


Review

Addressing Managerial Loss Aversion for the Corporate Value Creation Process: A Critical Analysis of the Literature and Preliminary Approaches

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Abstract: To date, the studies on managerial loss aversion have produced contradictory findings, making it impossible to: (i) identify the ultimate impact of managerial loss aversion on the value that organisations create for themselves and for their stakeholders, and (ii) mitigate the effect of managerial loss aversion to improve corporate value creation. With the aim of filling this gap, the authors of this paper first performed a Systematic Literature Review (SLR), resulting in 65 relevant papers. The 65 papers were then analysed through a Thematic Analysis (TA), which was aimed at isolating and revising the single effects of managerial loss aversion on the corporate value creation process. Once it became clear when and how managerial loss aversion leads to negative impacts on corporate value creation (such as suboptimal investments in corporate social responsibility, short-term-oriented budget expenditures, illegal corporate conduct in favourable contexts, and low demand for audit quality), a novel theoretical framework was built. This framework proposes some preliminary approaches to mitigate these detrimental effects. In particular, future empirical research may operationalise potential debiasing strategies, derived from critical analysis of the literature, to reduce managerial loss aversion in different business settings, thereby improving corporate value creation.



Citation: Camilli, Riccardo, Alessandro Mechelli, Alessandra Stefanoni, and Fabrizio Rossi. 2024. Addressing Managerial Loss Aversion for the Corporate Value Creation Process: A Critical Analysis of the Literature and Preliminary Approaches. *Administrative Sciences* 14: 5. <https://doi.org/10.3390/admsci14010005>

Received: 19 October 2023
Revised: 15 December 2023
Accepted: 19 December 2023
Published: 21 December 2023



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Keywords: managers; loss aversion; managerial loss aversion; corporate value creation process; systematic literature review

1. Introduction

Loss aversion, widely understood as greater sensitivity to losses compared to corresponding gains (Tversky and Kahneman 1991), has undergone extensive examination for its impact on managerial decision making (Novemsky and Kahneman 2005). Indeed, the effects of managers' loss aversion have been a focal point in various studies within the business domain (Devers et al. 2007; Margarita et al. 2015) due to the pivotal role that managers play in formulating judgments and decisions within corporate contexts (Alessandri et al. 2018). In this context, managerial figures have emerged as particularly suitable subjects for empirical analyses, primarily conducted through laboratory behavioural experiments focusing on loss aversion (Rubin et al. 2018). Among various aspects, managerial loss aversion is examined as a potential major precursor to the principal-agent contrast (Willman et al. 2002) as well as a pivotal factor in shaping the negotiation of their contractual terms and remuneration structure (Dodonova and Khoroshilov 2006). Thus, while acknowledging the relevance of other business actors in the corporate ecosystem, the literature on loss aversion has focused primarily on its impact on the Judgment and Decision-Making (JDM) processes of managers.

However, studies on managerial loss aversion yield conflicting findings that hinder the determination of its ultimate impact on the value generated by companies. Indeed, some view loss aversion as a human bias with significant adverse effects on corporate

activities. Some examples of adverse effects generated by managerial loss aversion on corporate activities are (i) an inability to proactively respond to environmental changes (Tversky and Kahneman 1991); (ii) a short-term vision that discourages corporate social responsibility initiatives (Shavit and Adam 2011); and (iii) a tendency to adopt illegal conduct to solve critical issues for the business (Mishina et al. 2010). On the other hand, several important studies exposed a doubtful, neutral or even positive impact of managerial loss aversion on corporate activities. Some examples of the non-negative effects generated by managerial loss aversion on corporate activities are (i) the search for profitable R&D opportunities under some conditions (Chen 2008); (ii) the pursuit of commercialisation alliances (Markovitch et al. 2005); and (iii) the tendency to business model adaptability under threatening market environments (Saebi et al. 2017). This contradiction is even more relevant when considering that it is not limited to business literature. In fact, the doubts about antecedents and the effects of loss aversion, as the latter is a cognitive distortion that influences a wide array of human decisions, are also examined by an authoritative part of the psychological literature (e.g., Rick 2011; Yechiam 2019).

Given the contradictions present in the business and general literature regarding the effects of managerial loss aversion on corporate activities, it appears impossible to clearly determine the role of managerial loss aversion on the whole value created by organisations. In this sense, corporate value is the utility or wealth created for the company itself and for its stakeholders (Cavaliere and Franceschi 2010; Marr et al. 2004). Hence, the concept of value creation considered in this paper includes a larger range of corporate results to be assessed, ranging from financial, environmental, organisational and sustainable (Low 2000), which have not yet been jointly studied under the effect of managerial loss aversion.

In summary, the authors perceive that there are limited and perplexing findings regarding the definitive role of managerial loss aversion in the corporate value creation process. The contradictory findings discussed in the literature thus far motivate our analysis. Consequently, a clear depiction of the role of managerial loss aversion in the corporate value creation process is both absent and desirable. Indeed, due to the lack of a picture on the effects of managerial loss aversion, it is impossible for researchers and practitioners to understand: (i) when and how managerial loss aversion produces detrimental effects on corporate value creation; and, thus, (ii) when and how managerial loss aversion should be mitigated. Moreover, to guide future academics' efforts towards understanding when and how managerial loss aversion should be mitigated, an innovative and comprehensive theoretical framework, based on the findings on managerial loss aversion and debiasing strategies, should be provided.

In light of these premises, the authors focused on two research questions:

(Rq1) What are the effects of managerial loss aversion on the corporate value creation process?

(Rq2) What are the potential debiasing strategies to be operationalised to mitigate managerial loss aversion?

To answer these research questions, the authors performed a Systematic Literature Review (SLR), resulting in 65 high-quality papers. After presenting the descriptive statistics of the 65 papers, the authors scrutinised the relevant literature by means of a Thematic Analysis (TA) to isolate and revise the single effects of managerial loss aversion on the corporate value creation process (Rq1). The single effects of managerial loss aversion on the corporate value creation process have been analysed through the factors that, according to authoritative studies, lead and allow value creation by companies. The findings of the descriptive and thematic analysis contribute to the existing literature by drawing on the state-of-the-art literature on managerial loss aversion and its effect on the corporate value creation process. On the basis of the findings emerging from the TA, the authors were able to explain how future researchers should work to mitigate managerial loss aversion to improve the corporate value creation process (Rq2). The authors present a novel theoretical framework, graphically illustrated, that outlines the adverse impact of managerial loss aversion on the process of corporate value creation. Additionally, the theoretical framework offers potential debiasing strategies for future empirical research, motivated by the gaps

and opportunities the authors identified through analysis of the literature, which could be operationalised in different business settings. The operationalisation of these preliminary approaches moves towards mitigating managerial loss aversion in its detrimental effects, ultimately enhancing the process of corporate value creation.

2. Key Concepts Used in the Paper

The field of economic sciences does not regard agents' behaviours as entirely rational (Kahneman et al. 1991). Business agents' rationality is notably constrained (Simon 1991) due to numerous cognitive distortions influencing their decisions (Cristofaro 2017; Cristofaro et al. 2023; Hristov et al. 2022). Among these distortions, the Judgment and Decision Making (JDM) literature focuses extensively on loss aversion (Schmidt and Zank 2005). Loss aversion, articulated by Tversky and Kahneman (1991, p. 1047), stems from the inclination to magnify losses over equivalent gains, which are deeply ingrained in human psychological mechanisms.

Thaler (1980) originally formulated the concept of loss aversion, highlighting that the perceived value of a received good is smaller than an equivalent good lost, which is called the endowment effect. This concept underwent substantial exploration and validation through subsequent experiments (Engelmann and Hollard 2010), while the formalisation of loss aversion came through the works of Kahneman et al. (1990) and Tversky and Kahneman (1991), focusing more on the reluctance to lose an item than the eagerness to acquire one.

Following such formalisation, numerous experiments delved into human sensitivity to the values of lost and received items, revealing unexpected instances of loss aversion, even for goods never owned, but merely considered as alternatives in decision making (Carmon et al. 2003). Several studies even explored factors that amplify or diminish loss aversion. For instance, Strahilevitz and Loewenstein (1998) demonstrated that loss aversion intensifies with longer ownership duration, while Wicker et al. (2001) suggested that allocating a smaller portion of a fixed sum for essentials reduces loss aversion, hinting at the mitigation of this bias with available disposable resources. Certain studies also probed factors capable of eliminating loss aversion. For example, Lerner et al. (2004) observed specific goods or induced emotions just before assessing value, which seemed to eradicate loss aversion, highlighting the intricate conditions influencing this cognitive bias.

Nevertheless, it is proper to highlight here that, despite various efforts, the complete eradication of individuals' loss aversion seems nearly unattainable through an authoritative stream of literature; this is due to the deeply embedded nature of loss aversion in decision-making processes (Kahneman 2011). Also, neuroscientific studies that use fMRI have shown the brain's emotional centres, like the amygdala, respond more strongly to potential losses than to equivalent gains. Thus, this emotional response is difficult to override through reasoning or logic alone (Tobler and Weber 2014).

Understanding loss aversion remains crucial for future business studies owing to its significant impact on economic decision making (Li et al. 2021). This cognitive bias profoundly influences corporate decisions, such as investments, resource allocation and performance evaluation. Investigating loss aversion provides insights into how individuals within organisations perceive risk, make trade-offs and manage uncertainty (Song et al. 2017). Unravelling loss aversion mechanisms aids in devising more effective interventions, guiding policymakers and formulating strategies that acknowledge this inherent bias, ultimately fostering more informed and rational corporate decision making.

3. Research Methodology

3.1. Research Design

This paper primarily aims to understand the effects of managerial loss aversion on the corporate value creation process (Rq1). The authors initiated the investigation by conducting a Systematic Literature Review (SLR) of existing studies on this subject. This choice was motivated by its replicable design and its capacity to connect forthcoming

research with prior inquiries (Tranfield et al. 2003). Indeed, the SLR is recommended for exploring extensively researched topics (Dekkers et al. 2013; Fink 2019), such as loss aversion, particularly in identifying independent and dependent variables (Edmondson and McManus 2007). This exploration aims to encompass factors related to managers' loss aversion and their impact on corporate value creation.

The SLR provided the authors with 65 papers, from which a descriptive analysis was produced to understand the literature trends on the topic over time and space. A Thematic Analysis (TA) (Braun and Clarke 2012) was performed on the text data of the 65 papers, with the aim of having a clear view of the effect of managers' loss aversion on the corporate value creation process (Rq1). Consequently, a picture of the phenomenon was instrumental in identifying when managerial loss aversion harms corporate value creation and, thus, needs to be mitigated (Rq2). Notably, a comparable research approach employing SLR and TA to construct a theoretical framework was effectively employed and detailed by Clark et al. (2019).

To offer a clear view of the methodological procedure of this paper, the data collection and data analysis are separately described in Sections 3.2 and 3.3.

3.2. Data Collection

The data collection procedure was specifically tailored to extract pertinent information aligned with the research objectives. The selection of papers was conducted following the guidelines outlined in the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses" (PRISMA) protocol (Moher et al. 2009), chosen for its established replicability and widespread adoption in acknowledged Systematic Literature Reviews (SLRs) (Tam et al. 2017). The entire methodological process is delineated in Figure 1, spanning from the initial selection of databases to the culmination of the final sample of 65 papers.

According to the orderly procedure described by Moher et al. (2009), the SLR reaches the final sample of papers through the following steps:

1. The primary database selected for gathering papers was Scopus, chosen due to its comprehensive coverage of papers and peer-reviewed journals (Yong-Hak 2013). Previous relevant studies have also favoured Scopus over other databases (Verma et al. 2021), which has been utilised for SLRs pertaining to this topic (Hristov et al. 2021).
2. The first research question (Rq1) facilitated the selection of keywords to initiate the procedure. Consequently, this keyword encapsulated the central concept addressed in this paper: "loss aversion". The chosen papers included "loss aversion" among the authors' designated keywords. Upon completion of the identification phase, a total of 1575 papers were identified.
3. To ensure a cohesive and pertinent final sample of papers, specific filters were applied to the database for the selection of eligible contributions. Only English papers published in the fields of Business Management and Accounting, rated (i.e., 1, 2, 3, 4, or 4*) by the Academic Journal Guide 2021, were included. This approach aimed to exclude non-authoritative papers, book chapters, doctoral theses and the entirety of grey literature, thereby ensuring a high level of analysis. Similar selective procedures have been previously employed in prominent literature reviews (Hoque 2014).
4. To conclude the eligibility phase, the authors collaborated to assess the alignment of the chosen papers with the research objectives. Consequently, the authors thoroughly reviewed all the papers, and the final sample incorporated those contributions that addressed the topic of managers' loss aversion and its impact on the corporate value creation process within any given organisation. A significant number of papers were excluded as they solely examined loss aversion in individuals from the perspective of customer preferences or personal finance, without considering the corporate viewpoint. At the conclusion of the eligibility phase, 63 papers were ultimately selected.
5. In order to ensure a comprehensive analysis and prevent inadvertent loss of critical data, the authors employed the snowballing technique. This method led to the

identification of two additional contributions, resulting in a definitive sample of 65 papers.

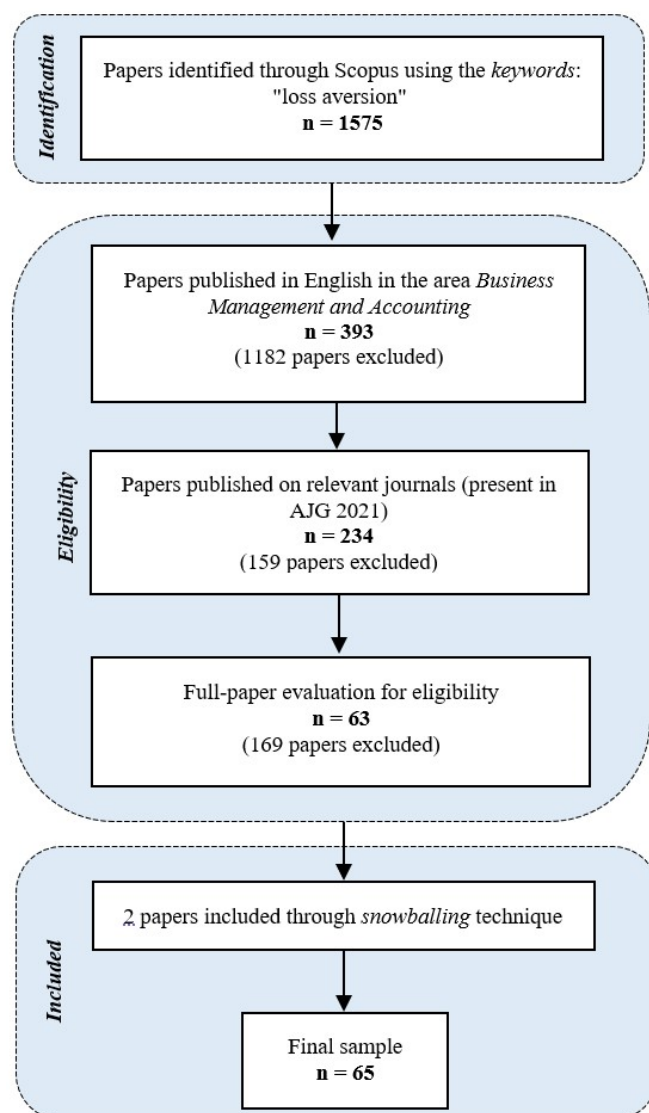


Figure 1. PRISMA protocol adopted for reporting the SLR process.

3.3. Data Analysis

To ensure a complete view of the topic, the authors analysed both the descriptive characteristics as well as the contents of the final sample of 65 papers.

Firstly, to comprehend the specific temporal dimensions pertinent to the research focus on the impact of managerial loss aversion on the corporate value creation process, the authors conducted a quantitative analysis encompassing several facets: the number of contributions and citations, publication journals, authors' countries and primary topics. Additionally, in order to gain deeper insights into the types of studies undertaken to evaluate the effects of managers' loss aversion on the corporate value creation process, the authors scrutinised the methodologies employed to address specific research objectives. Section 4.1 presents the descriptive characteristics of the 65-paper sample.

Secondly, the authors performed a Thematic Analysis (TA) (Braun and Clarke 2012) of the 65 papers collected through the SLR by following the procedural path for qualitative data described by Yin (2015), which is reinterpreted as follows:

1. The papers were read and the textual data, which were relevant to answer the research questions, were reported in a usable form.
2. Textual data were disassembled in “codes”—defined as “the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon” (Boyatzis 1998, p. 63)—concerning corporate value creation factors affected by managerial loss aversion. In this sense, the corporate value created is widely intended as utility or wealth created for the company itself and for the entire category of stakeholders (Cavaliere and Franceschi 2010). In the same logic, corporate value creation factors are all those activities, undertaken as a company, which improve the final value created as well as the conditions in which the company is placed to create this value (Amit and Zott 2001). Specifically, to define codes, a mixed deductive-inductive approach was followed as the authors retrieved factors from the literature reviewed while ensuring that such factors were included in both the frameworks of value creation metrics (Low 2000, pp. 254–55) and corporate value creation assets (Marr et al. 2004, p. 317).
3. A thematic map was depicted to draw and explain findings. In particular, the thematic map shows the incremental and decremental effects of managerial loss aversion on corporate value creation factors, and thus on value creation itself.

The findings of the TA are reported in Section 4.2 by means of the thematic map.

4. Research Findings

4.1. Descriptive Characteristics

With the aim of providing readers with quantitative expressions of literature trends (Harwood and Garry 2003) about managerial loss aversion on corporate value creation, the authors report the outputs of the descriptive analysis of the 65 papers reviewed. Specifically, this analysis evaluates the focus of research on this topic through several lenses: the frequency of publications and citations over time (refer to Figure 2), a comprehensive overview encompassing authors’ nationalities, keywords, and sources of contributions (refer to Figure 3) and a combined depiction of research objectives and methodologies (refer to Figure 4). These analyses aim to elucidate how prior research has assessed the effects of managerial loss aversion on the corporate value creation process.

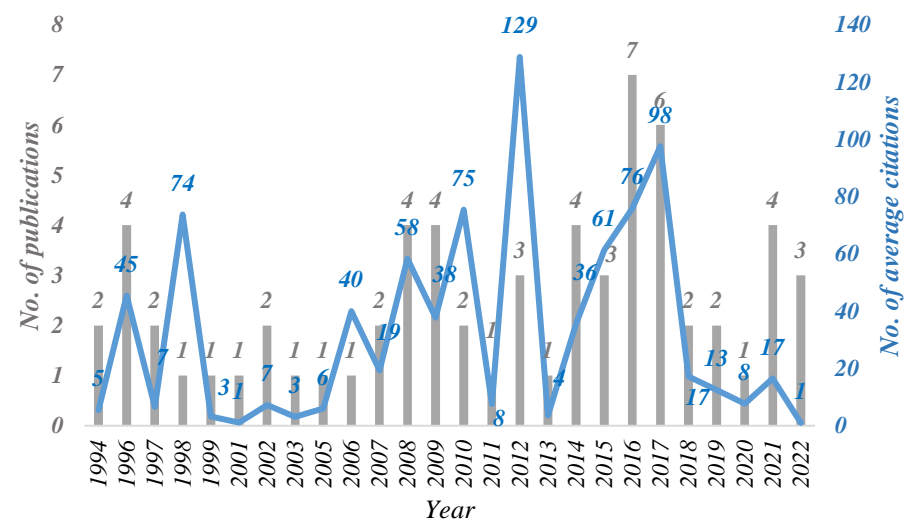


Figure 2. Contributions on managerial loss aversion over the years.

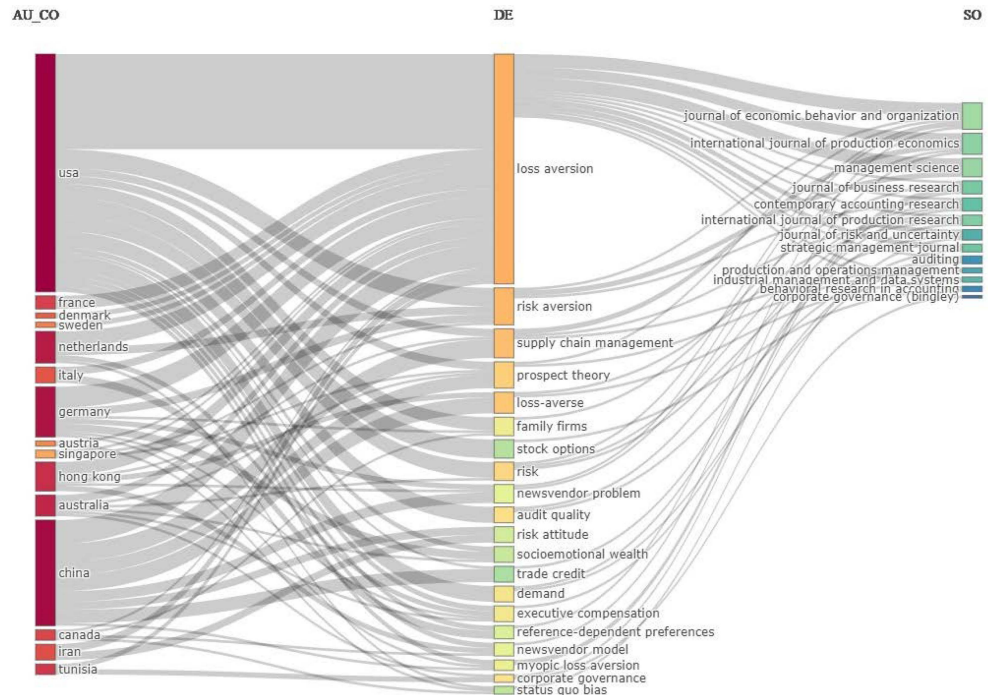


Figure 3. Three-field plot of authors' nationality-authors' keywords-source of contributions.

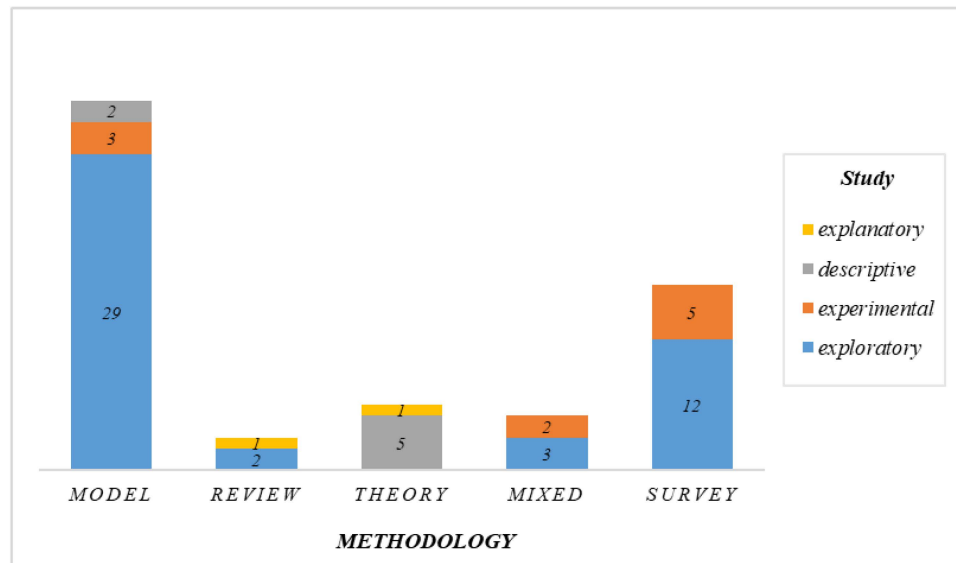


Figure 4. Methodologies and studies of contributions.

Examining the temporal distribution of papers reveals more than just a consistent upward trajectory in research interest regarding the topic. Figure 2 illustrates the initial emergence of significant discussions concerning managerial loss aversion in corporate value creation during the 1990s. These early discussions anchored loss aversion within fundamental management accounting judgments and decision-making contexts such as budgeting (Lee 1994) and the recovery of sunk costs (Schaubroeck and Davis 1994). By 2016, there was a peak in the annual number of publications (7), with several studies investigating the principal-agent relationship, specifically focusing on the impact of agents' loss aversion on business performance when control mechanisms are inadequate (Grolleau et al. 2016; Marchegiani et al. 2016). Moreover, Figure 2 demonstrates a similar trend in the average citations per year. However, the pinnacle of citations attained by Chrisman and

Patel (2012) underlines the considerable influence of managers' loss aversion on decisions related to investment in research and development (R&D).

In Figure 3, the authors present a comprehensive depiction of authors' nationalities, keywords and sources of contributions using a three-field plot generated via Biblioshiny (Aria and Cuccurullo 2017), specialised software employed for quantitatively synthesizing research streams (utilised in other authoritative business studies, such as Sahoo 2022). While the examination of connections between loss aversion and cultural aspects tied to nationality falls beyond the scope of this study, intriguing implications arise from the chart. Notably, the predominance of US authors across various topics is evident, whereas Chinese authors play a significant role in exploring the influence of managerial loss aversion in corporate decision making within supply chain management. This work has notably been published in field journals like the International Journal of Production Research (Li et al. 2022). Moreover, the concentration of US authors on the study of managerial loss aversion is notably pronounced in the context of family firms. Several studies, featured in top management journals such as the Academy of Management Journal and the Journal of Management Studies, have delved into the impact of loss aversion among managers in family firms, particularly concerning R&D investment decisions (Chrisman and Patel 2012; Fang et al. 2021).

The SLR analysed papers that investigated the impact of managerial loss aversion on corporate value creation. Following Scapens' (1990) categorisation of studies, this relationship can be explored, explained, described and even experimented upon. To achieve the objectives of these studies, the most suitable methodology is selected from various options, including models, case studies, theories, reviews and surveys, or a combination thereof. Figure 4 illustrates that a majority of the reviewed papers (34 out of 65) utilised quantitative models, primarily fed with secondary data sourced from existing datasets, to examine the effects of managerial loss aversion on corporate value creation across different scenarios (Wang and Webster 2007). However, acknowledging the significance of primary data obtained through direct observations of managerial decisions (Taleb 2007), several papers surveyed individuals for exploratory purposes. These analyses focused on diverse setups such as managers' loss aversion and its association with outsourcing (Jain and Thietart 2013). Lastly, as expected when investigating behavioural aspects of managerial decisions, a few papers employed reviews (Hoskisson et al. 2017) and theories (Shoham and Fiegenbaum 1999) as methodologies.

4.2. Thematic Map

In Figure 5, the authors present the outcomes of the Thematic Analysis (TA) conducted on the content of the 65 papers. The thematic map provides a graphical synthesis and interpretation of the impacts of managers' loss aversion on factors contributing to corporate value creation, as derived from the literature (Rq1). Managerial loss aversion stands as the sole theme of the analysis (depicted as a white oval), while corporate value creation factors are denoted by codes (represented as blue ovals). The directional arrows signify the effects—either incremental or decremental—of managerial loss aversion on these corporate value creation factors. The authors treated managerial loss aversion as an independent variable, representing its influence on corporate value creation factors, which, in turn, are considered dependent variables. These effects are categorised into two distinct types: incremental and decremental. Incremental effects denote an elevation in the intensity of specific factors, consequently contributing to an increase in the value created by the company, attributed to managers' loss aversion. Conversely, decremental effects indicate a reduction in the intensity of certain factors, thereby diminishing the value created by the company due to managers' loss aversion.

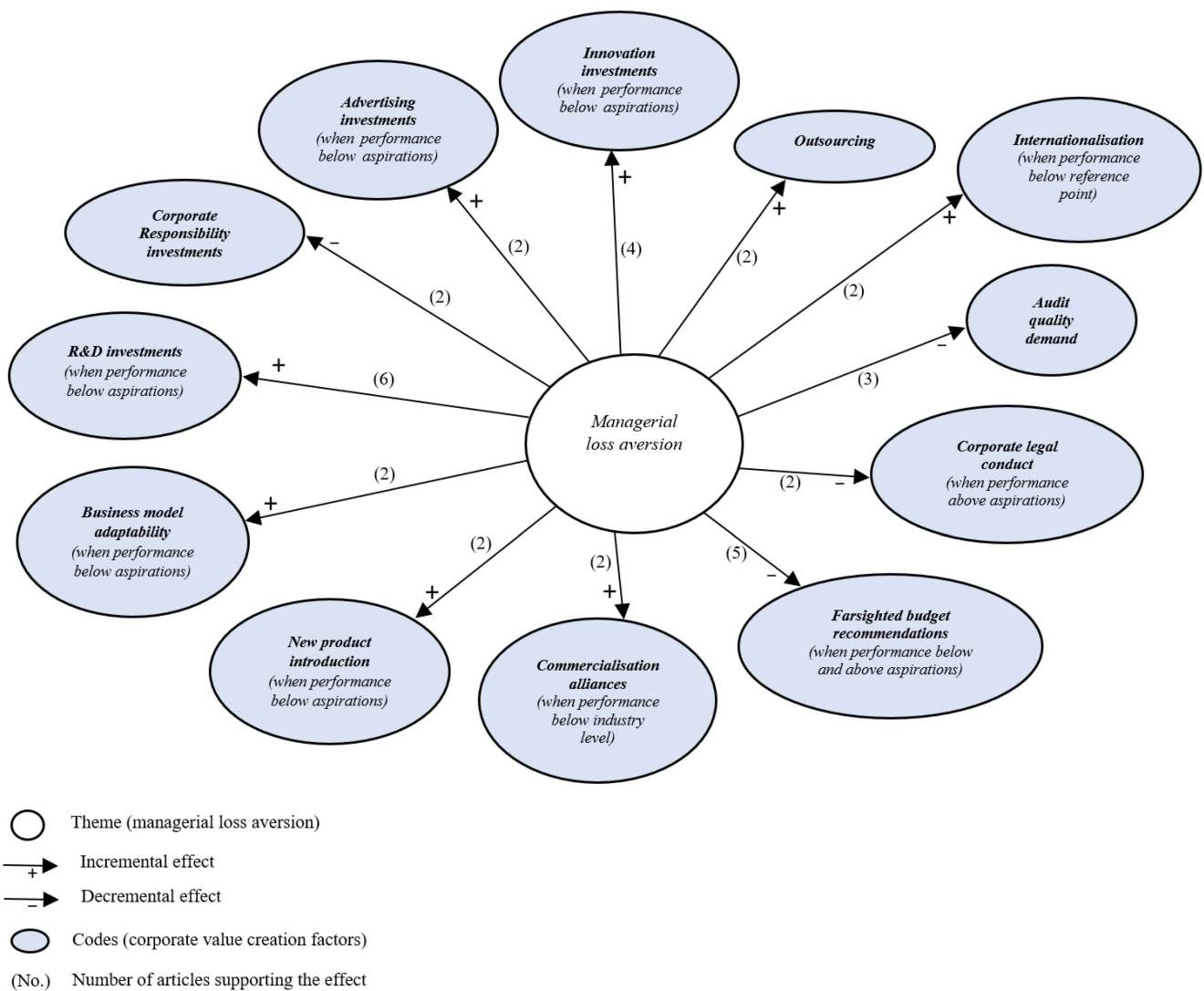


Figure 5. Thematic map of relevant contributions on managerial loss aversion.

To provide a quantitative assessment of the impact of managerial loss aversion on the associated corporate value creation factor, the authors have indicated, within parentheses, the number of articles that endorse this effect among those reviewed. It is important to note, however, that the total count of supportive papers does not correspond to the overall number of articles reviewed (65). This discrepancy arises because certain reviewed articles address effects that, while generally pertinent to addressing the research inquiries, are not directly attributable to specific corporate value creation factors. For instance, some articles highlight scenarios where loss-averse managers prompt general risk-taking initiatives within corporations when performances fall below the reference point, though not specifically tied to distinct value creation factors.

In line with the assumptions of prospect theory (Chou et al. 2009), managers generally take more risky decisions when current corporate performances stand below the reference point (Shoham and Fiegenbaum 1999; Dittmann et al. 2011; Hoskisson et al. 2017). As a consequence, several implications on resource allocation emerge. Firstly, with the aim of avoiding occurring losses, firms increase their search for R&D opportunities (Chen 2008). In this view, the case of family firms is particularly interesting. Indeed, despite family firms often reporting a lower degree of R&D investments in comparison to non-family firms (Chrisman and Patel 2012), in the case of financial performance below aspirations, family firms emergently react to recover through higher levels of R&D investments (Fang et al. 2021). Secondly, similar conduct is found in innovation and advertising spending.

Indeed, in scenarios of low corporate performances, innovation spending is sustained by loss-averse managers, especially those demonstrating low levels of ownership (Latham and Braun 2009), as well as administrators carry out advertising campaigns (Lee 1994). Thirdly, an effect that can be definitively negative for corporate value creation is that generated by myopic loss aversion, which occurs when reducing investments in corporate social responsibility due to overweighting of short-term over long-term outputs, thus generating a complex negative effect on a firm's long-term value (Shavit and Adam 2011). Fourthly, when allocating company resources through budget recommendations, managers tend to select a risky and/or disruptive option, coinciding with imminent increases in budget expenditure (Litton 2023) when options are framed in terms of loss. The issue is that loss-averse managers were found to propose investments that were unbalanced to maximise short-term profits, even in a gain context (Ho and Vera-Muñoz 2001). Definitively, it is recognised that, both in favourable and unfavourable scenarios, loss-averse managers might drive companies towards an unbalanced allocation rather than farsighted budget plans, potentially leading to the detriment of a firm's long-term value.

An effect that can be defined as negative for value created by the firm is that which managerial loss aversion may produce on the implementation of illegal corporate activities. In this regard, Mishina et al. (2010) suggested that loss aversion, in combination with other behavioural and psychological factors, may motivate top managers of high performing firms to breach the regulations with the aim of maintaining the preferential position. Another proven negative effect for corporate value creation is played by managerial loss aversion in the phase of choosing auditors. In practice, the loss aversion affects managers who, afraid of receiving severe and negative audit reports, lower audit quality demand (Hurley and Mayhew 2019; Hurley et al. 2021).

The case of corporate internationalisation emerged as particularly interesting in the study of managerial loss aversion. Indeed, for deciding on commercialisation alliances, managers set the reference point on the median industry performance level. Consistent with findings presented so far, commercialisation alliances are preferred by firms performing below the median industry performance level (Markovitch et al. 2005). Similarly, loss aversion sentiment can also discourage managers from embracing their own propositions and assume prudential attitude. For instance, to avoid supposed losses connected to in-house production, outsourcing solutions are usually preferred (Jain and Thietart 2013). Thus, prospect theory is effective in explaining corporate internationalisation practices as managers push to internationalise firms mostly in cases of performances below their reference point (Jung and Bansal 2009).

5. Theoretical Framework to Address Managerial Loss Aversion

In this section, the authors aim to provide preliminary guidance, especially for academics, to mitigate the detrimental effects of managerial loss aversion through debiasing strategies. Indeed, on the basis of the gaps and the opportunities that emerged from the analysis of the literature, some potential debiasing strategies are delineated, which can be operationalised by future empirical research in different business settings (Rq2), with the ultimate objective of enhancing corporate value creation. In this vein, the authors draw inspiration from Bonner's (1999) theoretical framework. Originally intended for the examination and correction of professional Judgment and Decision-Making (JDM) tasks within accounting scenarios, this framework has been reinterpreted and is presented in Figure 6.

The first part of the framework (contained within the dotted grey line) reports the four JDM scenarios (specified as Person, Task and Environment) where managerial loss aversion generates negative effects on corporate value creation factors, as have emerged from the TA carried out in the previous section. Thus, this first part represents the problem, namely conditions under which managerial loss aversion effectively harms corporate value creation. In other words, the first part of the framework suggests, especially for researchers, when managerial loss aversion is really harmful for corporate value creation, and thus when it is necessary to find solutions to mitigate it.

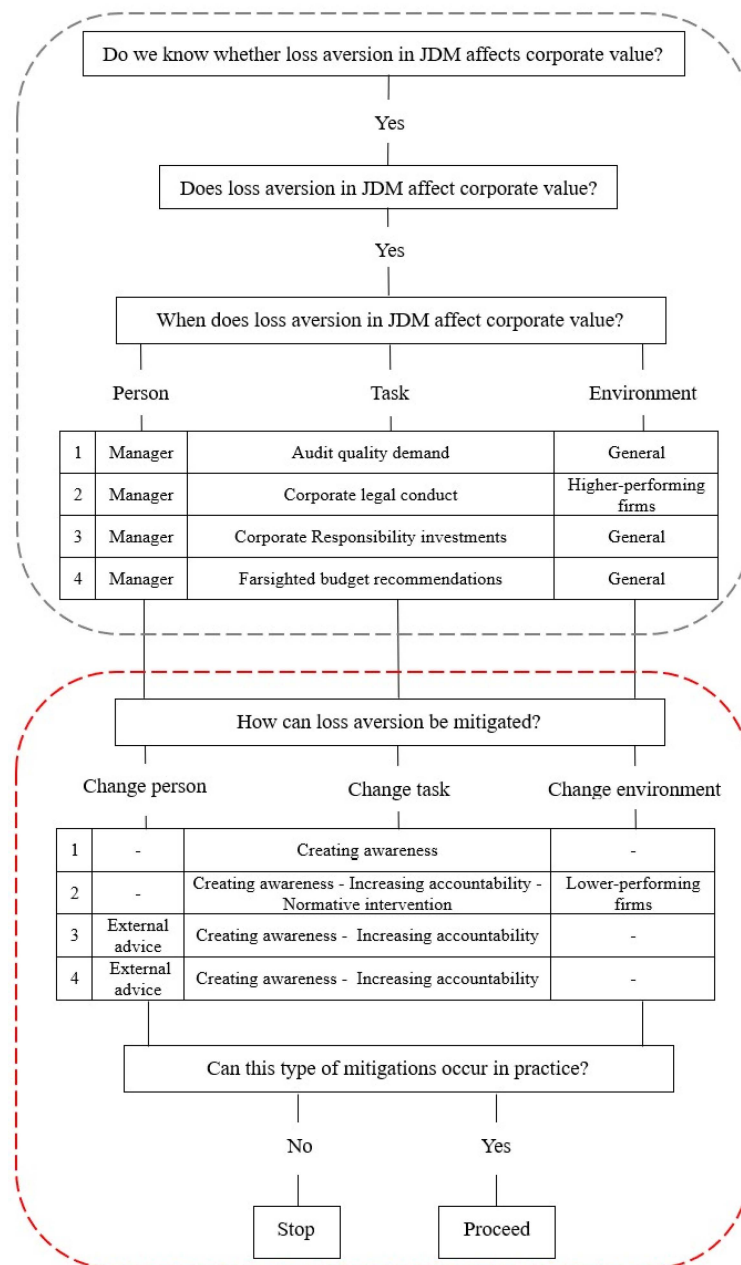


Figure 6. Theoretical framework to address managerial loss aversion.

In the second part (contained within the red dotted line), the authors offer preliminary approaches about how to mitigate managerial loss aversion with the main aim of improving the corporate value creation process. In particular, the second part of the framework suggests potential solutions for researchers, namely changes in JDM conditions (i.e., the person in charge of the decision, task and environment) to successfully mitigate loss aversion. In other words, all changes to the JDM conditions aimed at reducing managerial loss aversion are de facto considered potential debiasing strategies. Indeed, debiasing strategies are defined as strategies to mitigate the influence of decision biases and to enhance rational decision making (Kaufmann et al. 2009). Definitively, in effectively imposing organisational changes (i.e., change person in charge of a task, change the task, change the task environment), these debiasing strategies should be planned and agreed upon at a corporate strategic level (Kreilkamp et al. 2020). In any case, it has been repeatedly highlighted how debiasing strategies, initially formulated in theory, need to be operationalised to assess their effectiveness and efficiency within different business settings (Kaufmann et al. 2012). This

literature review, in agreement with other business (Kaufmann et al. 2010) and non-business (Ludolph and Schulz 2018) literature reviews, offers potential debiasing strategies for future empirical research.

For the first scenario, with the aim of mitigating the impact of loss aversion that leads managers to demand a lower level of audit quality, the authors suggest working on the improvement of task features. In particular, Hueber and Schwaiger (2022) proposed mitigating loss aversion through creating awareness, hence showing individuals the real occurrence and consequences of this distortion. Thus, in a similar way, future researchers could remodulate this mitigation strategy by adding, to the tasks, an explanation of the negative consequences of loss aversion as opposed to the long-term benefits of higher audit quality demand and legal corporate conduct on corporate value creation. In this view, the authors suggest operationalisation, according to specific and different business settings, of the following potential debiasing strategy: creating awareness about audit quality in loss-averse managers who are in charge of hiring auditors to increase audit quality.

Specifically to reduce illegal conduct of managers of high-performing firms, namely the second scenario, it could be suggested that boards and top managers mitigate managers' loss aversion by changing the task through: (i) creating awareness of real occurrences and consequences of managerial loss aversion; (ii) increasing managers' personal accountability for their choices (Lovallo and Sibony 2006); and/or (iii) exploiting the intervention of norms aimed at restricting managers' discretionary and, thus, irresponsible actions (e.g., Sarbanes-Oxley Act of 2002 2002). Moreover, changes in the environment can mitigate managerial loss aversion. More precisely, boards and top managers could mitigate managers' loss aversion through presenting the high firm performance in a loss frame (e.g., benchmarking on sector top performers or even higher owners' expectations). In this view, the authors suggest operationalisation, according to specific and different business settings, of the following potential debiasing strategies: creating awareness about corporate illegal conduct in loss-averse managers to increase corporate legal conduct; improving accountability of loss-averse managers to increase corporate legal conduct; targeted normative interventions on loss-averse managers to increase corporate legal conduct; and making loss-averse managers operate in corporate contexts characterised by lower performances to promote a lower degree of illegal conduct.

Heading towards mitigating the impact of loss aversion that leads managers to suboptimal levels of resource allocation, the authors' suggestions are still focused on modifying the tasks by creating awareness and increasing accountability around managers' planning choices. In practice, even the issues of reduced investments in Corporate Responsibility as well as short-term view budget recommendations, the third and fourth scenarios, respectively, can be figured out using practical solutions focused on improving managers' awareness and accountability of such choices. Furthermore, choices about resource allocation planning could be purged of the effect of managerial loss aversion through a change in the pool of people in charge of these choices. In fact, as in various JDM business scenarios, external advice, usually given by consultants to internal managers, can increase foresight in planning how to invest corporate resources (Graf et al. 2012). From this viewpoint, the authors suggest operationalisation, according to specific and different business settings, of the following potential debiasing strategies: external advice to loss-averse managers to increase corporate responsibility investments; creating awareness about corporate responsibility investments in loss-averse managers to increase corporate responsibility investments; improving accountability of loss-averse managers to increase corporate responsibility investments; external advice to loss-averse managers to increase farsighted budget recommendations; creating awareness about farsighted budget recommendations in loss-averse managers to increase farsighted budget recommendations; and improving accountability of loss-averse managers to increase farsighted budget recommendations.

6. Conclusions

In a sprawling and crucial realm of research, such as managerial Judgment and Decision Making (JDM), the authors swiftly identified pronounced contradictions regarding the impact of managers' loss aversion on the ultimate value generated by organisations. Consequently, a necessity arose to discern the effects of managerial loss aversion on corporate value creation (Rq1) and subsequently alleviate any identified adverse effects (Rq2). In addressing the primary research question, the authors employed a qualitative approach entailing a Systematic Literature Review (SLR) and Thematic Analysis (TA) of pertinent articles. The investigation revealed that the impact of managerial loss aversion on corporate value creation is unequivocally detrimental only in four select scenarios. These instances encompass suboptimal investments in corporate social responsibility, short-term-focused budget allocations, inclinations towards engaging in illicit corporate practices amid profitable scenarios, and diminished demand for higher audit quality. To tackle the second research query, the authors presented an innovative theoretical framework designed to guide researchers navigating managerial loss aversion. This framework, structured upon established models from influential JDM literature, is bifurcated into two key components. The initial segment utilises TA insights to delineate circumstances wherein managerial loss aversion undermines corporate value creation. Meanwhile, the subsequent segment delineates potential debiasing strategies to be operationalised according to specific and different business settings, encompassing alterations in JDM conditions (i.e., individual in charge, task and environment) to mitigate the impact of managerial loss aversion.

The implications of these findings are relevant for both academics and practitioners. In particular, academics now have a reference to clarify the hitherto unclear role of managerial loss aversion in corporate contexts. It is thus now possible to consider managers' loss aversion as a uniquely harmful bias only in the four specific scenarios described. These results aim to encourage future researchers to find solutions to mitigate managerial loss aversion in the contexts already described and deemed critical for corporate value creation. Accordingly, the theoretical framework offers potential debiasing strategies, motivated by the gaps and opportunities the authors identified through analysis of the literature, which may be operationalised by future empirical research in specific and different business settings.

Even professionals themselves could consider the debiasing strategies proposed in the framework, albeit with a practical approach still to be refined after further research on the topic. Such debiasing strategies are especially directed at board members and top managers acting at a strategic level who require ways to address the dysfunctional behaviours of their loss-averse managers, thus finally generating positive effects directly on corporate value creation. Specifically, this positive effect on the value created by the company would materialise by improving audit quality demand, corporate legal conduct, investments on corporate responsibility and farsighted budget recommendations. However, practitioners should also consider that the debiasing strategies generate organisational implications that could undermine the implementation of the debiasing strategies themselves (Kaufmann et al. 2009). Indeed, the debiasing strategies proposed (i.e., creating awareness, increasing accountability, external advice and normative intervention) could increase the costs of and time for corporate internal processes as well as generate conflicts between subject and object members of the debiasing strategies. Finally, the attempts made by both professionals and academics will be able to confirm, modify or even diminish the potential debiasing strategies as preliminarily proposed through the framework.

However, this study is not devoid of limitations. The primary constraints of this research can be identified in a key aspect. The evaluations positing managerial loss aversion as either detrimental or beneficial to corporate value creation primarily derive such conclusions from laboratory experiments. These experiments, while informative, may not comprehensively reflect the complexities of the corporate landscape, thus rendering them insufficiently reliable for drawing paradigmatic conclusions regarding real-world phenomena.

Author Contributions: Conceptualization, R.C.; methodology, A.S. and F.R.; validation, A.M.; formal analysis, F.R.; investigation, R.C.; resources and data curation, A.S.; writing—original draft preparation, R.C. and A.S.; writing—review and editing, A.M. and F.R.; visualization, R.C.; supervision, A.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Articles reviewed were retrieved from Scopus through the procedure reported in the data collection.

Conflicts of Interest: The authors declare no conflicts of interest.

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