Behavioral Finance and Stock Performance: Biases Influencing the Market

Mansi Kwatra

(Department of Economics, Lady Shri Ram College for Women/ University Of Delhi, India)

Abstract: This paper examines the behavioral aspect of Finance by analysing its impact on stock markets during the coronavirus pandemic. It highlights several behavioral biases and its influence on investor returns in the market. Comprehensive research suggests that presence of overconfidence and optimism bias provides suitable evidence for rising markets despite the recent economic downturn. It further suggests that Behavioral Economics might have played a significant role in panic selling which ultimately led to the biggest market crash in history (The Black Monday). The role of Irrational Exuberance in building major financial crises-especially the Global Financial Crisis (2008-09) is also highlighted.

Key Words: Behavioral Finance, Efficient Market Hypothesis, Biases, Irrational Exuberance

I. INTRODUCTION

We are all familiar with Finance as a field of study which deals with management of money and investments. Financial Institutions are the pillars of a civilised society, directing resources across space and time to their best uses. The study of Finance has long been associated with the idea of “Efficient Markets” and the famous Efficient Market Hypothesis which states that the share price reflects all available information. Advocates believe that it is absolutely impossible to “fool” the market by outperforming it through expert stock selection. However, the idea of Behavioral Finance, or more broadly Behavioral Economics came in as a challenge to the Efficient Market Hypothesis. It is a notable revolution in Finance which gained traction around 1990 and has so far been the only major revolution in the field after the efficient markets revolution which came in with the capital asset pricing model and mathematical finance. It explains why human beings as investors fall prey to several biases, be it cognitive or emotional while making investment decisions and thus questions the assumption of rationality made by Traditional Finance.

II. BRIEF HISTORY OF BEHAVIORAL FINANCE

The discussion about Behavioral Economics came into light in 1979 when two famous psychologists Daniel Kahneman and Amos Tversky published a paper in Econometrica titled “Prospect Theory: An Analysis of Decision under Risk.” The paper describes human beings as loss averse i.e. they tend to assign greater psychological pain to loss than an equitable amount of gain when asked to choose between two alternatives- one causing loss and the other gain. Since then, notable contributions have been made in this field especially by pioneer researchers like Richard Thaler, Hurt Shefrin, Daniel Kahneman and Amos Tversky. Following this narrative to the present, one may notice that psychological (behavioral finance) and anti-psychological (traditional finance) ideas within Finance subsequently co-exist.

However, I believe that the ideas go back very far to the Father of Economics, Adam Smith. Although well known for his book Wealth of Nations published in 1779 describing free market economies, Mr. Smith wrote another book in 1759 titled The Theory of Moral Sentiments in which he highlights the idea of humans having a desire for praiseworthiness as they mature. He gives the example of mathematicians who are not usually famous but are respected in their small community of mathematicians who have read their work. It makes them praiseworthy for their work, despite the fact that they are unknown which contradicts the usual assumption in economics that one wants to maximise consumption.

III. BEHAVIORAL BIASES AND HOW THEY INFLUENCE INVESTOR DECISION MAKING

As per Kahneman and Tversky’s research, behavioral biases provide reasons for asymmetry between the way humans make decisions involving gains and losses. Human beings tend to be risk-averse for decisions involving gains and risk-seeking for decisions involving loss. Behavioural biases are broadly divided into emotional and cognitive biases. Since humans tend to vary their willingness and ability to take risks based on...
circumstance, the idea of “Bounded Rationality” comes into play which makes knowledge and understanding of various biases extremely important.

a. COGNITIVE BIASES AFFECTING INVESTOR RETURNS

Cognitive Dissonance: Cognitive Dissonance refers to the mental conflict that occurs when one’s beliefs are discovered to be wrong. Human beings often make irrational decisions and later tend to identify with those decisions leading them to encounter this particular bias. For example, let’s say an investor believes that a stock currently priced at $80 is actually a good buy at $75. Stock price falls by $78 yet the investor waits for a further decline in value. Now if the stock price instead of falling rises to $85, the investor is likely to experience cognitive dissonance and act irrationally by buying the stock at a higher price.

Cognitive Dissonance very well explains the impulsive decisions made by investors wherein they tend to sell the investments which are high in value too early and keep the ones that have dropped in value - a behaviour practice termed as Disposition Effect, gravely affecting returns.

Endowment Bias: Another common bias affecting investor returns occurs when they place a higher value to the investments they already own rather than the ones they had the potential to acquire. This sense of attachment to the investment makes the investor reluctant to sell a security at the market price as she subconsciously assigns a higher price to it.

Anchoring Bias: Investment decisions are often influenced by psychological benchmarks (or anchors), generating a bias which directly affects investor returns. Humans have a tendency to depend massively on first piece of information while making decisions. The decision to sell or hold the stock is usually influenced by the purchase price, which acts as an anchor as against the actual value of the stock based on rational analysis. It was one of the most significant biases which investors have fallen prey to during the Dot-Com bubble crash, Global Financial Crisis and also the ongoing coronavirus pandemic.

Following graph shows behavioral biases affecting investment decisions the most:

![Graph showing behavioral biases affecting investment decisions](image-url)

Source: CFA Institute

IV. ARE BIASES AFFECTING STOCK PERFORMANCE DURING THE ONGOING CORONAVIRUS PANDEMIC?

It all started on December 1, 2019 when the first case of what is now termed as ‘COVID-19’ was confirmed in China. Following the report, around 1 to 5 new cases were reported every day and by December 15, the number of infections reached 27. The case count reached 60 by December 20 and the numbers have only grown since then. What is troublesome about the entire situation is that in less than three months, the disease turned into an outbreak with new cases being reported almost every day in every continent except Antarctica. Although several countries have successfully managed to control the pandemic, the fears of a second wave coming in are still prevalent.

Amidst the uncertainty that has surrounded the markets in the last few months; stock performances are usually in bulletin.

a. WHY ARE STOCK MARKETS UP WHEN ECONOMIES ARE DOWN?

While several factors are responsible for the stock market displaying indescribable behaviour, I specifically analyse the behavioral biases which have made a lasting impact on stock performance.
i. **OVERCONFIDENCE BIAS**

Overconfidence Bias has been proven to influence stock price volatility in the past. The situation is no different in times of the pandemic. The **miscalibration** i.e. displaying confidence higher than accuracy has definitely kept the markets up even in times of uncertainty. The sharp decline in economic activity marked an end of the longest expansion in US since 1854, as per the National Bureau of Economic Research. The US Economy entered into a recession in February while the market surprisingly hit its all-time high on February 19, 2020. Miscalibration and false growth projections kept investor expectations high even in times of extreme uncertainty.

In India, GDP growth projections published and revised constantly by Moody’s has displayed an optimistic outlook in the initial months despite growing concerns. The following table shows GDP growth projection in India when it was struck with pandemic:

<table>
<thead>
<tr>
<th>Date</th>
<th>Projected Growth Rate</th>
<th>ΔProjection</th>
<th>Cases</th>
<th>ΔCases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 17, 2020</td>
<td>5.4%</td>
<td>-18.18%</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mar 9, 2020</td>
<td>5.3%</td>
<td>-1.85%</td>
<td>48</td>
<td>1500%</td>
</tr>
<tr>
<td>Mar 27, 2020</td>
<td>2.5%</td>
<td>-52.83%</td>
<td>883</td>
<td>1739.58%</td>
</tr>
<tr>
<td>Apr 28, 2020</td>
<td>0.2%</td>
<td>-92%</td>
<td>31360</td>
<td>3451.53%</td>
</tr>
</tbody>
</table>

Source: Moody’s Investor Services

It is evident that India was at high risk of importing COVID-19 and is in fact the fourth most affected country at present. Markets were clearly influenced by the over optimistic predictions despite the fact that Fiscal Deficit in February was 5.07% of GDP and economic activity was being affected.

ii. **OPTIMISM BIAS - CONFIRMATION**

The tendency of investors to believe that they are less likely to experience a negative event and thus ignore the visible signs of trouble has propelled stock markets. Despite several banks realising a plunge in profits, investors have put much faith in the Federal Reserve System to cut rates, initiate bond purchase and release massive stimulus packages which initially kept the market soaring. Many market observers are searching for confirming beliefs by focusing only on encouraging signs that the virus outbreak would be contained and are at present manifestly ignoring renewed trade tensions between US and China displaying yet another bias known as confirmation bias.

In India however, the hype around the INR 20,00,000 Crore government stimulus fizzled out and stocks fell like deck of cards on Dalal Street.

b. **PANIC INDUCED SELLING IN THE MARKET**

On March 9, stock markets all over the world experienced the worst crash in history- termed as Black Monday. In fact on March 13, trading in equity market was halted for about an hour after BSE Sensex hit its 10% lower circuit level. Negative headlines about the uncertainty and volatility in the market led to wide-scale selling of equities all over the world, generating a sudden plunge. Widespread embracement of Efficient Market Hypothesis often makes us forget that fundamentally, emotion drives a lot of what’s going on in the world at present. Sudden halt of economic activity, imposition of lockdown and the outbreak of a pandemic created an immense amount of fear in the minds of investors leading them to indulge in herding behaviour which induced panic selling in the market.

Many investors tend to forget about long term goals and the importance of holding a diversified portfolio to manage the risk. This display of irrational behaviour is aimed at reducing the sudden anxiety which arises when they realise that the value of their assets might fall in the future.

V. **HOW IRRATIONAL EXUBERANCE BUILD UP THE 2008 FINANCIAL CRISIS**

The 2008-09 Global Financial Crisis, also termed as *Subprime Crisis* occurred majorly because of a sharp increase in high-risk mortgages which went into default beginning in 2007. But what led to escalation of The Global Financial Crisis? Can behavioral biases provide an explanation of its occurrence? The answer is undoubtedly a yes. Economist Robert Shiller believes that **IrrationalExuberance** i.e. an extreme investor enthusiasm that drives asset prices up and beyond levels that are not supported by fundamentals is one of the major signals of formation of bubbles in the market. In the second edition of his book published in 2005 and titled by the same name, Mr. Shiller warns of the housing bubble burst which ended up occurring three years later in 2008.

While several behavioral biases can explain this phenomenon, **Availability Heuristic Bias** is the most reasonable of them all. Human judgements are often biased based on the suitable instances that come to mind, leading to this specific bias. It creates a mental shortcut which enables us to focus on information that is made
available immediately and frequently i.e. information present in our short term memory. Various measures introduced by the government after dot-com crash to boost the economy led to easy availability of loans and all the optimistic talks surrounding monetary easing policies led people with even low credit ratings to leverage a large percentage of their mortgages. This led the investors and financial institutions to believe in the risk management capabilities of banks after frequent headlines about a long streak of positive outcomes. As a result, the investors increasingly placed higher trust in financial institutions leading to overestimation of risk management capabilities and underestimation of true risk when in reality, some of the subprime borrowers were actually a part of senior tranches of bonds.

Just like Availability Heuristic, investors fell prey to several other behavioral biases which ultimately led to building up of the crisis.

VI. CONCLUSION

Humans are complex and our financial institutions are structured in order to serve these complex human beings and thus their functioning depends on the behaviour of real people. There have been several instances wherein Behavioral Economics has challenged the idea of efficient markets in today's world. The COVID-19 pandemic has resulted in dramatic economic effects, characterized by excessive stock price volatility and a market crash. However, Behavioral Finance provides sufficient explanation for the unshaken confidence of financial institutions even in times of extreme uncertainty making it extremely crucial to consider our subconscious biases and decide further course of action while accounting traditional paradigms in order to escape another financial crisis.

REFERENCES