

## IRRATIONAL MANAGERS AND FIRM PERFORMANCE- A MEDIATING ROLE OF FINANCING DECISIONS.

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### Abstract

Behavioral finance traditionally discusses the irrational investor biases to stock purchase decisions and ignored the strategic role and their psychological biases of senior managers. However, recent literature has provided much attention to the Top Management Team's (TMT) Psychological biases on investment, financing, and dividend decisions. Hence, two important approaches are being studied in line with behavioral finance. The first approach is related to irrational investor bias with rational managers and the second approach is irrational managers with rational investors. This article completely investigates the irrational managers and their corporate decisions, which encompasses CFOs' optimism, overconfidence, and risk-aversion on future firm performance through the mediating effect of financing decisions. The article also reviews prior research and extensive evidence about how psychological biases of CFOs affect various corporate decisions such as investment, financing, acquisitions, the stock option which in-turn affect firm performance. This is a systemic review of literature on behavioral corporate finance where a research gap was found that the majority of the past studies documented CEOs/CFOs' behavioral biases influence either investment decision or financing decision, subsequently not measured firm performance in their model. Therefore, this review paper provides a conceptual model of CFOs' behavioral biases influence firm performance with the mediating effect of financing decisions. This could be the first survey method which analyses the behavioral biases of CFOs in the Sri Lankan context and bring novel contribution to the existing behavioral corporate finance literature. This review paper also shed light on the direction for future research and recommendation for further studies.

**Keywords:** Behavioural Corporate Finance, Behavioural Bias, Irrational Managers, Optimism, Overconfidence, Risk-Aversion

## 1. Introduction

The unprecedented shift in the global market, rapid technological change, and economic transformation have forced the business to work under financial pressure and keep an eye on finance and investment decision to improve the performance of firms. The conventional theory of the firm was based on the present disputed aim to maximize shareholder wealth. However, the present theory of firm suggests that they should increase firm value by optimizing the wealth of their stakeholders (Kalyebara & Islam, 2014; Hamzah & Zulkafli, 2014; Graham, Harvey, & Puri, 2015). As a result, companies globally should therefore require three critical decisions: investment decisions, funding (Financing) decisions, and dividend decisions, and these decisions are directly connected to the company's key objective. Among these, financing decisions are probably one of the hardest decisions in which senior managers try to select the best financing choice to optimize shareholder wealth.

Meanwhile, Senior Managers are required to improve the best financing methods, using either debt or equity, to maximize their firm performance. However, these decisions are not governed by strict technical, economic simulations (Shefrin, 2001). The calculations and implementation are also made on the expertise, skills, experiences, and personality traits of the manager (Bertrand & Schoar, 2003; Kaplan, Klebanov & Sorensen, 2007). Nevertheless, Conventional financial ideology has largely overlooked the role of the manager in decision-making and typically does not take his psychological characteristics into account. Despite advanced technology exist, human errors will continue to occur in many decisions making. Thus, one of the most influential theories of senior executives in strategic management literature is Upper Echelons Theory (UET) developed by Hambrick & Mason (1984). It has served as a catalyst to investigate how executives form their attitudes, decisions, and behaviors in ways that eventually affect the number of firms' outcomes (Abatecola & Cristofaro, 2018; Bromiley & Rau, 2016; Júlio Lobão, 2016; Wang, Holmes, Oh, & Hamilton, 2016).

Hence, executives' backgrounds, experiences, values, psychological attributes, and cognitive frameworks influence a wide range of strategic decisions and firm performance (Sydney Finkelstein, et al., 2009; Wang, Holmes, Oh, & Zhu, 2016). On the other hand, a significant number of scholars document that financing choice is one of the strategic decisions that eventually affects the performance of the firm (Chatterjee & Hambrick, 2007; Carpenter, Geletkanycz, & Sanders, 2004; Barros & da Silveira, 2007; Ben-David, Graham, & Harvey, 2013). An important obstacle to a company's value maximization process through financing decisions is due to behavioral errors managers create due to their cognitive imperfection and emotional influence which represent a systemic bias in decision-making processes (Graham, Harvey & Puri, 2013).

However, the majority of the previous studies were extensively discussed the cognitive-behaviors of senior managers and their choice over financing methods. Heaton's (2002), For example, found that optimistic managers overvalue their business ventures and would want to invest in projects with negative NPV value. This view is supported by Malmandier and Tate (2005) found that CEO overconfidence has a positive correlation with the use of less debt finance. In the same vein, Malmandier and Tate's (2005a) study concludes that managerial overconfidence prefers internal financing to external financing, and CEO with overconfident nature not wish to issue debt than other choices of financing methods.

Unlike Heaton (2002) and Malmandier & Tate (2005; 2005a; 2005b), theoretical work by Hackbarth (2004) argues that optimistic and overconfident managers prefer external finance and use more debt. In the same vein, Yu et al

(2006) argue that overconfident managers have decided to raise debt to equity, particularly in the short term, in China. On the other hand, Gombola and Marciukaityte (2007) claim that managers with less optimistic in psychological nature issue more external equity finance than other managers in the Top Management Team (TMT). However, the investigation from Hacbarth's (2008) shows that managers with optimism or overconfidence do not like to be confined with pecking order theory rather prefer higher debt and issue new debts more often,

Hence, all of the above studies were limited to understand and investigate the behavioral bias of senior managers on the choice financing methods and subsequently ignored to evaluate the future performance of the firm. However, the heterogeneous nature and psychological features of senior managers can influence the decision in the firm, eventually, on the performance of the organization. This incomplete view of the empirical issue poses serious questions in the literature on behavioral corporate finance. Therefore, this study aims to investigate the influence of senior managers' cognitive bias and the future performance of firms. Despite, the fact that an important question needs to be asked if managers choose debt finance or equity finance what will happen to the performance of firms? Hence, this study helps to investigate the hesitation in an empirical setting and bring out the answer to the unsolved problem in the behavioural finance literature. Moreover, no research has approached to study the cognitive bias of senior managers and the mediating effect of debt leverage decisions on future firm performance. This is a considerable omission in the existing literature in traditional finance and behavioural corporate finance.

According to the researcher's understanding, there is a dearth of published research in the Sri Lankan context and this is the first research being conducted to study the influence of managers' behavioral bias on and future firm performance through the mediating effect of financing methods. This would be a novel contribution to the existing literature resulting in new insight on this. Therefore, this study tries to investigate the theories of Psychology, Sociology, economics, Traditional finance, and behavioral finance. Hence, this paper aims, by mediating the financing decision (Choice), to fill a void in the literature of behavioural corporate finance by testing managerial cognitive behaviors (Managerial Optimism, Managerial Overconfidence, and Managerial Risk-Aversion) and company future performance of the firms.

## **2. Literature Review**

Conventional finance theories look deeply at the three vital assumptions that were chronologically discussed and challenged in many empirical setting of finance literature. The first assumption is market agents are perfectly rational, the second assumption is The Efficient Market Hypothesis (EMH) which implies that investors and managers make decisions with all available information. The third assumption is maximizing the market value of a firm which later turned into shareholder wealth maximization. (Pinches, 1982; De Bondt & De Bondt, 1995; Dayananda et al., 2002). The foundation for current corporate finance theories was developed by Modigliani and Miller (1958) and proposed financing decisions are unrelated to the value of the company. However, their proposition was challenged empirically and competing theories were developed by many scholars based on imperfect market conditions, these theories include trade-off, pecking order, market timing, and agency theories.

On the other hand, the above propositions largely focused on a realistic corporate climate, it has been a long debate that the chaotic and unexpected real market phenomena are not discussed in traditional finance theory. As a result, the emergence of behavioral finance was added to the new corporate finance literature. (Tversky & Kahneman, 1974; Heaton, 2002). Hence, It attempts to propose a modern approach to the thought of conventional finance by incorporating various theories from Psychology, Sociology, Economics, Strategic Management, and Finance (Tversky,

Amos & Kahneman, 1986). Subsequently, the two main behavioral financing approaches to the fundamental presumption of rationality in the conventional financial sphere were analyzed in (Baker, Ruback, & Wurgler, 2004; Baker & Wurgler, 2011).

The first approach addresses the investors' decision based on their emotional engagement which makes sense that they are not fully rational. While the second approach spot on the irrational decision made by managers or Top Management Team(TMT) who make firms' strategic decisions are less than fully rational (Baker & Wurgler, 2011; Labao, 2016; Shefrin, 2001; Baker, Ruback, & Wurgler, 2004). Hence, this study, therefore, investigates the senior managers' irrational behavior and biases in financing decisions and future firm performance.

The second approach which deals with the "managerial bias" further assumes that managers have behavioral biases as they table strategic decisions but assume that investors are rational. However, many empirical studies generally neglect the importance of top managers in strategic decisions especially the investment and financial (Fairchild, 2010; Baker & Wurgler, 2011). The emotional nature of individuals sometimes results in heterogeneous psychological features that may have an impact on strategic decisions which ultimately deteriorate the organization's performance (Labao, 2016). Thus, the role of top executives' involvement in the corporate decision was the subject of ongoing debate in the corporate finance literature (Abatecola & Cristofaro, 2018; R. Fairchild, 2010). Hence, Behavioral corporate finance becomes increasingly important (Heaton, 2002; Hackbarth, 2008). The current literature in behavioral finance centers the discussion of optimism, risk aversion, and overconfidence of senior managers and their impact on corporate decision.

However, a growing growing body of literature in behavioral finance empirically examined senior managers' cognitive bias and their impacts on financing decision especially the method of financing as a strategic decision (Malmendier, Tate, & Yan, 2011; Hackbarth, 2008; Graham et al., 2013; Ben-David et al., 2013; Malmendier and Zheng, 2012; Ting, Azizan, & Kweh, 2015; Siswoyo, Mahadwartha, & Sutejo, 2015). However, their studies were limited only to address whether CEOs/CFOs' optimism or overconfidence impacts financial decisions such as financial leverage, financing methods, and financing choice. Subsequently, no study was moved beyond to analyze the performance of firms once the financing decision was made by an optimistic or overconfident CEO/CFO.

Primary work on the role of managerial optimism discussed by Roll (1986), suggests that value-destroying mergers and cover payment for target firms were caused by overconfident executives. Meanwhile, Heaton's (2002) model indicated that preference for internal finance over external financing and the preference for equity over debt relies on managerial overconfidence and optimism which has brought evolutionarily explanation to behavioral finance theory. Moreover, Heaton (2002) further argued that senior managers with an optimistic bias desperately selects a negative NPV value project by overestimating their long term investment project.

On the other hand, Malmendier and Tate (2005) found that overconfident CEOs use less debt financing and endorsed Heaton's (2002) view. Meanwhile, another study of Malmendier's and Tate's (2005a) concludes that managerial overconfidence leads to an internal financing preference to external financing as addressed by (Heaton, 2002). They further found that CEOs with an overconfidence nature are less likely to issue debt finance which they believe is risky than equity finance. Moreover, Malmendier and Tate (2005b) also claim that overconfident CEOs prefer equity

finance to debt finance. On the contrary, Malmendier and Tate (2008) further say that overconfident CEOs are more likely to participate in high-risk investment ventures but less likely to issue debt financing.

Unlike Heaton (2002) and Malmendier & Tate (2005; 2005a; 2005b), theoretical work by Hackbarth (2004) argues that optimistic and overconfident managers positively correlated with a preference for external finance and use more debt. In the same vein, Yu et al (2006) found that overconfident managers in China choose a higher debt-to-equity ratio especially with less maturity debt like short-term debt-to-equity. Contrarily, Gombola, and Marciukaityte (2007) addressed that managers who rely more on debt financing are high optimistic than managers use external equity financing and the finding was consistent with Malmendier and Tate (2005).

However, Hackbarth (2008) documented that Optimistic and/or overconfident managers do not comply with pecking order theory rather they likely to use more debt and issue new debt more frequently which forces them to detain debt funds to increase the firm value. In the same vein, Ben-David, et al (2008) study uncovered that Overconfident CFOs with miscalibration effect prefer more debt finance especially long-term debt, which they believe, would increase firm value than using short-term debt and verify Hackbarth's (2008) prediction. Interestingly, their study empirically tested CFO's behavioral bias as opposed to the usual bias of CEOs and provided a new direction for behavioral corporate finance literature. Similarly, (Baker & Nofsinger, 2010) and Hackbarth (2010) found that optimistic managers likely to use external financing and witness that overconfident managers are not associated with pecking order preference, and they completely against the pecking order theory.

Consistent with Heaton's (2002) model, Malmendier et al., (2011) model concludes that optimistic and overconfident managers likely to use more equity finance or use retained earnings more. In supporting his previous investigation, Malmendier et al., (2011) documented that financial executives' overconfident prefer internal finance over external finance. On the other hand, Chava and Purnanandam (2010) compare the impacts of CEO and CFO's corporate policy risk-taking incentives and show the increased effect on the debt maturity of risk-tolerant CFOs. In the same vein, Marciukaityte and Szewczyk (2011) investigated the managerial over-optimism and discretionary accruals of firms obtaining external finance and found managerial optimism was in line with the use of external finance.

In another study, Wei, Min, and Jiaying (2011) tested the demographic and psychological characteristics of both CEOs and CFOs in association with Upper Echelon Theory (UET). Remarkable findings were uncovered that CEOs who have overconfident are younger, shorter tenure, lower education, and having either a management bachelor's degree. Meanwhile, Malmendier and Zheng (2012) documented that both overconfident CEOs and CFOs are much stronger to issue debt as they feel robust when they access the external capital market. Besides, they compared more of the roles of CEO and CFOs in line with their overconfidence and found that CEOs overconfident alone have a profound impact on decisions on non-financing, including investments, merger, acquisitions, and Research & Development, while overconfidence of CFOs has stronger effects on finance decisions ( debt and equity issuance). This study gives the platform to investigate the behavioral bias of CFOs on financing decisions and provided the cornerstone to behavioral corporate finance as CFOs are the most inevitable elements in strategic decisions especially financing decisions. On the other hand, Malmendier & Zheng's (2012) study also found that CFOs with risk aversion negatively associated with debt finance.

Meanwhile, more recently Graham et al (2013) found that optimism positively correlated with the acquisition, capital structure, and debt maturity decision. They also found that CEOs with high optimism are more apt to use short-term

debt which is in line with Landier and Thesmar's (2009) model provision. Recently, Ting and Azizan (2015 ) investigated the overconfidence of CEOs in the use of debt finance and found that both CEOs overconfident and the use of debt financing choices were substantially correlated positively in the context of Malaysian firms. Whereas, another study by Ting, Lean, Kweh, and Azizan (2016) shows that a significant negative correlation between CEOs overconfidence and corporate finance decisions while government intervention plays a moderating role between CEOs overconfidence and financing decisions.

On the other hand, Bin Xu (2014) found that there was a significant association between managerial overconfidence and leverage and debt maturity decision. His study<sup>1</sup> found that negative overconfidence-leverage relationship. This study is consistent with Heaton (2002) and Malmendier et al (2011). However, study 2 found that overconfidence of senior managers contributes to increased debt maturity, which suggests that overconfident managers use less expensive long-term debt more frequently and this new evidence is consistent with Hackbarth's (2008). Nonetheless, His study three found that managerial overconfident, with regards to small enterprises, leads to a reverse pecking order theory, and this is a remarkable conclusion from his research. Eventually, he concludes that there was significant incremental explanatory power between managers' overconfidence and corporate financing decisions.

In comparison, Eckel, Philip, Catherine, and Grossman (2008) argue that risk-tolerant managers underestimate the liquidity risk of short-term debt and therefore prefer to use short-term debt more frequently. As opposed to CEOs/CFOs overconfidence and optimism, this is a remarkable finding of risk aversion which is another psychological bias of senior managers and this is a contradictory finding against the study of (Ben-David, et al, 2008 and Hackbarth's, 2008). They also underlined that overconfident managers with their degree of risk-tolerant bias underestimate the likelihood of financial loss and issue more debt to their existing project which highlights a positive relationship between risk perception bias and the use of debt and acknowledge trade-off- theory. This prediction was supported by Ben-David et al (2013) and, However, not is inconsistent with the findings of Hackbarth (2010).

In another study Groot, Renes, Segers, and Franses (2015) found that CEOs are generally perceived to be more risk-tolerant than CFOs. However, when it comes to realistic investment scenarios tailored to their personal professional experience, they found that CEOs and CFOs do not significantly differ in their appetite for risk, however, both are more risk-tolerant than non-executives. Hence, senior managers' risk perception bias (risk-tolerant or risk-aversion) more directly affects the financing choice which in turn influences the firm performance or value.

The optimism model by (Baker & Nofsinger, 2010) demonstrates that optimism of senior managers encourages standard pecking ordering preferences to financial decisions. Besides, optimistic managers prefer financing from within-firm over financing from the capital market, assuming that debt is riskier based on their risk perception bias. This model reinterprets the information asymmetry theory of Myers and Majluf (1984) based on the pecking order theory and subsequently match with Heaton (2002) model. On the other hand, Marciukaityte and Szewczyk (2011) investigated the managerial over-optimism and discretionary accruals of firms obtaining external finance and found that it is unlikely managers with over-optimism obtain financing from the capital market. This study is consistent with several empirical models such as (Heaton, 2002; Malmendier et al., 2005; Gombola & Marciukaityte, 2007). Similarly, Malmendier and Zheng (2012), investigated that overconfidence of senior managers impacts corporate decisions and found superlative truth that CFOs overconfidence is the primary concern of financial policies, while CEOs overconfidence alone affects nonfinancial decisions. It uncovers that CFOs are the predominant decision-maker in terms of financing decisions although CEOs' involvement considerably exists. However, the study also showed that both overconfident CEOs and CFOs use even more debt finance as firms have a large financial deficit.

Nevertheless, Malmendier and Zheng (2012) in their study have shown that overconfident CEOs believe in the issue of equity as it is significantly low risk when they access external finance, whereas the overconfident CFOs believe negatively. The results indicated that only firms with overconfident CFOs use less equity financing to offset their finance shortages. However, with regards to investment decisions, their results have no substantial impact on sensitive investment- cash flow by CFO overconfidence. Hence, this study contributed significantly to corporate finance literature that CFOs are also mattered as CEOs concerning the strategic decision-making process especially the investment and financing decisions. As a result, CFOs' psychological bias also affects investment, financing, and dividend decision which eventually impact firm performance.

However, the influence that overconfident CFOs have on corporate financial policies, as seen in findings of Ben-David et al (2013), overconfident CFOs use comparably more long-term debt than short-term debt. This study was not consistent with (Heaton, 2002; Malmendier & Tate, 2005). More recently, Graham et al (2013) demonstrated that CEO's behavioral traits such as optimism and managerial risk-aversion influence corporate decisions. The findings show that the behavioral characteristics of senior executives influence leverage policy, debt maturity, and acquisition activity with some notable findings like significant acquisitions were made by risk-tolerant CEOs, whereas risky short-term debt finance was preferred to use by more optimistic CFOs.

Consistent with the prediction of Landier and Thesmar's (2009) model, Graham et al (2013) study adds significant value to the irrational behavior of CEOs and CFOs in the USA and Other parts of the world. In the same vein, Souissi, Jarboui, & McMillan, (2018) studied CEOs emotional bias and bank performance through the control effect and validated their argument that CEO's optimism has a positive impact on performance through incentive and evaluation systems, while the negative relationship between risk aversion and control systems.

Overall, the above studies highlight that managers' behavioral biases influence financing choices or methods either in the way of debt leverage decision or debt maturity decision. However, largely ignored to measure the firm performance after the measure of the influence of managers' cognitive bias on various corporate decisions. Therefore, the need for further investigation is required on managers' behavioral biases influence financing methods, and subsequently what happened to the firms' future performance.? Therefore, this study tries to propose financing as the mediating factor which affects eventually the firm value, and this could be the new direction for research and bring new insight into behavioral corporate finance.

Similarly, another needed area found to be researched is that majority of the above studies in behavioral corporate finance are focused on the cognitive bias of CEOs. This is because the CEO is always seen as the chief decision-maker of the business (Graham et al., 2013). On the other hand, Ben-David et al (2013) also document that CFO's psychological bias has a significant influence on several strategic decisions, especially capital structure and financing decisions since he comes from finance education. He further demonstrated that the CEO does not alone take corporate decisions, but also judges and includes other top managers, such as the Chief Financial Officer (CFO) or the chief operating officer (COO). However, CEOs share control and make decisions together with other top executives and may not provide complete insight into the role of top executives in strategic decisions (Hambrick & Mason, 1984). Another field of studies grows around top management teams (TMTs) on the extension of Upper Echelon Theory (Carpenter, Geletkanycz, & Sanders, 2004).

In line with the above argument, Malmendier and Zheng (2012) found that personal characteristics of the CFOs are likely to have different impacts on several corporate decisions. Hence, there is a significant omission in the existing studies to investigate CFOs' behavioral bias in corporate decisions both in developed and developing economies. Nonetheless, CFOs are the most inevitable element in financing decisions though CEOs' involvement typically necessary in decision making. This neglected area was also supported by Zheng Hui (2012) who investigated separately and jointly the impact of CEOs' overconfidence and CFOs' overconfidence on various types of corporate decisions. Therefore, a considerable omission and dearth of knowledge in the literature to investigate CFOs' behavioral biases on financing decisions and firm performance. Therefore, this study also posits CFOs' behavioral bias in the Sri Lankan context- listed companies in the Colombo Stock Exchange.

Having critically reviewed the significant number of past studies concerning senior managers' psychological characteristics or cognitive bias. The evidence shows that top executives such as CEOs' and CFOs' cognitive biases like overconfidence, optimism, and risk perception bias influence financing decisions, especially, debt leverage and debt maturity decisions. However, no research evidence has shown that financing decision was taken as the mediating variable that affects future firm performance. Also, a significant number of studies attempt to investigate managerial optimism and overconfidence separately only for analytical purposes. However, psychological and strategic management studies argue that these biases are closely related and are likely to appear jointly (Taylor & Brown, 1988).

Hence, no studies so far documented to investigate senior managers' optimism, overconfidence, and risk aversion in one model that analyses the mediating effect of financing method and firm performance. Therefore, this study investigates three closely related managers' behavioral biases in one model which influence financing decision and firm performance. This could bring a novel contribution to the existing literature in behavioral corporate finance, psychology, and strategic management. However, this study is limited to investigate CFOs' overconfidence, optimism, and risk-aversion with the financing decisions which in turn influence future firm performance. On the other hand, this critical review paper also discovered several shortcomings, contradictions, and research gaps which provide direction for future research abundantly in the literature of behavioral corporate finance.

### **3. Recommendation for future studies**

As literature levied above of the fundamental empirical gap needs to be filled by the appropriate research approach which would eventually deliver a valuable contribution to the existing body of knowledge in line with behavioural corporate finance. Below, we highlight some possible research areas that could be carried out in the future and provide a clear guideline on what issues still need to be resolved in the area of senior executives' psychological behavior in the corporate strategic decision making. This would offer crystal clear recommendations for scholars to move forward with behavioural corporate finance especially senior managers' cognitive bias in the strategic decision. The following are some of the future research.

#### ***Managers cognitive-behavioral bias and firm performance, the mediating role of debt maturity decision.***

The trade-off between short-term debt and long-term debt is a critical evaluation as senior managers intricate in making an investment decision. Managers struggle with choosing the right financing methods as it affects the value of the firm eventually. As they decided to act on debt financing for their potential investment decision, debt maturity decision is of important element which needs to be seriously taken care of. However, a significant number of past studies found that the decision to choose debt financing either short-term debt or long-term debt is primarily influenced by the cognitive/psychological bias such as overconfidence, optimism, and risk-perception bias of



CFOs/CEOs. Meanwhile, (Abatecola, Caputo, & Cristofaro, 2018) in their critique model shift through many variables in Upper Echelon Theory found that the psychological bias of Top Management Team affects the strategic decision making which eventually influences the future performance of the firm. Nonetheless, no research has yet looked into the mediating role of debt maturity decisions between CFOs/CEOs' psychological bias and firm performance. This could be a possible area of future research that will bring a novel contribution to the existing body of literature in line with behavioral corporate finance.

#### ***Managers cognitive-behavioral bias and firm performance, the moderating role of leadership style.***

Leadership style is one of the prominent researchable areas in behavioral corporate finance as it is a psychological process similar to the cognitive behavioural bias of senior managers. Neely, Lovelace, Cowen, & Hiller, (2020) in their model suggested that leadership style affects the performance of the firm through the strategic decision making of the Top Management Team. Similarly, future research could be explored the moderating role of the leadership between CFOs/CEOs' psychological bias and firm performance.

#### ***The moderating role of contextual factors on Managers cognitive-behavioral bias and firm outcome.***

The systematic review of past literature has raised questions over two decades, about contradictory empirical results in the studies of behavioral corporate finance. More recently, the role of contextual factors in moderating the executive's impact on company performance (e.g., Busenbark). The contextual factors consist of corporate governance practice, organizational culture, and differences in Top management team member's backgrounds. To this end, theoretical and empirically defining conditions under which main predictions are supported have been called for further attention. Hence, the moderating role of contextual factors is essential to offer meaningful insights to the practicing managers as they are influenced by the irrational nature of their decision making which eventually impacts the outcome of firms. As a result, this could be the potential future research option in line with behavioral corporate finance.

## **4. Conclusion**

This paper provides a comprehensive literature review of cognitive-behavioral biases of senior managers on the financing methods and firm performance. In terms of the literature review, it was documented that top executives disclose interrelated cognitive-behavioral biases such as optimism, overconfidence, and risk-aversion. These biases influence the decisions of capital budgeting, financing decision, and dividend payout decision. However, this paper critically reviews only the influence of these biases on financing methods. A research gap was found based on the review that firm performance was not measured, subsequently to the decision of financing methods or financing choices that CFOs/CEOs made. Hence, it was concluded as a research gap that decisions of financing methods mediate between senior managers' behavioural biases and firm performance.

## **References**

- Abatecola, G., & Cristofaro, M. (2018). Hambrick and Mason's "Upper Echelons Theory": evolution and open avenues. *Journal of Management History*. <https://doi.org/10.1108/jmh-02-2018-0016>
- Adam, T. R., Burg, V., Scheinert, T., & Streitz, D. (2019). Managerial Biases and Debt Contract Design: The Case of Syndicated Loans. *Management Science*, (1). <https://doi.org/10.1287/mnsc.2018.3165>

- Azouzi, M. A., & Anis, J. (2012). CEO emotional bias and investment decision, Bayesian network method. *Management Science Letters*, 2(4), 1259–1278. <https://doi.org/10.5267/j.msl.2012.02.012>
- Baker, M. P., Ruback, R. S., & Wurgler, J. A. (2004). Behavioral Corporate Finance: A Survey. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.602902>
- Baker, M. P., & Wurgler, J. A. (2011). Behavioral Corporate Finance: An Updated Survey. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1909013>
- Barros, L. A. B. de C., & da Silveira, A. D. M. (2007). Overconfidence, Managerial Optimism and the Determinants of Capital Structure. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.953273>
- Ben-David, I., Graham, J. R., & Harvey, C. R. (2013). Managerial Miscalibration\*. *The Quarterly Journal of Economics*, 128(4), 1547–1584. <https://doi.org/10.1093/qje/qjt023>
- Bukalska, E. (2019). Testing trade-off theory and pecking order theory under managerial overconfidence. *International Journal of Management and Economics*, 0(0). <https://doi.org/10.2478/ijme-2019-0008>
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, Wm. G. (2004). Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition. *Journal of Management*, 30(6), 749–778. <https://doi.org/10.1016/j.jm.2004.06.001>
- Clare, A. D., Seaton, J., Smith, P. N., & Thomas, S. H. (2013). The Trend is Our Friend: Risk Parity, Momentum, and Trend Following in Global Asset Allocation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2265693>
- De Bondt, W. F. M., & De Bondt, D. B. (1995). Chapter 13 Financial decision-making in markets and firms: A behavioral perspective. In *Handbooks in Operations Research and Management Science* (pp. 385–410). [https://doi.org/10.1016/s0927-0507\(05\)80057-x](https://doi.org/10.1016/s0927-0507(05)80057-x)
- Fairchild, R. (2010). Behavioural corporate finance: existing research and future directions. *International Journal of Behavioural Accounting and Finance*, 1(4), 277. <https://doi.org/10.1504/ijbaf.2010.032843>
- Fairchild, R. J. (2012). From behavioural to emotional corporate finance: a new research direction. *International Journal of Behavioural Accounting and Finance*, 3(3/4), 221. <https://doi.org/10.1504/ijbaf.2012.052191>
- Graham, J. R., Harvey, C. R., & Puri, M. (2013). Managerial attitudes and corporate actions. *Journal of Financial Economics*, 109(1), 103–121. <https://doi.org/10.1016/j.jfineco.2013.01.010>
- Graham, J. R., Harvey, C. R., & Puri, M. (2015). Capital allocation and delegation of decision-making authority within firms. *Journal of Financial Economics*, 115(3), 449–470. <https://doi.org/10.1016/j.jfineco.2014.10.011>
- H Kent Baker, & Nofsinger, J. R. (2010). *Behavioral finance : investors, corporations, and markets*. Hoboken, N.J.: Wiley.
- Hackbarth, D. (2008). Managerial Traits and Capital Structure Decisions. *Journal of Financial and Quantitative Analysis*, 43(4), 843–881. <https://doi.org/10.1017/S002210900001437X>
- Heaton, J. B. (2002). Managerial Optimism and Corporate Finance. *Financial Management*, 31(2), 33. <https://doi.org/10.2307/3666221>
- Hvide, H., Lee, J., & Odean, T. (2019). Easy Money, Cheap Talk, or Spuds: Inducing Risk Aversion in Economics Experiments. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3433380>
- Júlio Lobão. (2016). *Behavioural Corporate Finance*. Newcastle Upon Tyne: Cambridge Scholars Publishing.
- Legesse, T. S., & Guo, H. (2020). Does firm efficiency matter for debt financing decisions? Evidence from the biggest manufacturing countries. *Journal of Applied Economics*, 23(1), 106–128. <https://doi.org/10.1080/15140326.2020.1711591>
- Lin, Y., Hu, S., & Chen, M. (2008). Testing pecking order prediction from the viewpoint of managerial optimism: Some empirical evidence from Taiwan. *Pacific-Basin Finance Journal*, 16(1–2), 160–181. <https://doi.org/10.1016/j.pacfin.2007.04.007>

- Liu, D., Fisher, G., & Chen, G. (2018). CEO Attributes and Firm Performance: A Sequential Mediation Process Model. *Academy of Management Annals*, 12(2), 789–816. <https://doi.org/10.5465/annals.2016.0031>
- Maditinos, D., Tsinani, A., Sevic, Z., & Stankeviciene, J. (2019). Financially Constrained Firms: The Impact of Managerial Optimism and Diversification on Firms' Excess Value: The Case of Greece. *EUROPEAN RESEARCH STUDIES JOURNAL*, XXII(Issue 1), 3–15. <https://doi.org/10.35808/ersj/1405>
- Malmendier, U., Tate, G., & Yan, J. (2011). Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies. *The Journal of Finance*, 66(5), 1687–1733. <https://doi.org/10.1111/j.1540-6261.2011.01685.x>
- Memarista, G. (2016). Managerial Optimism and Debt Financing: Case Study On Indonesia Manufacturing Listed Firms. *Jurnal Keuangan Dan Perbankan*, 20(3). <https://doi.org/10.26905/jkdp.v20i3.257>
- Neely, B. H., Lovelace, J. B., Cowen, A. P., & Hiller, N. J. (2020). Metacritiques of Upper Echelons Theory: Verdicts and Recommendations for Future Research. *Journal of Management*, 014920632090864. <https://doi.org/10.1177/0149206320908640>
- Odean, T. (1998). Volume, Volatility, Price, and Profit When All Traders Are Above Average. *The Journal of Finance*, 53(6), 1887–1934. <https://doi.org/10.1111/0022-1082.00078>
- Pinches, G. E. (1982). Myopia, Capital Budgeting and Decision Making. *Financial Management*, 11(3), 6. <https://doi.org/10.2307/3664993>
- R. McMahon. (2016). Behavioural Finance, entrepreneurial cognition and SME financial management. Retrieved September 29, 2020, from undefined website: <https://www.semanticscholar.org/paper/Behavioural-Finance%2C-entrepreneurial-cognition-and-Mcmahon/04789af32337607bcf43ba556bce1a3b6324150e>
- Roll, R. (1986). The Hubris Hypothesis of Corporate Takeovers. *The Journal of Business*, 59(2), 197. <https://doi.org/10.1086/296325>
- Ross, M. L. (2016). Restraining Overconfident CEOs through Improved Governance: Evidence from the Sarbanes-Oxley Act. *CFA Digest*. <https://doi.org/10.2469/dig.v46.n5.14>
- Shefrin, H. (2001). BEHAVIORAL CORPORATE FINANCE. *Journal of Applied Corporate Finance*, 14(3), 113–126. <https://doi.org/10.1111/j.1745-6622.2001.tb00443.x>
- Siswoyo, E., Mahadwartha, P. A., & Sutejo, B. S. (2015). THE EFFECT OF MANAGERIAL OVERCONFIDENCE ON CORPORATE FINANCING DECISION. *Journal of Management and Business*, 14(2). <https://doi.org/10.24123/jmb.v14i2.324>
- Souissi, Y., Jarbou, A., & McMillan, D. (2018). Does CEO emotional bias affect performance? *Cogent Economics & Finance*, 6(1), 1453452. <https://doi.org/10.1080/23322039.2018.1453452>
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193–210. <https://doi.org/10.1037/0033-2909.103.2.193>
- Tekin, B. (2019). The Factors Affecting Capital Structure: A Panel Data Analysis in the Context of Behavioural Corporate Finance. *Sosyoekonomi*, 145–162. <https://doi.org/10.17233/sosyoekonomi.2019.04.08>
- Tekin, B. (2019). The Factors Affecting Capital Structure: A Panel Data Analysis in the Context of Behavioural Corporate Finance. *Sosyoekonomi*, 145–162. <https://doi.org/10.17233/sosyoekonomi.2019.04.08>
- Ting, I. W. K., Azizan, N. A. B., & Kweh, Q. L. (2015). Upper Echelon Theory Revisited: The Relationship between CEO Personal Characteristics and Financial Leverage Decision. *Procedia - Social and Behavioral Sciences*, 195, 686–694. <https://doi.org/10.1016/j.sbspro.2015.06.276>
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>

- Tversky, Amos, & Kahneman, D. (1986). Rational Choice and the Framing of Decisions. *The Journal of Business*, 59(S4), S251. <https://doi.org/10.1086/296365>
- Wang, G., Holmes, R. M., Oh, I.-S., & Zhu, W. (2016). Do CEOs Matter to Firm Strategic Actions and Firm Performance? A Meta-Analytic Investigation Based on Upper Echelons Theory. *Personnel Psychology*, 69(4), 775–862. <https://doi.org/10.1111/peps.12140>