A Conceptual Research Study on Identification of Biases with towards Assets Allocation and Portfolio Management of Investors

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Abstract : The economic development of a nation is reflected by the progress of the various economic units, broadly classified into corporate sector, government and household sector. There are areas or people with surplus funds and there are those with a deficit. A financial system or financial sector functions as an intermediary and facilitates the flow of funds from the areas of surplus to the areas of deficit. A Financial System is a composition of various institutions, markets, regulations and laws, practices, money manager, analysts, transactions and claims and liabilities. In this Paper researcher identified the various factors & Biases, which are affected for choice of Assets allocation and perceptions of investors related to investment decision by analysing various literature & books of related study.

Keywords: Portfolio Management, Biases in Behavioural Finance, Assets Allocation

INTRODUCTION

The economic development of a nation is reflected by the progress of the various economic units, broadly classified into corporate sector, government and household sector. There are areas or people with surplus funds and there are those with a deficit. A financial system or financial sector functions as an intermediary and facilitates the flow of funds from the areas of surplus to the areas of deficit. A Financial System is a composition of various institutions, markets, regulations and laws, practices, money manager, analysts, transactions and claims and liabilities.

An “investment is a sacrifice of current money or other resources for future benefits” and investment may be defined as the net addition to a nation’s physical stock of capital. In the present financial market scenario numerous avenues of investment are available. The two key aspects of any investment are time and risk. Our economic wellbeing in the long run depends significantly on how wisely or foolishly we invest. “Investing is simple, but not easy” it’s not a joke, it is said by Warren Buffet – one of the richest men in the world, and without doubt the most successful investor, having made his fortune of more than $40 billion almost exclusively through investing. There are lots of successful investors in the world.

Investment is simple because it just means keeping some money aside so that it grows more valuable after a period of time. At the same time investing is difficult because it challenges our basic human nature – our urge to spend, enjoy and satisfy our needs as early as we can than later. It is difficult because people have to be patient and disciplined for long stretches of time. It’s because all around us we see people spending and having the time of their lives while we sacrifice those pleasures. Investing is also difficult
because we have to make a lot of decisions differentiating between needs and wants. Food, clothing, house, medicines, and education (Maseleno et al., 2019): these are needs. Eating out, going on vacations, watching movies – these are wants and could be reduced to keep aside money for investing, because it is so easy to give in to these temptations, investing is such a challenge for people.

OVERVIEW OF PORTFOLIO MANAGEMENT

Portfolio management is the process of managing money. Other terms commonly used to describe this process are investment management, asset management, and money management. Accordingly, the individual who manages a portfolio of investment vehicles is referred to as a portfolio manager, investment manager, asset manager, or money manager.

In discussing portfolio management, reference is made to the “investor.” The investor is the entity that will receive the benefits from the investment of proceeds that results from managing of the portfolio. Typically, an investor does not make portfolio management decisions. Rather, the investor delegates that responsibility to professional portfolio managers. Professional portfolio managers rely to varying degrees on portfolio analytics for identifying investment opportunities, keeping portfolios aligned with investment objectives, and monitoring portfolio risk and performance.

(Santacruz, 2016) An investor’s portfolio is his or her collection of investment assets. Investors make two levels of decision in constructing their portfolios, namely asset allocation and security selection. “Asset allocation is the choice among broad asset classes (e.g., cash, fixed interest securities, property, equities) and the decision on how much of the portfolio to place in each one. Security selection is the choice of specific securities to hold within each asset class” (Bodie, 2011). The significance of asset allocation on portfolio performance has been established in the literature. Using U.S. investment data, it was found that about 90% of the variability in returns across time of a typical portfolio is explained by asset allocation (Briston, 1986). Another study found that about 40% of the variation of returns across several portfolios is explained by asset allocation (Ibbotson, 2000). This study uses the term “asset allocation” to refer mainly to strategic asset allocation. While tactical asset allocation also plays a role in actual practice, research has shown that straying away from strategic asset allocation introduces return and risk penalties for portfolios, which are even higher in an after-tax context (Brunel, 1998)

ASSETS ALLOCATION

It is widely agreed that asset allocation accounts for a large part of the variability in the return on a typical investor's portfolio. This is especially true if the overall portfolio is invested in multiple funds, each including a number of securities. Asset allocation is generally defined as the allocation of an investor's portfolio among a number of "major" asset classes. Clearly such a generalization cannot be made operational without defining such classes.

Once a set of asset classes has been defined, it is important to determine the exposures of each component of an investor's overall portfolio to movements in their returns. Such information can be aggregated to determine the investor's overall effective asset mix. If it does not conform to the desired mix, appropriate alterations can then be made.

Once a procedure for measuring exposures to variations in returns of major asset classes is in place, it is possible to determine how effectively individual fund managers have performed their functions and the extent (if any) to which value has been added through active management. Finally, the effectiveness of the investor's overall asset allocation can be compared with that of one or more benchmark asset mixes.
The social factors we consider which we refer to as “peer effects”, are household, workplace, and neighborhood factors. A number of papers document peer effects: (Hong, 2004) find households that attend church and interact more with neighbors, tend to invest more in stocks. (Brown, 2008) Show the average stock market participation of a community influences an individual’s decision whether to own stocks. (Hvide, 2015) & (Lu., 2011) demonstrate that social interaction at work impacts investment decisions. (Pool, 2015) Find fund managers who live in the same neighborhood are more likely to have similar holdings and trading patterns than managers who live in different neighborhoods.

Our personal characteristic data include age, gender, and tax rates and funds under management, which are often used as proxies for investor sophistication. (Ackert, 2002) find age influences investors’ choice of risky assets. As individuals reach retirement age, they likely look to reduce risk by decreasing the stock–bond ratio. (Bekaert, 2017) Find that education greatly enhances international diversification.

They also include financial advice as a possible asset allocation determinant. (Kramer, 2012) Finds portfolios of advised investors are better diversified through more investments in mutual funds, the use of more asset classes, and a lesser focus on domestic equity. (Bekaert, 2017) Find the degree of international diversification of equity holdings is correlated to the access to financial advice.

### BEHAVIORAL FINANCE

One behavioral finance lesson for asset managers is about the importance of marketing in identifying investors’ wants and helping satisfy them. Another is about the use of cognitive and emotional shortcuts and susceptibility to cognitive and emotional errors. Asset managers can identify their own errors and correct them, and they can choose to correct investors’ errors or to exploit them.

Investors belong in two main groups: amateurs and professionals. Typical individual investors, often called retail investors, are investment amateurs. They buy investments for themselves, in retirement saving plans or outside them. Amateur investors are skilled at professions and occupations such as medicine, engineering, policing, or gardening, but they are not skilled at investing.

Asset managers are investment professionals, skilled at investing, and acting as marketers whether they acknowledge it or not. Pension fund managers market to boards or corporate managers, and mutual fund managers market mostly to amateur investors. In turn, pension fund and mutual fund managers are marketed to by other investment professionals, such as brokers and investment bankers. Buyers of mousetraps want nothing more than to rid themselves of mice, but investors have many wants, some aligned with better returns and some conflicting with them. Marketing to investment professionals is not entirely different from marketing to investment amateurs because the wants of investment professionals are not entirely different from the wants of investment amateurs.

Socially responsible investors, both professionals and amateurs, comingle wants for better returns with wants for being true to values, and some are willing to sacrifice returns for fidelity to values. Moreover, investors acknowledge some wants but hide others, not only from other people but also from themselves. Some investors, both professionals and amateurs, deny to others and possibly to themselves that they enjoy investing as a game, as others enjoy chess or backgammon. In an interview with (Kolhatkar, 2012) he said: “Some people like playing chess, some like backgammon. This is like a game, and playing games is fun,” and added “It’s more fun when you win.”

<table>
<thead>
<tr>
<th>Biases</th>
<th>Book Title</th>
<th>Author Name</th>
<th>Reference</th>
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<tr>
<td>Cognitive Dissonance, Conservatism, Confirmation, Representativeness,</td>
<td>Behavioral Finance and</td>
<td>MICHAEL POMPIAN</td>
<td>(Pompian, 2012)</td>
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<tr>
<td>Illusion of Control, Hindsight, Mental Accounting, Anchoring and Adjustment, Framing, Availability, Self-Attribution, Outcome, Recency, Loss Aversion, Overconfidence, Self-Control, Status Quo, Endowment, Regret Aversion, Affinity</td>
<td>Wealth Management</td>
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<td>Framing, Violation of Dominance Principle, Loss Aversion, Overconfidence, Confirmation, Anchoring, Cognitive Dissonance, Illusion of Control</td>
<td>Behavioral Corporate Finance</td>
<td>JULIO LOBAO (Labao, 2016)</td>
<td></td>
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<tr>
<td>Mental Accounting, Anchoring, Gambling, High Risk, January effect, Calendar effect</td>
<td>The Financial Consequence of Behavioral Finance</td>
<td>Imad A Moosa &amp; Vikash Ramiah (Ramiah, 2017)</td>
<td></td>
</tr>
<tr>
<td>Over Confidence, Self Serving</td>
<td>Loss Aversion, Disposition effect, Representativeness</td>
<td></td>
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<td>Hindsight, Phenomenon of Panic, Herd Behavior, Status Quo, Survivorship, Money illusion, Attachment, Familiarity, Illusion of Control, Conservatism, Narcissism,</td>
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**Table 1: Biases for Investment decision**

Fundamentally, behavioral finance is about understanding how people make financial decisions, both individually and collectively. By understanding how investors and markets behave, it may be possible to modify or adapt to these behaviors in order to improve financial outcomes. In many instances, knowledge of and integration of behavioral finance may lead to better than expected results for both advisors and their clients. But advisors cannot view behavioral finance as a panacea or “the answer” to problems with
clients. Working with clients is as much an art as it is a science. Behavioral finance can add many arrows to the art quiver. (Pompian, 2012)

Professor Statman has written a book entitled What Investors Really Want According to Statman, what investors really want is three kinds of benefits from their investments: utilitarian, expressive, and emotional. Utilitarian benefits are those investment benefits that drop to the bottom line: what money can buy. Expressive benefits convey to us and to others an investor's values, tastes, and status. For example, Statman contends that hedge funds express status, and socially responsible funds express virtue. Emotional benefits of investments express how people feel. His examples are: insurance policies make people feel safe, lottery tickets and speculative stocks give hope, and stock trading gives people excitement. (Statman, 2011)

(Pompian, 2012) Behavioral finance models and interprets phenomena ranging from individual investor conduct to market-level outcomes. Therefore, it is a difficult subject to define. For practitioners and investors reading this book, this is a major problem, because our goal is to develop a common vocabulary so that we can apply to our benefit the very valuable body of behavioral finance knowledge. For purposes of this book, we adopt an approach favored by traditional economics textbooks; we break our topic down into two subtopics: behavioral finance micro and behavioral finance macro.

1. Behavioral finance micro (BFMI) examines behaviors or biases of individual investors that distinguish them from the rational actors envisioned in classical economic theory.

2. Behavioral finance macro (BFMA) detects and describes anomalies in the efficient market hypothesis that behavioral models may explain.

Fundamental Anomalies
(Pompian, 2012) Irregularities that emerge when a stock's performance is considered in light of a fundamental assessment of the stock's value are known as fundamental anomalies. Many people, for example, are unaware that value investing—one of the most popular and effective investment methods—is based on fundamental anomalies in the efficient market hypothesis. There is a large body of evidence documenting that investors consistently overestimate the prospects of growth companies and underestimate the value of out-of-favor companies.

Calendar Anomalies
(Pompian, 2012) One calendar anomaly is known as “The January Effect.” Historically, stocks in general and small stocks in particular have delivered abnormally high returns during the month of January. Robert Haugen and Philippe Jorion, two researchers on the subject, note that “the January Effect is, perhaps, the best known example of anomalous behavior in security markets throughout the world.” (Jorion, 1996) The January Effect is particularly illuminating because it hasn't disappeared, despite being well known for 25 years (according to arbitrage theory, anomalies should disappear as traders attempt to exploit them in advance). The January Effect is attributed to stocks rebounding following year-end tax selling. Individual stocks depressed near year-end are more likely to be sold for tax-loss harvesting. Some researchers have also begun to identify a “December Effect,” which stems both from the requirement that many mutual funds report holdings as well as from investors buying in advance of potential January increases.

Barnwell Two-Way Model
(Pompian, 2012) One of the oldest and most prevalent psychographic investor models, based on the work of Marilyn MacGruder Barnewall, was intended to help investment advisors interface with clients. Barnewall distinguished between two relatively simple investor types: passive investors and active investors. Barnewall's work suggests that a simple, noninvasive overview of an investor's personal history and career record could signal potential pitfalls to guard against in establishing an advisory relationship. Her analysis also indicates that a quick, biographic glance at a client could provide an important context for portfolio design.
Bailard, Biehl, and Kaiser Five-Way Model

(Pompian, 2012) The Bailard, Biehl, and Kaiser (BB&K) model features some principles of the Barnewall model; but by classifying investor personalities along two axes—level of confidence and method of action—it introduces an additional dimension of analysis.

BEHAVIORAL BIASES DEFINED

(Pompian, 2012) The dictionary defines a “bias” in several different ways, including: (a) a statistical sampling or testing error caused by systematically favoring some outcomes over others; (b) a preference or an inclination, especially one that inhibits impartial judgment; (c) an inclination or prejudice in favor of a particular viewpoint; and (d) an inclination of temperament or outlook, especially, a personal and sometimes unreasoned judgment. In this book, we are naturally concerned with biases that cause irrational financial decisions due to either (1) faulty cognitive reasoning or (2) reasoning influenced by emotions which can also be considered feelings, or, unfortunately, due to both. The first dictionary definition (a) of bias is consistent with faulty cognitive reasoning or thinking while (b), (c), and (d) are more consistent with impaired reasoning influenced by feelings or emotion. Behavioral biases are defined, essentially, the same way as systematic errors in judgment. Researchers distinguish a long list of specific biases, and have applied over 50 of these to individual investor behaviors in recent studies. When one considers the derivative and the undiscovered biases awaiting application in personal finance, the list of systematic investor errors seems very long indeed.

(Pompian, 2012) More brilliant research seeks to categorize these biases according to a meaningful framework. Some authors refer to biases as heuristics (rules of thumb), while others call them beliefs, judgments, or preferences. Psychologists’ factors include cognitive information processing shortcuts or heuristics, memory errors, emotional and/or motivational factors, and social influences such as family upbringing or societal culture. Some biases identified by psychologists are understood in relation to human needs such as those identified by Maslow—physiological, safety, social, esteem, and self-actualizing. In satisfying these needs, people will generally attempt to avoid pain and seek pleasure. The avoidance of pain can be as subtle as refusing to acknowledge mistakes in order to maintain a positive
self-image. The biases that help to avoid pain and instead produce pleasure may be classified as emotional. Other biases are attributed by psychologists to the particular way the brain perceives, forms memories, and makes judgments; the inability to do complex mathematical calculations, such as updating probabilities; and the processing and filtering of information.

(Labao, 2016) In the last few decades, a large set of studies on social and cognitive Psychology have shown that people don't see the world as it is. In that sense, we can say that our perspective of the world is imperfect. To understand that "imperfection"—let's call it this for now—we must understand its source, its raison d'être. To do so, we will approach the topic in two distinct stages. In the first stage we are going to explain the cause of that 'imperfection'. In the second, we will define what led some of the environment's characteristics to become 'invisible' to human beings—all of us—and what made others so self-evident.

(Marston, 2011) After a foundation chooses its asset allocation, it should be able to leave that allocation unchanged for the indefinite future. As the last chapter showed, a foundation can set up a spending plan and choose a long-run strategic asset allocation to support it. Unless there is major distress in the markets, the foundation should be able to carry out its plans without making changes to its allocation. It will hire and fire managers, but the overall investment plan should remain unchanged. Some foundations, of course, will pursue tactical asset allocation in an attempt to take advantage of short-term opportunities to overweight or underweight specific asset classes. But usually the tactical asset shifts are relative to a strategic (i.e., long-run) asset allocation that remains unchanged.

(Marston, 2011) Individual investors are different. Most individual investors have one major investment goal—to save enough for retirement. Spending out of their portfolio is usually minimal in the years when they are working. Then spending becomes essential at the time of retirement. For this reason, there is a life-cycle to investing. In the years when wealth is being accumulated, asset allocation is much more aggressive than when the investor nears retirement.

(Marston, 2011) In the last few years, investment firms have begun to formalize this process by which asset allocation changes over time. These firms have created target retirement funds which change continuously as the investor gets closer to retirement. The funds are usually defined relative to the year of retirement.

(Redhead, 2008) Psychological research has indicated that there are biases in decision-making. These biases have implications for the decisions as to whether to invest in stock market related products, the extent of such investment, and the nature of the investments. The biases could cause investors to make poor decisions; or financial advisers to give poor advice. If investors understand the psychological biases to which they may be prone, they may be able to compensate for them when making investment decisions. If a financial adviser knows the psychological biases that affect clients, the adviser can try to offset those biases by appropriate information and advice. Whilst a financial adviser should discover and accept a client’s preferences, the adviser should attempt to dispel misperceptions and misjudgments that arise from the client’s psychological biases. Simultaneously advisers should guard against the biases to which they themselves may be prone.

(Redhead, 2008) Psychological research has found a number of systematic biases that affect investors. These include: overconfidence, hindsight bias, representativeness, conservatism, narrow framing, irretrievability, and ambiguity-aversion. In addition social influences and moods (emotions) affect investment decisions. All of these biases interfere with the process of rational decision-making. Psychological factors can be divided into self-deception, heuristic simplification, social influence, and emotions (Hirshleifer 2001). Some psychological influences may belong to more than one of these categories.
Assets Allocation

Constructing the appropriate asset allocation is always a challenge, but it is particularly difficult in the current economic environment. The reason is simple: The United States and many other developed world economies are fighting through a deleveraging process that is likely to last for a decade or longer. Deleveraging is a fancy term for debt reduction or lowering leverage. When the amount of debt in any economy gets too high relative to the ability to pay it back, then the debt burden must be reduced. But what does this really mean and why is it so important? To effectively answer this central question, I will start at the most basic level. (Shahidi, 2015)

If your objective is to construct a portfolio mix that is expected to earn steady returns over time, then the next logical discussion point is an analysis of how the conventional portfolio fits within this context. Is the conventional portfolio well balanced? A 60/40 asset allocation (60 percent stocks and 40 percent bonds) has long been considered a balanced portfolio by most investors, professional advisors, and other experts. This mix sounds balanced because it invests in both stocks and bonds, two asset classes that are materially different from one another. One is highly volatile (stocks) and offers attractive long-term expected returns, while the other (bonds) provides stability and lowers the volatility of the total portfolio. Conventional theory posits that bonds earn less but are needed to lessen variability in returns, and stocks earn more but are far too volatile to be held alone. (Shahidi, 2015) The total return of the portfolio is dependent on the returns of the two asset classes during each period. (Shahidi, 2015)

Since we have determined that two of the three key sources of risk are not diversifiable, we will focus on the one that is diversifiable. Another way to think about asset allocation, and really the bottom line of this core chapter, is to appreciate the fact that each asset class is merely a package of different economic structural biases. Each asset class is impacted differently by unexpected shifts in growth and inflation. Some asset classes are positively influenced by rising growth, while others do better when growth underperforms expectations. There are asset classes that are biased to do well during rising inflationary environments and others that favor falling inflation. By isolating each asset class into the key factors that drive its returns (and therefore are the main cause of volatility) you will be analyzing portfolio construction from the appropriate perspective, which will lead to building a truly balanced portfolio. (Shahidi, 2015)

Factor/Biases Identification

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<th>No.</th>
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<th>Factors</th>
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<tr>
<td>1</td>
<td>How Persistent are the Effects of Experience Sampling on Investor Behavior?</td>
<td>(Meike A. S. Bradbury, 2018)</td>
<td>Financial Risk Attitude, Financial Literacy, Experience, Age, Male, Income, Investment</td>
</tr>
<tr>
<td>2</td>
<td>Psychological Capital: Impacts on Asset Management</td>
<td>(Nocolas Change, 2019)</td>
<td>Self-Efficiency, Hope, Resilience, Optimism, Profitability, Age,</td>
</tr>
<tr>
<td>3</td>
<td>Emotions in the Stock Market</td>
<td>(John Griffith, 2019)</td>
<td>Fear, Gloom, Joy, Stress</td>
</tr>
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<td>4</td>
<td>Investors’ Personality Influences Investment Decisions: Experimental Evidence on Extraversion and Neuroticism</td>
<td>(Andreas Oehler, 2017)</td>
<td>Age, External Locus of Control (EXTLOC), Internal Locus of Control(INTLOC), Negative Effect (NEGAEFFECT), Positive Effect (POSIEFFECT), Extravention, Gender, Payment</td>
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<td>5</td>
<td>Emotional finance: investment and the unconscious</td>
<td>(Taffler, 2017)</td>
<td>Emotion, Excitement, anxiety and denial, gambling real risk and uncertainty Judgments and</td>
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states of mind

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<tr>
<th>No.</th>
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<td>6</td>
<td>Peer Effects, Personal Characteristics and Asset Allocation</td>
<td>(Annie C. Zhang, 2018)</td>
<td>Age, gender, tax rates, and funds under management, financial Advice, Rich, Poor</td>
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<td>7</td>
<td>How Persistent are the Effects of Experience Sampling on Investor Behaviour?</td>
<td>(Meike, 2018)</td>
<td>Financial Risk and Attribute, Financial Literacy, Experience, Investment, Age, Gender, Income</td>
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[Table 2: Literature Review on Factor/ Variable Affecting Investment Decision in Portfolio Management]

[Table 3: Literature Review for Selection of Respondent]

REFERENCE


