
FROM MODERN PORTFOLIO THEORY TO BEHAVIORAL PORTFOLIO CONSTRUCTION: A PARADIGM SHIFT

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ABSTRACT:

This study examines the paradigm shift from Modern Portfolio Theory (MPT) to Behavioral Portfolio Construction, highlighting the limitations of traditional financial models and the growing relevance of behavioral finance. MPT, grounded in assumptions of rationality and efficient markets, has long provided a quantitative framework for portfolio optimization through diversification and risk-return trade-offs. However, empirical evidence suggests that investor behavior is often influenced by cognitive biases, emotions, and bounded rationality, leading to deviations from optimal decision-making. The research adopts a conceptual and analytical approach, supported by a review of existing literature and a descriptive analysis of return trends from 2011 to 2021. The findings indicate that market fluctuations are not solely driven by economic fundamentals but are also shaped by investor sentiment and behavioral patterns such as overconfidence, loss aversion, and herd behavior. Behavioral Portfolio Theory (BPT) offers a more realistic framework by incorporating multiple investor goals and preferences into portfolio design. The study concludes that integrating behavioral insights with traditional models provides a more comprehensive and practical approach to portfolio construction, enhancing investment decision-making in dynamic financial markets.

Keywords: Modern Portfolio Theory, Behavioral Finance, Behavioral Portfolio Theory, Investor Behavior, Risk and Return, Cognitive Biases, Portfolio Construction

INTRODUCTION

The evolution of portfolio theory represents one of the most significant intellectual transformations in the field of finance. Traditionally, investment decision-making has been dominated by the principles of Modern Portfolio Theory (MPT), introduced by Harry Markowitz in 1952. MPT established a rigorous quantitative framework that emphasized the

trade-off between risk and return, advocating diversification as the primary mechanism for optimizing portfolio performance. The theory assumes that investors are rational, risk-averse, and capable of making decisions based on complete and unbiased information. Within this paradigm, portfolios are constructed along the efficient frontier, representing optimal combinations of assets that maximize expected returns for a given level of risk (Hayes, 2020; Bodnar et al., 2022; Brzeczek, 2016).

At its core, MPT relies on mean-variance optimization, where risk is measured through standard deviation and returns are assumed to follow a normal distribution. This mathematical precision provided a scientific basis for portfolio construction and revolutionized financial economics. The underlying assumptions of rational behavior and efficient markets, closely associated with the Efficient Market Hypothesis (EMH), suggest that asset prices fully reflect all available information, thereby eliminating opportunities for consistent abnormal returns (Rutterford & Sotiropoulos, 2016a; Rutterford & Sotiropoulos, 2016b; Sotiropoulos & Rutterford, 2019). As a result, investors are expected to behave logically, continuously updating their beliefs in response to new information and selecting portfolios that align with their risk tolerance (Ababio, 2020; Costa & Kwon, 2019).

Despite its theoretical elegance and widespread adoption, MPT has faced growing criticism over time. One of the primary limitations lies in its unrealistic assumptions about investor rationality and market efficiency. Empirical evidence suggests that financial markets are often influenced by psychological, social, and emotional factors that deviate from purely rational behavior (Mussell, 2018; Oladele & Bradfield, 2018). Investors frequently exhibit biases such as overconfidence, loss aversion, herd behavior, and anchoring, which can lead to suboptimal investment decisions and market anomalies (Butt, 2021; Deshpande et al., 2019). These behavioral patterns challenge the foundational premises of MPT and highlight the need for a more realistic framework that accounts for human imperfections.

Behavioral finance emerged as a response to these limitations, integrating insights from psychology and economics to better understand how individuals actually make financial decisions. Unlike traditional finance, which assumes rationality, behavioral finance recognizes that investors are subject to cognitive biases and emotional influences that shape their perceptions of risk and return (Lin & Tian, 2021; Robertson, 2020). This perspective shifts the focus from normative models of how investors should behave to descriptive models of how they do behave in real-world settings (Alles Rodrigues & Lleo, 2018; Viviani et al., 2023).

The transition from MPT to behavioral approaches marks a paradigm shift in portfolio construction. Behavioral Portfolio Theory (BPT), developed by Shefrin and Statman, extends the traditional framework by incorporating investors' multiple goals and mental accounting processes. Instead of viewing portfolios as single, unified entities optimized solely for risk-return trade-offs, BPT conceptualizes them as layered structures, where different segments serve distinct purposes, such as capital preservation and wealth maximization (Fulga, 2015; Henriques & Neves, 2019). This layered approach reflects the reality that investors often prioritize safety and aspirations simultaneously, rather than adhering strictly to mean-variance efficiency.

Another critical dimension of this paradigm shift is the recognition of bounded rationality. Investors operate under constraints of limited information, cognitive capacity, and time, which influence their decision-making processes (Goswami et al., 2016; Grishina et al., 2017). Behavioral models acknowledge these constraints and emphasize heuristics—mental shortcuts that individuals use to simplify complex financial decisions. While heuristics can be useful, they also introduce systematic errors that affect portfolio outcomes (Haley, 2016; Lam, 2016). Consequently, portfolio construction must account for these behavioral tendencies to improve investment performance and risk management.

Furthermore, the growing complexity of global financial markets has reinforced the relevance of behavioral perspectives. Market volatility, financial crises, and the increasing role of retail investors have exposed the limitations of purely quantitative models. Events such as asset bubbles and market crashes cannot be fully explained by MPT alone, as they often result from collective behavioral dynamics, including panic selling and speculative trading (Lavigne & Nicet-Chenaf, 2016; Petukhina et al., 2021). Behavioral finance provides valuable insights into these phenomena by examining how emotions and social interactions influence market behavior. Technological advancements and data analytics have also contributed to the evolution of portfolio construction. The integration of artificial intelligence and machine learning enables the identification of behavioral patterns and biases at a granular level, allowing for more personalized investment strategies (Walther & Münster, 2021; Pun & Wang, 2021). These innovations facilitate the development of adaptive portfolio models that combine quantitative rigor with behavioral insights, bridging the gap between theory and practice.

In addition, the shift toward behavioral portfolio construction aligns with the broader trend of investor-centric approaches in finance. Modern investors are increasingly concerned with achieving specific financial goals, such as retirement planning, wealth preservation, and ethical investing, rather than simply maximizing returns. Behavioral frameworks accommodate these diverse objectives by incorporating preferences, beliefs, and individual circumstances into the portfolio design process (Kim & Lee, 2016; Mefford et al., 2017). This personalized approach enhances the relevance and applicability of portfolio theory in contemporary financial environments. Moreover, recent research has emphasized the importance of integrating behavioral factors into risk management. Traditional measures of risk, such as volatility, may not fully capture the psychological impact of losses on investors. Behavioral concepts such as loss aversion suggest that individuals experience losses more intensely than gains, leading to asymmetric risk perceptions (Höök et al., 2015; Turcas et al., 2017). By incorporating these insights, behavioral portfolio construction aims to develop strategies that not only optimize financial outcomes but also align with investors' emotional comfort levels.

The paradigm shift from MPT to behavioral portfolio construction does not imply the abandonment of traditional theories but rather their extension and refinement. MPT continues to provide a foundational framework for understanding risk-return relationships and diversification benefits. However, its integration with behavioral insights results in a more comprehensive approach that reflects the complexities of real-world investing (Barrot, 2021; Bačević et al., 2019). This hybrid perspective acknowledges that while mathematical models

are essential, they must be complemented by an understanding of human behavior to achieve effective portfolio management. In conclusion, the transition from Modern Portfolio Theory to behavioral portfolio construction represents a fundamental shift in financial thought. It moves beyond the idealized assumptions of rationality and market efficiency to embrace the realities of human behavior and market imperfections. By integrating psychological insights with quantitative models, this new paradigm offers a more holistic framework for portfolio design, better suited to the dynamic and complex nature of modern financial markets. As the field continues to evolve, the synthesis of traditional and behavioral approaches is likely to play a crucial role in shaping the future of investment management (Woods, 2018; Simões et al., 2018).

LITERATURE REVIEW

The literature on portfolio theory has evolved significantly over the past decades, reflecting a gradual transition from the traditional assumptions of rationality and market efficiency toward a more nuanced understanding of investor behavior. Early contributions rooted in Modern Portfolio Theory (MPT) established a quantitative foundation for investment decision-making, emphasizing diversification and the optimization of risk-return trade-offs. However, subsequent research has increasingly challenged these assumptions, giving rise to behavioral perspectives that incorporate psychological, cognitive, and emotional dimensions into portfolio construction.

A substantial body of literature highlights the strengths and limitations of MPT. Hayes (2020) and Bodnar et al. (2022) emphasize that MPT provides a mathematically rigorous framework that enables investors to construct efficient portfolios based on expected returns and variance. Similarly, Brzeczek (2016) underscores the importance of diversification in minimizing unsystematic risk, reinforcing the theoretical robustness of the model. However, these studies also acknowledge that the assumptions of normally distributed returns and investor rationality often fail to hold in real-world markets. Rutterford and Sotiropoulos (2016a, 2016b) and Sotiropoulos and Rutterford (2019) critically examine the historical development of portfolio theory, arguing that its reliance on idealized conditions limits its practical applicability, especially during periods of market turbulence.

The critique of rationality has been a central theme in the literature. Ababio (2020) and Costa and Kwon (2019) argue that investors do not always behave in a utility-maximizing manner, as suggested by classical theories. Instead, their decisions are influenced by subjective perceptions of risk and return. Mussell (2018) and Oladele and Bradfield (2018) further highlight that emotional responses, such as fear and greed, often drive investment behavior, leading to deviations from optimal portfolio choices. These findings have paved the way for the emergence of behavioral finance, which seeks to bridge the gap between theoretical models and observed market behavior.

Behavioral finance literature provides extensive evidence of systematic biases affecting investor decisions. Butt (2021) and Deshpande et al. (2019) identify common cognitive biases such as overconfidence, anchoring, and herd behavior, which can distort investment judgments. Lin and Tian (2021) and Robertson (2020) emphasize that these biases are not random but predictable, allowing researchers to model their impact on financial markets.

Alles Rodrigues and Lleo (2018) and Viviani et al. (2023) argue that incorporating these behavioral elements leads to a more realistic understanding of market dynamics, particularly in explaining anomalies that cannot be accounted for by traditional theories.

The concept of Behavioral Portfolio Theory (BPT) represents a significant advancement in this domain. Fulga (2015) and Henriques and Neves (2019) describe BPT as an extension of traditional portfolio theory that accounts for investors' multiple goals and mental accounting processes. Unlike MPT, which assumes a single utility function, BPT recognizes that investors construct portfolios in layers, each serving a different objective. This layered approach aligns with real-world investment practices, where individuals simultaneously seek security and growth. Mefford et al. (2017) and Kim and Lee (2016) further support this perspective by demonstrating that investors' preferences are often shaped by personal goals, risk tolerance, and socio-economic factors.

Another important strand of literature focuses on bounded rationality and decision-making heuristics. Goswami et al. (2016) and Grishina et al. (2017) argue that investors operate under constraints of limited information and cognitive capacity, leading them to rely on heuristics or mental shortcuts. While these heuristics simplify complex decisions, they also introduce systematic errors. Haley (2016) and Lam (2016) provide empirical evidence showing how heuristic-driven decisions can result in suboptimal portfolio performance. This line of research underscores the importance of incorporating behavioral insights into portfolio construction to mitigate the adverse effects of cognitive biases.

The role of market conditions and external factors has also been extensively examined. Lavigne and Nicet-Chenaf (2016) and Petukhina et al. (2021) analyze how financial crises and market volatility expose the limitations of traditional models. Their findings suggest that extreme market events are often driven by collective behavioral responses rather than purely economic fundamentals. Turcas et al. (2017) and Höök et al. (2015) highlight the significance of loss aversion, demonstrating that investors tend to react more strongly to losses than gains, which can lead to risk-averse or overly conservative portfolio strategies during downturns. Recent studies have also explored the integration of technology and behavioral finance. Walther and Münster (2021) and Pun and Wang (2021) discuss the application of artificial intelligence and machine learning in identifying behavioral patterns and improving portfolio optimization. These technologies enable the analysis of large datasets to detect biases and predict investor behavior, thereby enhancing decision-making processes. Barrot (2021) and Bačević et al. (2019) argue that the combination of quantitative models and behavioral insights represents a hybrid approach that can address the shortcomings of both traditional and behavioral theories.

Historical and sociological perspectives further enrich the literature. Rutterford and Sotiropoulos (2016a, 2016b) and Sotiropoulos and Rutterford (2019) trace the evolution of investment practices, highlighting how cultural and institutional factors influence portfolio decisions. Woods (2018) and Simões et al. (2018) emphasize the importance of contextualizing financial theories within broader social and economic frameworks. These studies suggest that investment behavior cannot be fully understood without considering the interplay between individual psychology and external environments. Moreover, the literature increasingly recognizes the importance of investor-centric approaches. Henriques and Neves

(2019) and Mefford et al. (2017) argue that modern portfolio construction should prioritize individual goals and preferences rather than relying solely on abstract optimization models. This shift reflects a broader trend toward personalization in financial services, where investment strategies are tailored to meet specific needs and objectives. Oladele and Bradfield (2018) and Mussell (2018) further highlight that understanding investor behavior is crucial for designing effective financial products and advisory services.

In addition, the empirical validation of behavioral theories has gained momentum in recent years. Studies by Petukhina et al. (2021) and Lin and Tian (2021) provide evidence of persistent market anomalies that challenge the Efficient Market Hypothesis. These anomalies, such as momentum effects and excess volatility, can often be explained by behavioral factors rather than rational expectations. Viviani et al. (2023) extend this analysis by examining the impact of behavioral biases on asset pricing, demonstrating that incorporating psychological variables improves model accuracy.

The literature also addresses the implications of behavioral finance for risk management. Traditional risk measures, such as standard deviation, may not adequately capture the psychological impact of losses. Höök et al. (2015) and Turcas et al. (2017) argue that incorporating behavioral factors into risk assessment can lead to more effective portfolio strategies. This approach emphasizes the importance of aligning investment decisions with investors' emotional tolerance for risk, thereby enhancing long-term satisfaction and performance. Overall, the literature reflects a clear paradigm shift from the rigid assumptions of Modern Portfolio Theory to a more flexible and realistic framework that incorporates behavioral insights. While MPT continues to provide a valuable foundation for understanding risk and diversification, its limitations have necessitated the development of alternative approaches. Behavioral Portfolio Theory and related models offer a more comprehensive perspective by acknowledging the complexities of human behavior and market dynamics.

The transition from traditional to behavioral approaches in portfolio construction represents a significant advancement in financial research. The integration of psychological, technological, and contextual factors has enriched the understanding of investment behavior, leading to more robust and adaptable models. As financial markets continue to evolve, the synthesis of MPT and behavioral finance is likely to remain a central theme in the literature, providing valuable insights for both academics and practitioners (Woods, 2018; Viviani et al., 2023; Barrot, 2021).

Table 1: MPT vs Behavioral Portfolio Theory

Author(s) & Year	Study Focus	Methodology	Key Findings	Contribution to Study
Ababio (2020)	Investor behavior and decision-making	Conceptual/Empirical	Investors deviate from rationality due to psychological factors	Highlights need for behavioral integration in portfolio theory
Alles Rodrigues & Lleo	Behavioral finance frameworks	Theoretical analysis	Behavioral biases significantly influence investment decisions	Supports shift from traditional to behavioral

(2018)				models
Bačević et al. (2019)	Portfolio optimization approaches	Quantitative analysis	Hybrid models outperform traditional MPT in volatile markets	Advocates integration of behavioral and quantitative methods
Bodnar et al. (2022)	Modern Portfolio Theory evaluation	Statistical modeling	MPT remains useful but limited by unrealistic assumptions	Establishes baseline for comparison with behavioral models
Brzeczek (2016)	Diversification in portfolios	Analytical study	Diversification reduces unsystematic risk effectively	Reinforces core principle of MPT
Butt (2021)	Cognitive biases in investing	Empirical survey	Overconfidence and herd behavior distort investment choices	Emphasizes behavioral anomalies in markets
Costa & Kwon (2019)	Risk perception in investors	Empirical analysis	Subjective risk perception affects portfolio selection	Challenges assumption of objective risk evaluation
Deshpande et al. (2019)	Behavioral biases in financial markets	Survey-based research	Anchoring and loss aversion lead to irrational decisions	Supports behavioral finance applicability
Fulga (2015)	Behavioral Portfolio Theory	Conceptual framework	Investors create layered portfolios based on goals	Introduces BPT as alternative to MPT
Henriques & Neves (2019)	Investor-centric portfolio construction	Empirical study	Personal goals and preferences shape investment strategies	Supports personalized portfolio approaches
Lin & Tian (2021)	Behavioral anomalies in markets	Empirical/Statistical	Market inefficiencies explained by behavioral factors	Validates behavioral finance over EMH

METHODOLOGY

The present study adopts a conceptual and analytical research design to examine the transition from Modern Portfolio Theory (MPT) to Behavioral Portfolio Construction. The methodology is primarily based on an extensive review and synthesis of existing literature,

focusing on both traditional financial theories and emerging behavioral frameworks. Secondary data has been collected from peer-reviewed journal articles, books, and credible academic sources to ensure the reliability and validity of the analysis. The selected studies span multiple dimensions, including risk-return optimization, investor psychology, market anomalies, and portfolio structuring approaches (Bodnar et al., 2022; Hayes, 2020; Viviani et al., 2023).

The research follows a thematic approach to analyze the literature. Initially, key concepts of MPT such as diversification, efficient frontier, and mean-variance optimization are examined to establish a theoretical baseline (Brzeczek, 2016; Rutterford & Sotiropoulos, 2016a). Subsequently, behavioral finance theories are reviewed to identify deviations from rational decision-making, including biases like overconfidence, loss aversion, and herd behavior (Butt, 2021; Deshpande et al., 2019; Lin & Tian, 2021). This comparative analysis enables the identification of gaps in traditional models and highlights the relevance of behavioral insights in portfolio construction.

The study incorporates a descriptive analysis of secondary time-series data (2011–2021) to illustrate market fluctuations and investor response patterns. The chart-based analysis supports the theoretical arguments by demonstrating real-world deviations from expected rational behavior. The integration of qualitative insights with quantitative trends strengthens the explanatory power of the research. The methodology emphasizes an integrative framework that combines elements of MPT and Behavioral Portfolio Theory (BPT), providing a holistic understanding of portfolio construction in contemporary financial markets (Fulga, 2015; Henriques & Neves, 2019). This approach ensures that both mathematical rigor and behavioral realism are considered in evaluating investment strategies.

DISCUSSION

The findings of this study highlight a clear transition from the traditional assumptions of Modern Portfolio Theory (MPT) toward a more realistic and behaviorally grounded approach to portfolio construction. While MPT provides a strong theoretical framework based on diversification and risk-return optimization, the discussion reveals that its assumptions of rationality and market efficiency are often inconsistent with real-world investor behavior. Empirical and conceptual studies suggest that investors are influenced by cognitive and emotional biases, which significantly affect their financial decisions (Butt, 2021; Deshpande et al., 2019; Lin & Tian, 2021).

The chart depicting portfolio returns from 2011 to 2021 provides practical evidence supporting these theoretical insights. The observed fluctuations in returns over the period indicate that markets do not follow a smooth or predictable path, as often implied by traditional models. For instance, the decline in returns around 2012 and 2015, followed by recovery phases in subsequent years, reflects the cyclical nature of financial markets. These variations can be interpreted as outcomes of investor sentiment, macroeconomic uncertainty, and behavioral reactions such as panic selling during downturns and over-optimism during growth phases. Such patterns challenge the assumption that investors always make rational decisions based on complete information (Mussell, 2018; Oladele & Bradfield, 2018).

The sharp increase in returns observed around 2017 and again toward 2021 can be associated with periods of heightened investor confidence and market optimism. Behavioral finance literature suggests that such phases are often driven by herd behavior and overconfidence, where investors collectively push asset prices beyond their intrinsic values (Alles Rodrigues & Lleo, 2018; Viviani et al., 2023). Conversely, the noticeable dip around 2019 highlights the impact of loss aversion, where investors react more strongly to losses than gains, often leading to abrupt market corrections (Höök et al., 2015; Turcas et al., 2017). These observations reinforce the argument that market movements cannot be fully explained by MPT alone.

The discussion underscores the importance of Behavioral Portfolio Theory (BPT) in addressing these limitations. Unlike MPT, which assumes a single objective of utility maximization, BPT recognizes that investors have multiple, often conflicting goals. The layered portfolio approach suggested by BPT aligns with the observed market behavior, where investors simultaneously seek security and growth. This is particularly relevant in volatile periods, where investors may shift their preferences toward safer assets while still maintaining exposure to higher-risk investments for potential gains (Fulga, 2015; Henriques & Neves, 2019). Another important aspect highlighted in the discussion is the role of bounded rationality and heuristics. Investors operate under constraints of limited information and cognitive capacity, which leads them to rely on simplified decision-making processes. While these heuristics can be efficient, they also introduce systematic biases that influence portfolio outcomes (Goswami et al., 2016; Grishina et al., 2017). The fluctuations observed in the chart can thus be partly attributed to these behavioral tendencies, as investors react differently to similar market conditions based on their perceptions and experiences.

The integration of behavioral insights into portfolio construction also has significant implications for risk management. Traditional measures of risk, such as standard deviation, may not fully capture the psychological impact of market fluctuations. The chart clearly illustrates periods of volatility that may induce emotional stress among investors, leading to suboptimal decisions. Incorporating behavioral factors such as loss aversion and risk perception can help in designing portfolios that are better aligned with investors' emotional tolerance and long-term objectives (Costa & Kwon, 2019; Mefford et al., 2017). Moreover, the discussion highlights the growing relevance of hybrid models that combine the strengths of MPT and behavioral finance. While MPT provides a structured and quantitative foundation, behavioral finance adds depth by accounting for real-world complexities. Studies suggest that such integrative approaches can improve portfolio performance by addressing both mathematical optimization and human behavior (Bačević et al., 2019; Barrot, 2021). The observed return patterns in the chart further support the need for such models, as they demonstrate the dynamic and often unpredictable nature of financial markets.

The discussion emphasizes that the shift from MPT to behavioral portfolio construction is not merely theoretical but is strongly supported by empirical observations. The analysis of return trends from 2011 to 2021 illustrates the limitations of traditional models and the importance of incorporating behavioral insights. By acknowledging the role of psychological factors, bounded rationality, and market dynamics, behavioral portfolio construction offers a more

comprehensive and practical framework for investment decision-making in modern financial markets (Woods, 2018; Simões et al., 2018).

CONCLUSION

The study concludes that the evolution from Modern Portfolio Theory (MPT) to Behavioral Portfolio Construction represents a significant paradigm shift in financial decision-making. While MPT has long served as the cornerstone of investment theory by emphasizing diversification and the optimization of risk and return, its foundational assumptions of rational investors and efficient markets are increasingly challenged by empirical evidence. The growing body of literature indicates that real-world investors do not always behave in a fully rational manner, and their decisions are often influenced by psychological and emotional factors (Hayes, 2020; Bodnar et al., 2022). The findings of this research highlight that behavioral finance provides a more realistic framework for understanding investor behavior and market dynamics. Cognitive biases such as overconfidence, loss aversion, and herd behavior significantly impact investment decisions, often leading to deviations from optimal portfolio choices (Butt, 2021; Deshpande et al., 2019; Lin & Tian, 2021). These behavioral tendencies help explain market anomalies and fluctuations that traditional theories fail to address adequately. As a result, the integration of behavioral insights into portfolio construction enhances the explanatory power of financial models and improves their practical relevance.

Furthermore, the concept of Behavioral Portfolio Theory (BPT) offers a valuable extension to MPT by recognizing that investors have multiple goals and preferences. Unlike the single-objective framework of MPT, BPT adopts a layered approach to portfolio construction, allowing investors to balance risk and return across different segments of their investments (Fulga, 2015; Henriques & Neves, 2019). This approach aligns more closely with actual investor behavior, where individuals simultaneously seek capital preservation and wealth accumulation. It also reflects the importance of personalization in modern investment strategies, where financial decisions are tailored to individual needs and risk tolerance (Mefford et al., 2017; Kim & Lee, 2016). The analysis of return trends from 2011 to 2021 further supports the argument that financial markets are dynamic and influenced by behavioral factors. The observed fluctuations in returns demonstrate that market movements are not solely driven by rational expectations but are also shaped by investor sentiment and external uncertainties. These patterns reinforce the limitations of traditional models and highlight the necessity of incorporating behavioral considerations into portfolio management (Mussell, 2018; Oladele & Bradfield, 2018).

The study emphasizes the importance of adopting a hybrid approach that combines the strengths of both MPT and behavioral finance. While MPT provides a strong quantitative foundation, behavioral finance adds depth by accounting for human behavior and market imperfections. Such an integrative framework enables more robust portfolio construction by addressing both theoretical and practical challenges (Bačević et al., 2019; Barrot, 2021). The incorporation of advanced technologies, such as artificial intelligence and data analytics, further enhances this approach by enabling the identification and mitigation of behavioral biases in investment decisions (Walther & Münster, 2021; Pun & Wang, 2021). The shift from Modern Portfolio Theory to Behavioral Portfolio Construction reflects a broader

transformation in financial thought, moving from idealized assumptions to a more comprehensive and realistic understanding of markets. By integrating psychological insights with quantitative models, this new paradigm offers a more effective framework for portfolio design and management. As financial markets continue to evolve, the adoption of behavioral approaches is likely to play an increasingly important role in improving investment outcomes and aligning strategies with the complexities of human behavior (Woods, 2018; Simões et al., 2018).

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