply chain disruption & financially hit firms and financial markets. Some

of the definitive traits of value stocks and growth stocks;

VALUE STOCKS	GROWTH STOCKS
Consistent cash flow.	High growth rate of sales and earnings.
PE ratio at or lower than broader markets.	Low or zero dividends.
Less volatile.	Competitive advantage.
Likely to pay dividends.	Loyal customer base.
Reliable transparent financial statements.	Investors make money through capital gains.
Undervalued.	High risk factor

Table 1 – Comparison between growth and value stocks

Value strategies include stocks of established firms with evidenced track records differentiating them in terms of higher price in comparison to growth stocks, which are generally issued by recently established companies which do not have a long history. As value stocks could take longer than growth stocks to grow positively in price Roland Rousseau & Paul van Rensburg (2004), investing

in value strategies is convenient for long term investors who have patience to wait.

Investing in both the strategies can be very valuable for the portfolio of an investor who tends to invest for long term. Combining both can yield higher returns with low volatility.

Fama and French (1992) in their 3-factor model expanded on the CAPM as they added value risk components to the market risk. Their theory outperformed on a regular basis and thus the model adjusted for the value premium. This is because value strategies tend to give better returns on a risk adjusted basis in long term holding periods. The difference between returns by high book to market stocks and low book to market stocks is nothing but value premium.

Expected Rate of Return = Risk Free Rate + Market Risk Premium + Small Minus Big (SMB)

$$r = r_f + \beta_1(r_m - r_f) + \beta_2(SMB) + \beta_3(HML) + \varepsilon$$

regarded value and small cap strategies + High Minus Low (HML)

r = Expected Rate of Return

rf = Risk-free rate

Beta = Relative Sensitivity

rm-rf = Market Risk Premium

Small Minus Big = Small cap companies – Large cap companies (Returns)

High Minus Low = Return of high book to price ratio stocks over low book to price ratio stocks i.e. Value – Growth.

Epsilon = Risk

LITERATURE REVIEW

Many researchers have worked on value investing strategies to pick the best stock. **Benjamin Graham** will always be remembered as the father of value investing. He was analogous with picking stocks on the premise of ratios like Price to Earnings and Price to Book ratios. He believed in buying undervalued firms cheaply. In his famous book, "The Intelligent Investor" he said that, "The price of the stock swings between optimism and pessimism and value investors are those who buy from pessimists and sell it to the optimists".

Joseph. D. Piotroski (2000) found how the use of past financial statement data can separate winner stocks from loser stocks. He devised the F-score to improve the return on investment in strategies that invest in value stocks which will be used in our research to pick the vest value stocks. The score is calculated based on 9 criteria's and a company gets 1 point for each met criterion.

Seung-Woog Kwag, Ph.D., and Sang Whi Lee, Ph.D. (2006) compared a value strategy portfolio with a growth strategy portfolio in a business expansion and contraction period and reported that the value stocks unfailingly outperformed the growth stocks throughout the business cycle.

Troung, Cameron (2009) studied value strategy that used the Price-to-Earnings ratio and found that by investing in low P/E multiple stocks, investors can achieve a consistent superior return.

Some scholars like, **Roland Rousseau & Paul van Rensburg (2004)** studied that returns from value investing becomes sizable and reliable with an increase in holding period of the stock.. "Value investors appear to be rewarded for time" said their paper "Time and the payoff to value investing".

Jason Hsu evaluated the smart beta strategy of value investing and found the approach to be balanced and better diversified.

Value stocks are More propitious to analysis of

financial statements than growth stocks which attract a lot of glamour. Valuations of growth stocks are mainly based on forecasts of sales and earnings. Momentum is key to predict the returns on growth stocks, **Asness (1997).** In contrast, for value strategies, investors pay attention on any recent changes in the fundamentals of the company for e.g. leverage, liquidity, profitability, cash flow etc.

Clifford Asness, Ronen Israel, Andrea Frazzini and Tobias Moskowitz, (2015) aim to clarify the many areas of uncertainty about value investing and focusing on the diversified systematic value strategies while expanding on how this strategy can be related to a more condensed implementation.

Edward Qian, Eric H Sorensen and Ronald Hua in their **2009** presented the need to augment value strategies and adopt a multi-strategy approach. They talked about all value strategies not being equal and in order to preserve market neutrality and reduce exposure to volatility we need to look at a multi-strategy perspective

Seungmin Chee, Richard Sloan, Aydin Uysal (2013) provided a structure for outlining, formulating and evaluating different value investment strategies by ascertaining the relative value of investment in terms of its expected yield suggested by the future cash flows and the current market price of the stock.

Mikiharu Noma (2010) investigated whether a simple accounting based fundamental analysis can outperform the market using a fundamental signal of F-Score to separate between eventual winners and losers. The study revealed that F-score can predict future earning and does not support risk-based explanation for the investment strategy.

Mohsen Alvandi, Safar Fazl, Ahmad Hashemi Siavoshani (2013) combined both value investing and momentum-based stock selection using data envelopment analysis as the data size was very large. The result showed the ability of DEA metric to add value to the equity portfolio selection.

OBJECTIVES OF THE STUDY

1. To evaluate the performance of value stocks in comparison to growth stocks in the COVID-19 led bear market.
2. To study the value-growth dispersion in the February-March 2020 bear market.

RESEARCH METHODOLOGY

Data Collection: Secondary Data has been used of the research. The required data of the companies listed on the Indian stock market have been collected from various sources like the Bombay Stock Exchange, National Stock Exchange, Screener.in, MSN Money, Yahoo Finance. Daily adjusted close closing value of the respective stocks taken for analysis.
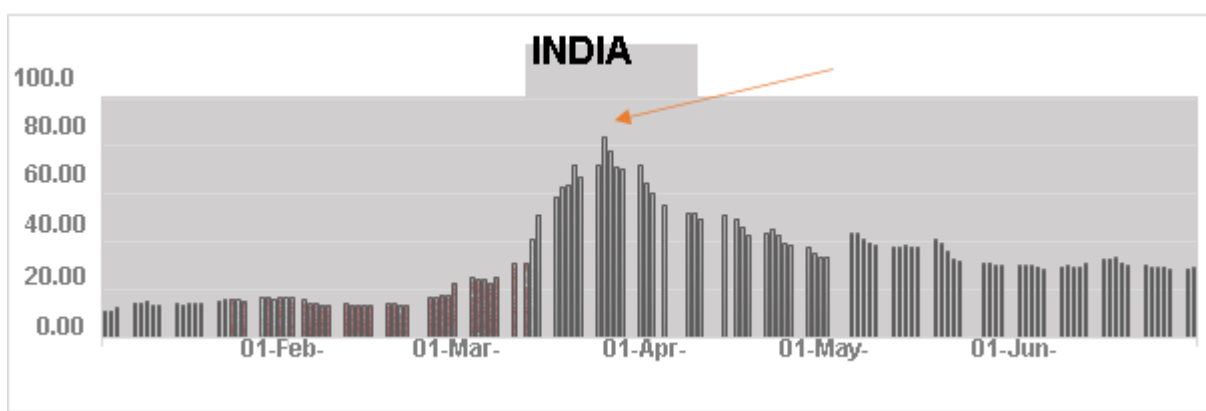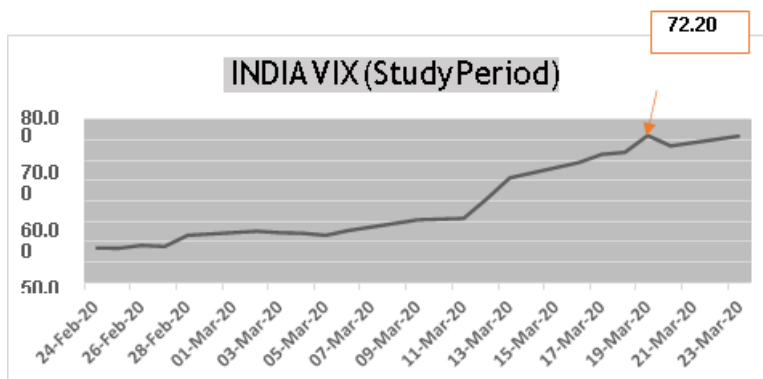

Figure 1

Figure 2

The study considered the period from 24th February 2020 to 23rd March 2020 when the market was most volatile (India VIX topped the chart on 24th march). Apart from that 16th January 2020 marked the day when BSE Sensex was at all time high when it crossed 42,000 mark for the first time in history. The bear market sparked in

the month of February when the Coronavirus cases across the world started to rise. Between 18th February & 17th March 2020, Sensex fell by almost 5% 3 times in one trading day. Additive effect of such market corrections built the bear market.
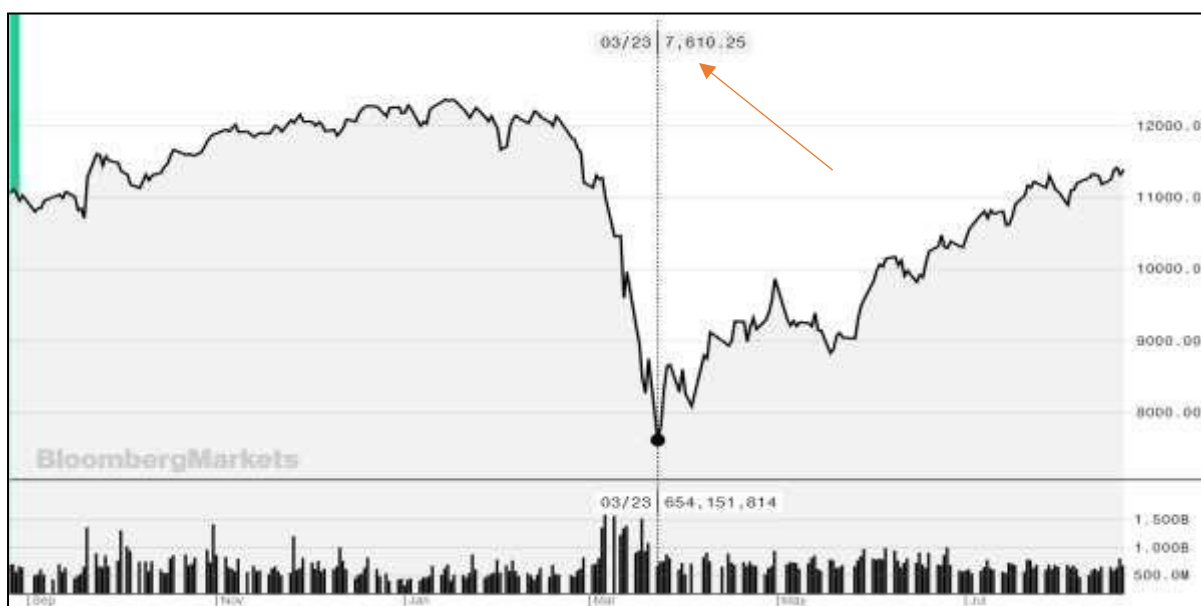

Figure 3

In order to compare the performance of value and growth strategies, the best 10 stocks of the respective categories are chosen on the basis of certain criteria. For Value stocks the study applies **Piotroski's F Score** which is a discrete score between 0-9 that can be used to pick up the best value stocks and also firms financial position. The score is based on 9 criteria's divided into 3 groups. A company gets 1 point if it meets one criterion.

- **Profitability Criteria**

o Net Income. (positive)
o Return on Asset in the current year. (positive)
o Operating cashflow. (positive)
o Cashflow from Operating activities should be greater than the Net income.
- **Leverage, Liquidity Criteria**
o Low ratio of long-term interest-bearing debt in current year compared to the previous year. (Solvency Ratio)
o High Current ratio. /Quick Ratio
o No issuance of new shares in the current year.

(No Dilution)
- **Operating Efficiency Criteria**
  - High Gross Margin.
  - High Asset Turnover ratio.
  In case of Growth Stocks, the following characteristics are taken into consideration;
- Company's presence in mass markets,
- Market dominance and barriers to entry for new players.
- Accelerating earnings and revenue growth.
- High profit margins.
- Innovative management.

The study analysed the stocks by conducting Risk & Return analysis on the value and growth stocks respectively. The average daily returns of both classes of stocks were calculated and compared.

Value Growth valuation dispersion was calculated by finding the value spread measures of the most expensive and the cheapest stocks in the market. Value spread measures include, Price to Book ratio, Price to Sales ratio and Price to Earnings ratio. The data were analysed using Microsoft Excel.

RESULTS

The **Piotroski's F Score** method was employed to cherry pick the 10 best value stocks based on their financial position. A score of 7-9 is considered good for a value stock while a score of 0-2 is considered weak. Thus, the selected 10 stocks were perceived to be good undervalued stocks with strong fundamentals.

Stock/Criteria	+ve NI	+ve ROA	+ve OCF	OCF>NI	Low Debt	High Quick ratio	No Dilution	High Gross Margin	High Asset Turnover	Total
DCB Bank	1	1	1	1	0	1	1	1	0	7
SBI	1	1	1	1	0	1	1	0	1	7
GAIL	1	1	1	1	0	0	1	1	1	8
Jindal Saw	1	1	1	1	1	1	1	0	0	8
NCC	1	1	1	1	0	0	1	1	1	8
DB Corp	1	1	1	1	0	1	0	1	1	8
Phillips Carbon	1	1	1	1	0	0	1	1	0	7
Indiabulls Housing	1	1	1	1	0	1	1	1	0	8
JK Paper	1	1	1	1	1	0	1	1	1	8
hampur Sugar	1	1	1	1	1	0	1	1	1	8

Table 2 – Piotroski's F-Score Table

Value Stocks	PE Multiple	PB Multiple	% Daily Return
DCB Bank	8.85x	0.86x	-3.06%
SBI	8.14x	0.77x	-2.81%
GAIL	3.66x	0.70x	-1.92%
Jindal Saw	3.53x	0.23x	-3.08%
NCC	3.35x	0.22x	-3.78%
DB Corp	5.07x	0.83x	-2.08%
Phillips Carbon	3.77x	0.63x	-3.63%
Indiabulls Housing	1.87x	0.26x	-5.76%

JK Paper	4.10x	0.56x	-2.86%
Dhampur Sugar	2.56x	0.40x	-4.12%
Average	**4.49x**	**0.55x**	**-3.31%**

Table 3

The above table demonstrates the percentage daily returns of the value stocks and their respective PE and PB multiples. The average daily return of the Value stock portfolio in the period of 24th February-23rd March 2020 is – 3.31%.

Growth Stocks	PE Multiple	PB Multiple	% Daily Return
AU Small Finance	22.50x	3.51x	-3.38%
Kotak Mahindra Bank	29.38x	3.72x	-2.10%
SBI Life	44.48x	7.33x	-2.63%
Ultratech Cement	17.51x	2.39x	-1.75%
L & T Tech	16.55x	4.32x	-2.56%
Granules India	10.06x	1.97x	-1.89%
Coromandal Int.	12.59x	3.64x	-1.11%
Apollo Hospitals	34.83x	4.56x	-2.10%
Sudarshan Chemicals	21.44x	4.29x	-1.86%
Trent Limited	136.98x	6.96x	-3.34%
Average	**34.63x**	**4.27x**	**-2.27%**

Table 4

The above table demonstrates the percentage daily returns of the Growth stocks and their respective PE and PB multiples. The average daily return of the Growth stock portfolio in the period of 24th February-23rd March 2020 is – 2.27%.

A mathematical approach was taken by looking at the valuation differential of the expensive growth stocks and cheap undervalued stocks in our market portfolio.

Figure 5
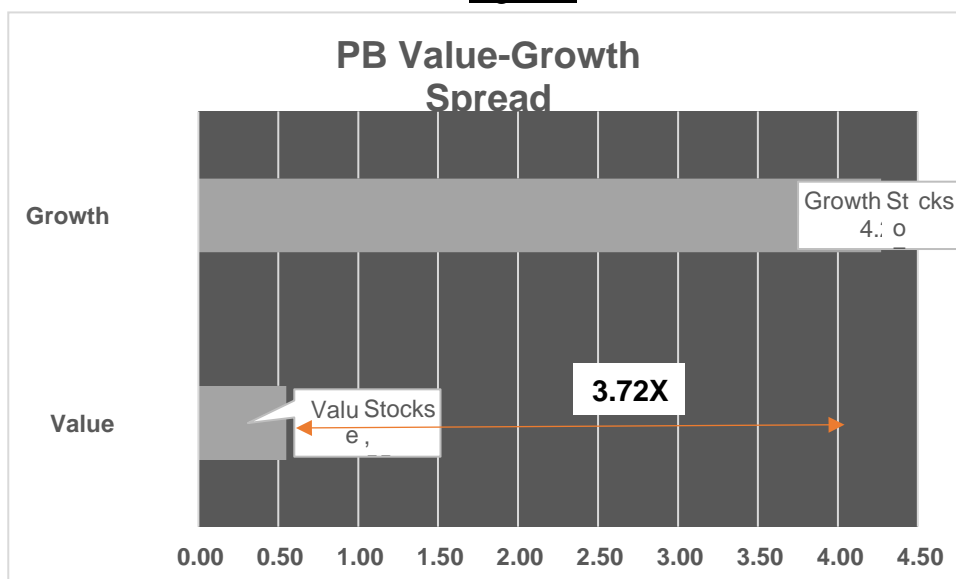
This is the chart of PB spread between the growth and value stocks which tells us that if the value stocks

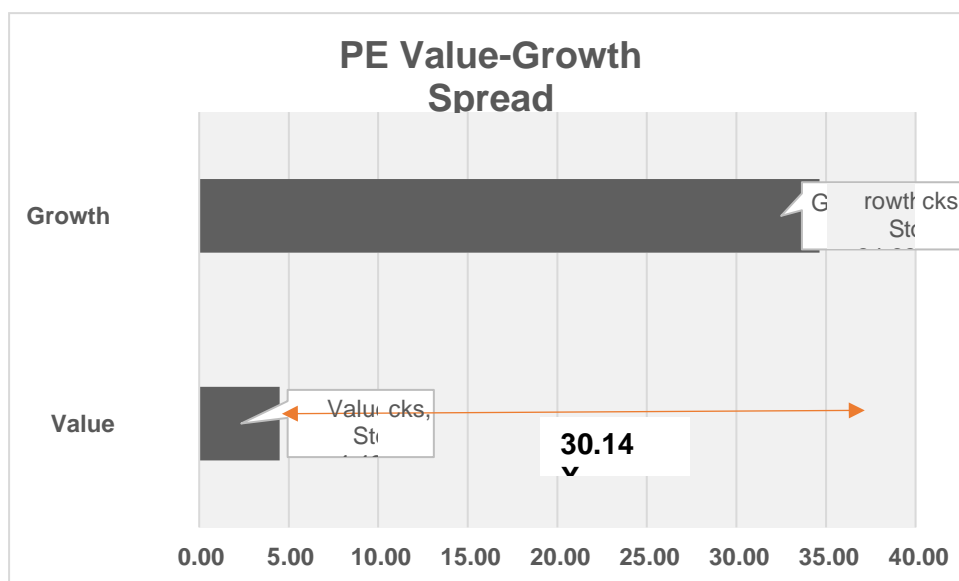trade at 1x book, then the growth stocks will be trading at 3.72x book.

Figure 6

This is the chart of PE spread between the growth and value stocks which tells us that if the value stocks trade at 1x earnings, then the growth stocks will be trading at 30.14x earnings.

DISCUSSION

The pandemic is having a massive impact on our lives and is taking a terrible toll on the economy. The implications of the lockdown on businesses and personal lives have proven to be one of the strongest since World War. February and March 2020 brought upon us one of the most brutal bear markets. Due to the uncertainty over the lengths of the lockdowns and the possible second wave of the virus, it is very difficult to predict how businesses will operate after the lockdown and the extend of damage they will face. The investors, globally are facing one of most difficult conundrums and in order to pass through the current economic downturn, its vital to take lessons from the past. Times like these are very unnerving, but also create excellent investment opportunities.

"History doesn't repeat, but it rhymes"

In the previous bear markets, we see that value strategy outperforms when the bear market is preceded by the bursting of a bubble. In contrast, when bear market is sparked by shock to the fundamentals, value strategy performs poorly as we observed in the recent market downturn.

The study examined the performance of value stocks with respect to growth stock in the 2020 bear market.

Tech Bubble

During the 1990s, internet created new and unique business opportunities powered by lower interest rates and reduced taxes. These companies attracted huge capital through the share market. As a result, the value growth dispersion grew wider. In April 2000, the bubble began to burst, stock price plummeted and a mild recession ensued over this period. Value stocks showed outperformance in the tech bubble crash as it was not associated with the shock to fundamentals.

Global Financial Crisis

Since early 2000s, lending witnessed a boom in the subprime mortgage market due to low interest rates, securitization and tax regulation. This fuelled the housing bubble. By 2007-08, the prices of these mortgages began to decline which led to the banking crisis. Government intervention was required to revive the economy. Value stocks tend to be price sensitive and react negatively to a shock to fundamentals which took place in the housing market crash.

The gap in the performance of value and growth stocks is mainly driven by market sentiment. Generally, value stocks tend to be out of favour whereas growth stocks tend to be popular among investors. In the period of a financial bubble, assets tend to be mispriced and when the bubble bursts, the reversion to the mean is violent. Thus, value companies tend to outperform and growth companies underperform.
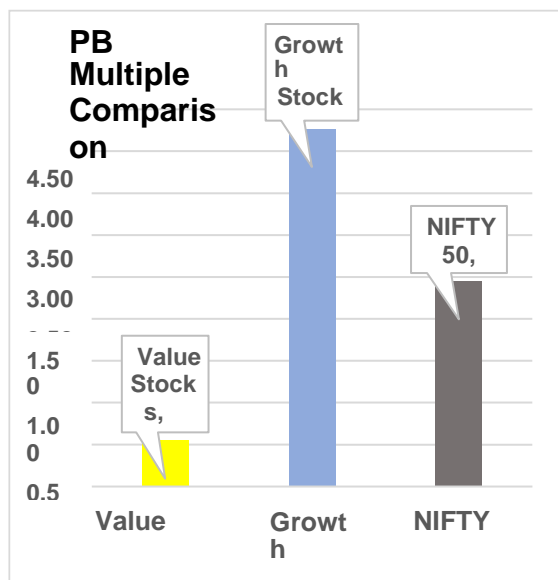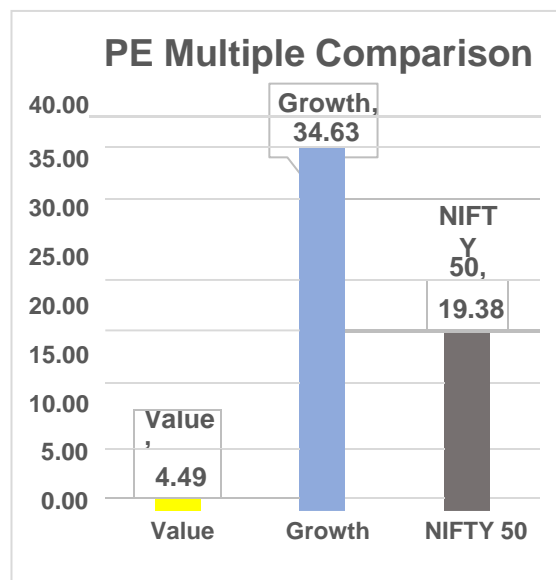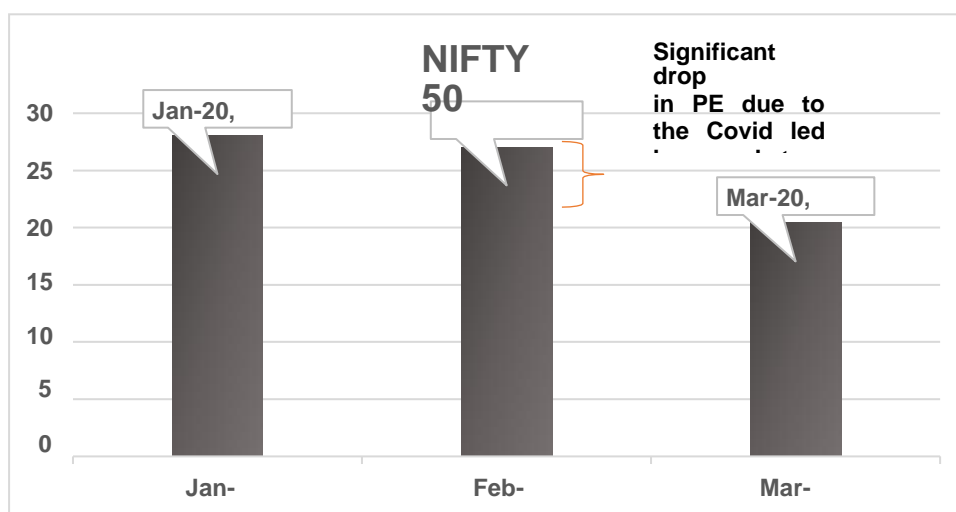

Figure 7

Figure 8

Figure 9 – Variation in PE multiple in early 2020

LIMITATIONS AND FUTURE SCOPE

This study is based on historical data is done in hindsight. It cannot be applied to every industry in the market as some sectors maybe independent of an economic downturn. Generalisation of this study is not possible to all sectors of the economy. The challenge in value investing is to estimate a company's intrinsic value because data cannot effectively capture all the qualitative, tangible and intangible factors in such volatile markets. Investors can run into risk of flawed analysis. This study can be a pre-cursor for efficient asset allocation in one's portfolio for better returns and reduced risk. A blend of value and growth stocks may lead to forming a well- diversified portfolio.

CONCLUSION

The scope of economic damage done by the lockdown is unknows but looks enormous. Lockdown is not the only reason the markets sold off so frantically. Other contributors to this slide can be an expensive equity market in January, inverted yield curve in 2019, Investment crisis and India's large debt pile leading up to the pandemic.

Bear markets in the past have tested lows at stretched out for long periods but the amount of fiscal and monetary stimulus being brought to stem the tide may prevent new market lows.

Percentage daily returns of the value stocks took a hit whereas growth stocks mimicked the market and had relatively better returns over value investors.
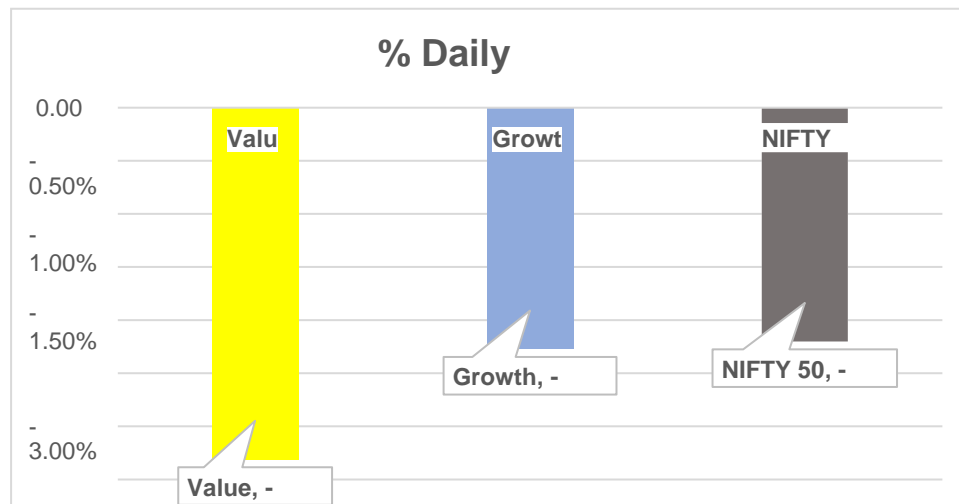

Figure 4 - %daily returns comparison of value and growth portfolios with a broad market index

In the 2020 bear market, value strategy took a severe hit. This behaviour is typical in such downturns due to a big shock to the fundamentals of companies. The valuation dispersion was widened during the bear market breaking past highs. Historically, it is evident that fear in the markets create investment opportunity. Small-cap stocks consistently perform better than the large cap stocks and since May small and mid-cap stocks have outperformed the benchmark. Investors have to be patient and need to take risks with an appropriate fear premium for which they may get rewarded in times of recovery.

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