Systematic review in financialization politics: the role of corporategovernance and managerial compensation

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Abstract

This review seeks to synthesize empirical findings on financialization policies and provide answers to two questions: (1) What relationship exists between Financialization and Corporate Governance? (2) Is there any relationship between financialization and CEO compensation/remuneration systems? A group of 38 scientific articles was selected using the methodological protocols ProKnow-C and Methodi Ordinatio. Based on its reading, analysis, and synthesis of the main empirical findings between financialization and the accumulation of capital and between financialization and income distribution, it is evident that there is a negative correlation between this phenomenon and the investment in means of production and the proportion of income from labour. We hope that this work can contribute to a rethinking of the income redistribution model (internationally), as the current model has contributed to an increase in the unequal distribution of social wealth, which is characterized primarily by the excessive compensation of top executives who prioritize short-term goals. We hope that it can also serve as a foundation for future scientific work and as a resource not only for regulatory agencies but also for government entities that must make political, economic, and fiscal decisions to mitigate or even reverse the global effects.

Keywords *Financialization* · Corporate Governance · Executive compensation systems

Introduction

The existing body of literature pertaining to executive compensation is extensive and has garnered significant attention from various interdisciplinary studies. It continues to be a pivotal subject in public discussions surrounding corporate influence and wealth distribution. This topic holds relevance for regulators, employees, and shareholders alike (Kotnik and Sakinç 2022). However, the discourse has primarily been shaped by the financial economics viewpoint put forth by Fama and Jensen (1983a) as well as Jensen and Meckling (1976).

> *"Compensation for executive managers at publicly traded companies has attracted much attention from scholars in various disciplines, including economics* (Jensen and Murphy 1990; Hall and Murphy 2003), *sociology* (Allen 1981; DiPrete et al. 2010), *and man- agement* (Devers et al. 2007; Finkelstein et al. 2009)"(Shin 2012, p. 536).

According to Bebchuk and Fried (2003a, b) the notion that managers hold substantial power in listed companies where there is a clear separation between ownership and management extends back to Berle and Means (1932) who observed that while in office, executives have nearly complete discretion in management.

Since Jensen and Meckling (1976), the problem of management power and discretion in finance has been referred to as an 'agency problem'. These authors con- tend that through share-based compensation, executives'

personal interests can be aligned with those of the firm and its shareholders, thereby making them co-owners. If executives are compensated as bureaucrats, they will conduct as such; consequently, they should be compensated with substantial amounts of stock in order to align their interests with those of the other shareholders (Hall and Murphy 2003; Jensen and Murphy 1990). This new way of thinking was widely adopted on Wall Street, and compensation practices shifted: stock-based compensation became the norm, and shareholder value became the 'gospel' of American capitalism (Denning 2017). Prior to the 1970s, only 16% of CEOs of S&P 500 companies received performance-based compensation, a percentage that increased to 26% in the 1980s and 47% in the 1990s (Bank et al. 2017 *in* Admati 2017).

During the 1980s and 1990s, this new vision centred on shareholder value creation gave rise to a dominant model of corporate governance in the US business community (Admati 2017; Dobbin and Jung 2010; Fligstein and Shin 2007; Goldstein 2012; Lazonick and O'Sullivan 2000) all cited *in* Shin (2012), Stockhammer (2004, 2005, 2010), Orhangazi (2007)—a model that quickly expanded globally. It is referred to as financialised corporate governance by Hansmann and Kraakman (2001), as cited by Admati (2017), and is characterized by executive decision-making that tends to increase the current value/price of shares (Credit Suisse 2015).

In this financial conception of the firm, corporate efficiency is defined as the capacity to maximize dividends and maintain high share prices (Fligstein 1990, p. 298 as cited *in* Zwan 2014). Corporations are now 'managed' by markets and accounting-based metrics (Davis 2011 cited *in* Admati 2017).

This new paradigm of corporate governance affects not only how companies conduct business, but also the compensation systems for Chief Executive Officers (CEOs) in a significant manner (Doubleday and Wagner 2009; Lilling 2006; Ozkan 2007; Shaw and Zhang 2010). The emphasis on shareholder value creation has caused CEO compensation to depend on financial parameters such as profit, share price, and return on equity, ensuring that managers' interests are aligned with shareholders (Admati 2017). The vast majority of large corporations now use earnings per share in their incentive plans, and the vast majority also use share prices and shareholder returns in their compensation plans (Reda et al. 2016 as cited *in* Admati 2017).

These developments are part of a larger trend referred to as financialization, in which the financial sector and financial activities gain prominence in an economy and financial markets and financial measures increasingly direct economic activity (Admati 2017). Financialization has manifested itself through a growing emphasis on financial metrics such as stock prices and dividends, which has led non-financial firms to make strategic decisions that have shifted their focus from productive investments to finance-related activities (Krippner 2005; Tomaskovic-Devey and Lin 2011).

According to Krippner (2005), financialization is a multifaceted and complex process that has transformed non-financial firms into financial firms. As central productive actors, business firms have restructured their environments through financialized strategies and financial imperatives promoted progressively under the banner of'shareholder value' (Kotnik and Sakinç 2022). Financialization is the process of subordinating corporate strategies to the accumulation of financial capital, whereby corporate performance is evaluated in capital markets using financial measures (Lazonick and O'Sullivan 2000) and guided by the Shareholder Value Ideology (Kotnik and Sakinç 2022; Montalban and Sakinc 2013), resulting in changing incentive mechanisms for corporate executives and exploding executive pay (Clarke et al. 2019; Hager 2021). However, the introduction of finance capital in financial firms is a consequence of alterations in management behaviour (Zhang and Andrew 2014).

Some authors view non-financial organizations as hostages of this model in which finances play a significant role in their decision-making, emphasizing their reliance on markets and financial services as well as their relative vulnerability in the eyes of investors and financial agents (Crotty 2003; Dobbin and Zorn 2005; Dore 2008). Therefore, to determine if corporations have constructed the necessary mechanisms to perpetuate this finance-based model, we pose the first research question: Is there a relationship between financialization and corporate governance?

To Kotnik and Sakinç (2022, p.19), the metamorphosis of the non-financial corporation—typically in its Chandlerian form managed by executive professionals—is a focus of academic research in order to identify the multiple facets of the financialization of capitalist economies. For these authors, it is crucial to study and examine the dynamics of the remarkable increase in executive remuneration—in the form of financialized share-based compensation—in an effort to comprehend contemporary issues of income distribution, employment stability, and corporate resource allocation for productive and financial purposes. *Shareholder value ideology and the rise of executive pay are widely acknowledged but only partly explored aspects of financialization*"(p.1). There appears to be a scarcity of information about the extent to which CEOs are influenced by shareholder value ideology and their susceptibility to financialized decision-making (Kotnik and Sakinç 2022, p.2).

The literature lacks discussion on the role of executive management incentives in the financialization of non-financial firms (Knafo and Dutta 2020). Given that: the increase in shareholder value orientation has been extensively studied over the past few decades as a key component of financialization (Shin 2012); that financialization has benefited managers of large corporations by indexing their remuneration

to the corporation's stock market performance (Zwan 2014), and that CEOs, when deciding the allocation of corporate resources, are known to take an active role in implementing the imperatives of the shareholder value orientation ideology (Kotnik and Sakinç 2022), we posed the second research question in order to comprehend the role of the CEO in the financialization process that has occurred in non-financial companies: Is there a relationship between CEOs' remuneration systems and the Financialization that has been witnessed in non-financial companies?

The discussion of executive remuneration practices and their relationship with the distribution of wealth and power among managers, workers, and shareholders is also a part of the academic critique, including on financialization (Zwan 2014). Therefore, we sought to provide relevant studies on these issues through a systematic review. We expect to contribute to the state of the art regarding the relationship between financialization in non-financial companies and corporate governance, as well as the relationship between financialization and CEO compensation, in order to identify possible gaps in the literature and improve future research in the field.

The methodological approach used to ensure and contribute to a transparent, scientific, and replicable analysis of the evidence in the literature by identifying the most relevant scientific papers considered two protocols, ProKnow-C and Methodi Ordinatio, that employ metrics for assessing the quality of the impact of publications on the scientific community.

After selecting the set of articles, the primary empirical findings were analysed, interpreted, and synthesized. The primary findings suggest that there is a negative correlation between financialization and capital accumulation, as demonstrated by the preference of large corporations for financial investments over investments in production products. The focus of management on the creation of shareholder value is measured by successive increases in dividend payments and financial revenues, and the alignment of the interests of top managers is reflected in compensation packages and bonuses associated with stock options at the expense of wages. As Scheuplein (2019) notes, both macroeconomic and microeconomic empirical results demonstrate a decline in the labour income share and a deterioration of working conditions.

We believe that this article can contribute to a (global) rethinking of the model of income redistribution, since the current model has contributed to a more unequal distribution of social wealth. A productive system that insistently prioritizes the creation of shareholder value through financial investments at the expense of investments in capital goods (Stockhammer 2012) continues to mortgage not only its own future, but also the future of an entire community that depends on and is a part of it (Clarke et al. 2019). The agency theory perspective that dominated in large corporations during the 1970s to 1990s and led to new models of corporate governance, according to Dore (2008), has resulted in a more heterogeneous society with less foresight and less ability to offer perspectives to current and future generations.

The article is organized as follows: initially, the methodology used to select the sample of articles comprising this systematic review is described, followed by a theoretical context. Next, the results of the systematic review will be presented, beginning with a concise description of the articles comprising the final portfolio before proceeding to a systematisation of the theoretical/conceptual and empirical results. Finally, we provide a discussion and future lines of research, finalising with main conclusions.

Methodological approach

The ProKnow-C Method (Ensslin et al. 2010, 2015) and the Methodi Ordination (Campos et al 2018; Pagani et al. 2015) put forth recommendations grounded in bibliometric indicators for the purpose of discerning and choosing pertinent publications in the context of a systematic literature review. Both the ProKnow-C Method and the Methodi Ordinatio have been extensively utilized in the context of supporting systematic reviews, as evidenced by the substantial number of citations they have received (ProKnow-C Method = 179 citations; Methodi Ordinatio = 161 citations)[1] (Vieira et al. 2022).

Both method was employed concurrently in two distinct databases that employ diverse metrics for assessing publications (citations) and journals (impact factor). Each database was subjected to separate methodological protocols when

[1] The data were collected from Google Scholars in March 2021. According to Scopus research findings, the Proknow-C Method has been cited in a total of 37 publications, comprising 19 articles, 14 conference papers, and 4 reviews. Analysis of the study areas covered by these publications reveals that 20.2% pertain to the field of Business, Management, and Accounting, while an equal percentage is attributed to Engineering. Additionally, 18% of the publications fall within the domain of Computer Science, and 12.4% are related to Mathematics. In the case of Web of Science, it is observed that a publication typically does not exhibit the same pattern when it is associated with only one citation. In both Scopus and Web of Science, the number of citations for Methodi Ordinatio is comparable, with 58 and 51 citations, respectively. Out of the 58 publications retrieved from Scopus, 30 (51.7%) are classified as articles, while 25 (43.1%) are categorized as reviews. Similarly, among the 51 publications obtained from Web of Science, the distribution is quite comparable, with 22 (43.1%) identified as articles and 29 (56.8%) designated as reviews. While there are slight variations in the research categories defined by Scopus and Web of Science, it is noteworthy that the Environmental Sciences research area accounts for 35.3% of the results obtained in Web of Science and 18.5% in Scopus. Similarly, the Engineering field represents 27.5% in Web of Science and 13.3% in Scopus, while the domains associated with Economics/Accounting/Management comprise 21.6% in Web of Science and 13.7% in Scopus.

analysing the collection of publications from Scopus and the collection of publications from the Web of Science. Ultimately, two portfolios remained following the implementation of two distinct methodologies. The first portfolio emerged from the amalgamation of publications obtained by applying the ProKnow-C Method to the initial portfolios sourced from Scopus and Web of Science. The second portfolio resulted from the combination of publications obtained by applying the Methodi Ordinatio to the initial portfolios sourced from Scopus and Web of Science. The methodological approach was established through a three-phase process, which consisted of: a) conducting a preliminary inquiry; b) selecting the portfolio; and c) finalizing the portfolio selection.

Phase I: the preliminary investigation

The preliminary stage was conducting a comprehensive search in Scopus, specifically targeting the "*Article Title, Abstract, and Keywords*" field. Additionally, a search was conducted in Web of Science using the "*Topic*" search feature. The number of articles related to the concept of 'financialization'[2] is significantly high in both Scopus and Web of Science bibliographic databases. Scopus contains 3101 publications, while Web of Science includes 2871 publications.[3] The statistical analysis conducted using these tools has confirmed the presence of a significant concentration of research on this subject within the fields of Social Sciences, Economics/Econometrics/Finance, and Management and Accounting. This concentration is primarily observed in the form of articles.

In an effort to conduct a systematic review on the topic of 'financialization and Corporate Governance', with a specific focus on the selection of financialization policies by top managers, bibliographic data obtained from Scopus and the Web of Science was utilized to examine the keywords associated with the research objectives. Subsequently, a conclusive search algorithm[4] was established, which initiated a novel phase of study resulting in the creation of two preliminary portfolios. The first portfolio was derived from Scopus, while the second was obtained from Web of Science.

Scopus yielded a total of 549 publications across various scientific disciplines, while Web of Science yielded 394 publications.[5] A secondary filtration process was exclusively implemented on the specific scientific domains of Scopus, namely ECONOMICS, ECONOMETRICS, FINANCE BUSINESS, AND BUSINESS, MANAGEMENT, AND ACCOUNTING. Similarly, the domains of ECONOMICS, BUSINESS FINANCE, MANAGEMENT, AND BUSINESS were subjected to a secondary filtration process in Web of Science. This process yielded a total of 128 publications in Scopus and 148 publications in Web of Science.

Phase II: portfolio selection

During the selection phase of the publication's portfolio, a decision was made to examine the titles and corresponding abstracts, in pairs, in order to find those that were in line with the study objectives. As a primary criterion, it was established that in cases of uncertainty regarding the title, the abstract is consulted. Another decision rule that was implemented is the requirement to read all abstracts. The ProKnow-C Method employs a posteriori abstract reading, in contrast to the Methodi Ordinatio. This decision rule is implemented to address strategic and resource management concerns, ensuring that all publications are in line with the research objectives.

The first portfolio has a total of 56 Scopus publications that pertain to the selected theme. In a similar vein, the second portfolio consists of 83 publications from the Web of Science database that are also in line with the selected theme. Among the 139 papers that were scrutinized, it was discovered that 22 of them were duplicates. Consequently, the final tally of publications that aligned to the selected theme amounted to 117.

Figure 1 depicts a graphical illustration of the analytical investigation carried out throughout this specific phase of the research effort.

ProKnow-C methodology

Since each database employs its own citation counting and journal evaluation methodology, the ProKnow-C Method was independently applied to the 56 Scopus and 83 Web

[2] The concept of financialization appears written in its English forms: financialization and financialization.

[3] The preliminary phase were developed at the end the 2020, so these results are regarding this period.

[4] Final search algorithm:
*(("Financiali?ation" AND "CEO Compensation") OR ("Financiali?*action" AND "Managerial Compensation") OR ("Financiali?ation" AND "CEO Characteristics") OR ("Financiali?ation" AND "pay-performance sensitivity") OR ("Financiali?ation" AND "Executive Compensation") OR ("Financiali?ation" AND "Corporate Finance") OR ("Financiali?ation" AND "CEO Incentives") OR ("Financiali?ation" AND "ceo power") OR("Financiali?ation" AND "managerial incentives") OR ("Financiali?ation" AND "CEO pay") OR ("Financiali?ation" AND "Earnings Management") OR ("Financiali?ation" AND "Excess compensation") OR ("Financiali?ation" AND "Financial" system") OR ("Financiali?ation" AND "shareholder value") OR ("Financiali?ation" AND "Upper echelons theory") OR ("financiali?ation" AND "Corporate Governance")).

[5] Time-off date of publications to be included: February 2021.

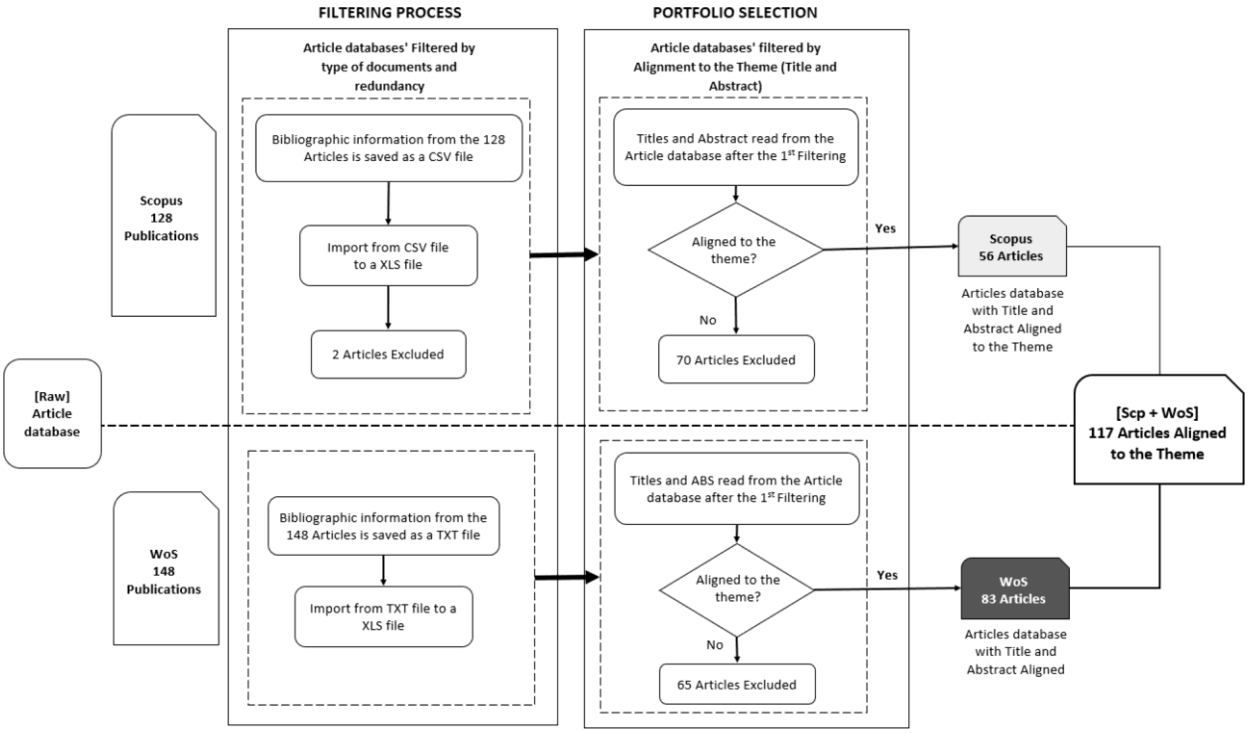

Fig. 1 Initial selection process for the initial portfolio of publications

of Science publications pertinent to the topic. The bibliographic data were transferred to an Excel spreadsheet, where it was processed and organized in a descending order based on citation. The citation percentage and accumulated citation percentage were computed for each publication. The decision was made to employ Pareto's Law (Ensslin et al. 2015) as a guiding principle for determining the desired representativeness. Specifically, it was ensured that 80% of the total citations were accounted for by 23% of the 56 aligned publications from Scopus and by 19.27% of the 83 aligned publications from Web of Science.

In accordance with the prescribed methodology, an initial review of the latest publications was conducted, resulting in the identification of a combined total of 29 publications published between 2019 and 2020. Specifically, 9 publications were obtained from Scopus, while 20 publications were sourced from Web of Science. The second iteration of the evaluation process involves identifying the authors of publications that have received established and confirmed scientific recognition. Specifically, any paper authored by these individuals that was excluded in the initial ranking must be included in the final portfolio. An additional five publications were consequently obtained from the Web of Science.

At the end of the ProKnow-C Methodology, a total of 22 publications were identified from Scopus, consisting of 13 relevant[6] publications and 9 recent[7] publications. Additionally, 41 publications were identified from Web of Science, comprising of 21 recent publications and 20 relevant publications. Fifteen duplicated publications were excluded, resulting in a final portfolio of 48 publications using the ProKnow-C Method. Among these, 25 papers are deemed relevant, while the remaining 23 are considered recent. Figure 2 presents a comprehensive schematic representation illustrating the complete procedure that was undertaken.

Ordinary methodology

The bibliographic data were once again transformed into an excel file, wherein the Methodi Ordinatio was then employed as an independent procedure. This resulted in the computation of an Ordinatio Index for Scopus articles and an Ordinatio Index for Web of Science publications. The 2019 CiteScore Index provided on Scimago in the Journal & Country Rank was utilized to obtain Scopus publications. This measure, employed by Elsevier, the owner of Scopus, enables the assessment of the influence of affiliated journals. The Impact Factor of Clarivate Analytics, the owner of Web of Science articles, was utilized for this study. Specifically,

[6] Relevant—more citations.

[7] Recent—published in the last 2 years.

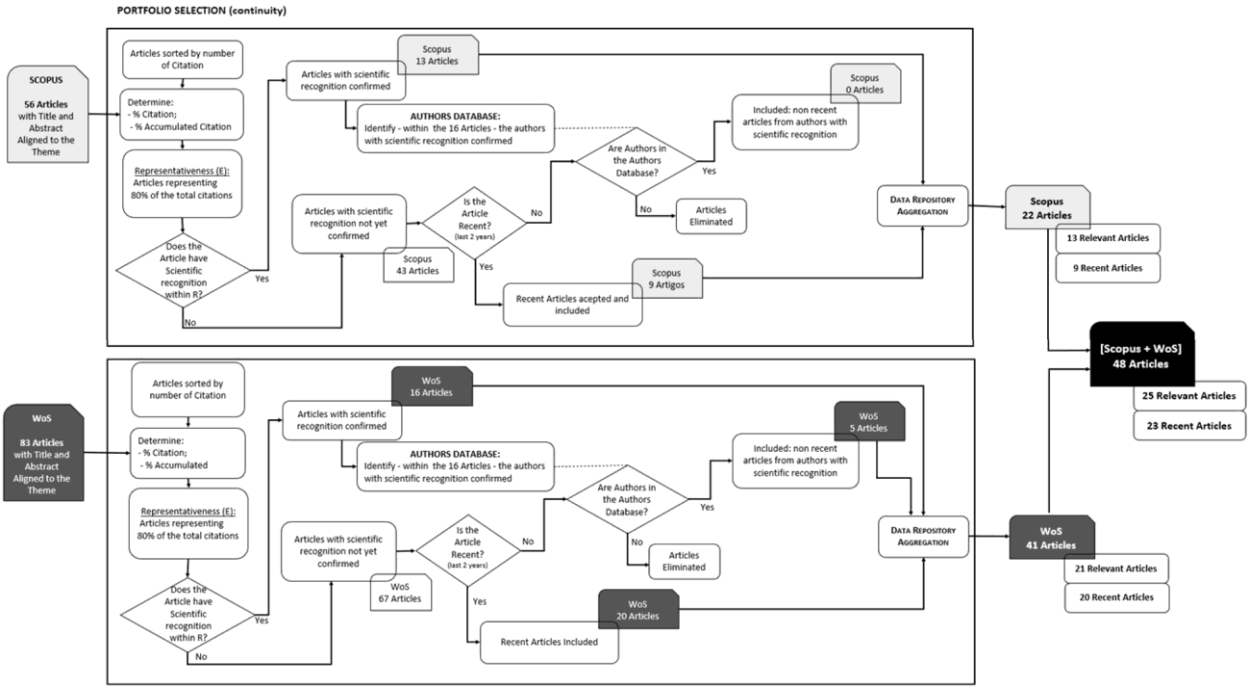

Fig. 2 Representation of the application of ProKnow-C methods

the 2019 Journal Impact Factor (JIF) available in the Journal Citation Reports (JCR) was employed. The calculation of the Ordinatio Index assumes a value of zero in the absence of the Cite Score Index and the 2019 JIF. The aforementioned occurrences were seen in three distinct articles indexed in Scopus. It is noteworthy that all three publications were categorized as Book Chapters, indicating the absence of a specific journal affiliation for each. There were 17 publications missing JIF_2019 from Web of Science's database, only two of which were Proceeding Papers. The forthcoming investigation will be executed with enhanced accuracy to assess the quality of the final compilation of articles acquired through both approaches. Furthermore, a comprehensive analysis will be conducted to evaluate the various impact variables connected with the chosen journals.

Within the framework of the Ordinatio Index, a determination was reached to allocate a numerical value of 10 to the variable α. The decision was made with the understanding that it is imperative to refrain from disregarding potentially valuable contributions just due to a lack of citations. According to the findings of Pagani et al. (2015), a significance level of $\alpha = 10$ underscores the importance of incorporating the publication year as a pertinent variable in the study.

After the calculation of the Ordinatio Index, the publications were arranged in a descending order based on the index value. Subsequently, the accumulated percentages of the Ordinatio Index were computed, with any negative indices being adjusted to zero. The Methodi Ordinatio does not establish a specific threshold for the inclusion of classified publications. However, Pagani et al. (2015) propose that researchers have the flexibility to choose a subset of publications, such as the top 10 or the top 50, based on their own criteria. In a similar vein, De Carvalho et al. (2020) advocate for the application of the Pareto Principle to the Ordinatio Index, as it aligns with the cut-off criteria employed in the ProKnow-C Method. Therefore, the final Portfolio of the systematic review included the top-ranked publications and those that accounted for 80% of the Cumulative Ordinatio Index. Specifically, out of the 56 Scopus publications aligned with the theme, 32 publications were chosen. Similarly, out of the 83 Web of Science publications aligned with the theme, 53 publications were selected.

In an effort comparable to the approach employed in the ProKnow-C Method, it became imperative to consolidate these findings. Following the exclusion of 16 duplicated articles, a total of 69 publications remained, comprising 46 pertinent publications and 23 recent publications.

The methods employed are summarized in Fig. 3.

Final portfolio selection

In summary, we have identified two distinct sets of publications based on the employed methodologies: 48 publications utilizing the ProKnow-C Methodology and 69 publications employing the Methodi Ordinatio. After removing duplicate publications, a total of 79 papers were identified, consisting

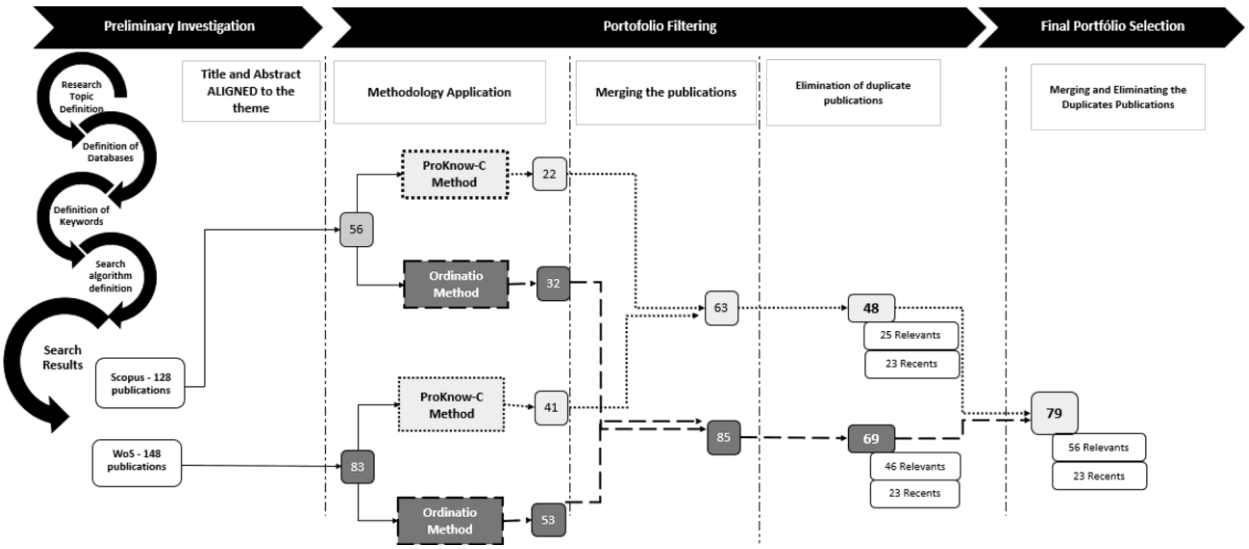

Fig. 3 Representation of the application of the ProKnow-C and Methodi Ordinatio methods

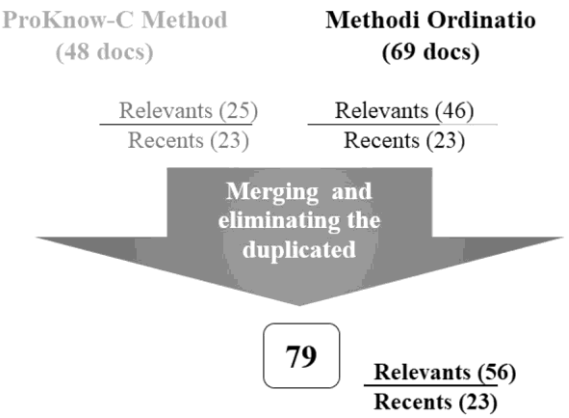

Fig. 4 Merging the two portfolios (Source: Vieira et al. 2022)

of 56 relevant publications and 23 recent publications (see Fig. 4).

However, it was crucial for the authors to establish a comparative analysis of the results produced by both techniques. The utilization of a Venn diagram, as depicted in Fig. 5, facilitates the visual representation of the outcome resulting from the intersection of the two approaches employed. Specifically, this intersection reveals a total of 38 publications that are common to both methodologies, all of which are classified as articles. Among these common publications, 15 are deemed relevant, while the remaining 23 are classified as recent. Therefore, out of the 25 pertinent articles acquired through ProKnow-C and the 46 acquired through Methodi Ordinatio, there is an overlap of 15 publications. This implies that only 10 out of the total 25 publications

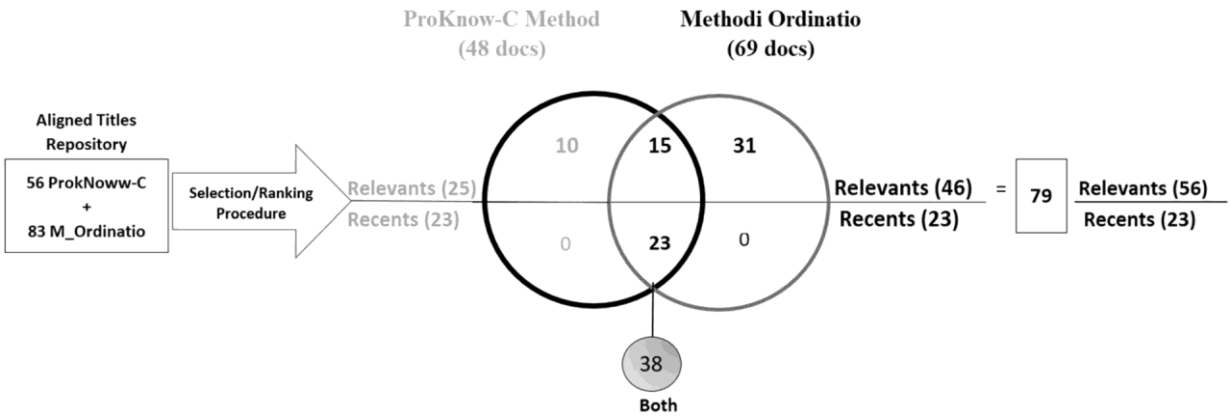

Fig. 5 Comparative analysis of the portfolios obtained by the two methods

identified by ProKnow-C and 31 out of the 46 publications identified by Methodi Ordinatio are unique to each respective method.

Based on the aforementioned factors, it was determined that the Final Portfolio of this Systematic Review would include the collection of 38 publications that are both common and accessible, as indicated in Table A of the "Online Appendix".

Contextualization of the topic: underlying theories and Ceo compensation's theoretical framework

Jensen and Meckling (1976) believe that individuals are motivated to maximize functions that align with their own interests, as their behaviour is driven by personal preferences and aims rooted in utility theory. According to these writers, the agency relationship can be defined as a contractual arrangement, wherein a principal engages the services of an agent to carry out tasks or duties on its behalf, which entails the transfer of certain decision-making powers to the agent. Based on the assertions made by these writers, it can be argued that in situations where both parties involved are driven by the desire to maximize their utility, there exists a strong likelihood that the agent will not consistently prioritize the interests of the principal. Consequently, this misalignment of interests gives rise to what is commonly referred to as agency costs. The agency problem arises when multiple parties engage in cooperation but possess divergent objectives and perspectives regarding the task at hand (Jensen and Meckling 1976; Eisenhardt 1989). Consequently, the collaborative behaviour that optimizes the collective interests of the parties does not align with the individual interests of each party (Baiman 1990).

The agency problem emerges as a result of the divergence of interests between the persons involved, the asymmetry of information, and the constraints imposed by limited reason. In essence, this phenomenon arises due to divergent aims among the parties involved. Managers are primarily driven by the desire to foster company growth and maximize profits, with the latter purpose not being the sole focus. Conversely, shareholders are solely motivated by the pursuit of profit. Managers possess a distinct advantage over stockholders in terms of their access to information, as well as their superior knowledge on decision-making, abilities, motivations, inventiveness, and effort (Zajac and Westphal 1994). Furthermore, it is worth noting that managers and shareholders alike face limitations in their ability to accurately forecast future circumstances or effectively analyse the vast amount of intricate information available to them. Consequently, these limitations hinder their capacity to devise the most advantageous strategies to fulfil their respective requirements and interests (Mellahi and Collings 2010).

The presence of conflicts of interest and information asymmetry gives rise to what is commonly referred to as 'agency costs'. According to agency theory, these costs can be reduced by implementing robust corporate governance systems that incorporate mechanisms to effectively monitor the actions of the agent and align their incentives more closely with those of the principal. To mitigate the risk of executives misusing corporate resources and to maximize shareholder value, it is anticipated that the implementation of monitoring mechanisms and the establishment of aligned incentives will enhance the influence and oversight of shareholders over management (Shin 2012). The literature on corporate governance has been predominantly influenced by agency theory, with a recent emphasis on the objective of maximizing shareholder value.

The existing body of literature has extensively examined several techniques that have the potential to mitigate agency costs between shareholders and executives. The primary internal mechanisms that hold significant importance include the Composition of the Board of Directors,[8] the Ownership Structure,[9] and the CEO Remuneration System. The latter is perceived as a mechanism to exert influence or incentivize executive behaviour in a favourable manner, thereby enhancing the probability of attaining organizational objectives (Merchant and Van Der Stede 2003a, b; Berry et al. 2005).

The alignment of interests between CEOs and shareholders has commonly been achieved through the implementation of CEO remuneration. Compensation contracts serve as a means of corporate governance, which is a mechanism that affects managers' decision-making in situations where control and ownership are separated (Larcker et al. 2007).

According to Tosi et al. (2000), the establishment of a contractual agreement is essential for achieving congruence of interests between managers and shareholders. This contract should encompass various aspects, such as delineating the rights and obligations of both the agent and the principal, specifying remuneration arrangements, implementing effective information systems, defining the agent's roles and

[8] Further elucidation on this topic can be obtained by consulting the scholarly literature authored by: Fama (1980), Fama and Jensen (1983b), Tricker (2012), Firstenberg and Malkiel (1980). Mace (1986), Lodever and Peyer (2002), Fich and Shivdasani (2006), Gstraunthaler et al. (2008).

[9] Further elucidation on this topic can be obtained by consulting the scholarly literature authored by: Fama and Jensen (1983b), Demsetz and Villalonga (2001), La Porta et al. (1999), Dennis and McConnell (2003). Schleifer and Visnhy (1997), Bhagat and Black (2002), Bebchuk and Weisbach (2009), Grossman and Hart (1980), Schleifer and Visnhy (1986), John and Senbet (1998), Vives (2000), Denis and McConnell (2003a, b), Gillan and Starks (2003).

responsibilities, and safeguarding the rights of the principal (Baiman 1990). The discussion pertains to an optimally structured contract, which presents several potential configurations and elicits diverse perspectives regarding the most effective approach from the perspective of the contract's owner. There are ongoing debates and inquiries surrounding several concerns, one of which is the subject raised by Eisenhardt (1989) regarding the optimal contract design. Specifically, the discussion is around determining whether a contract that emphasizes behavioural aspects such as salary and hierarchical structures is more efficient, or if a contract that prioritizes outcomes through mechanisms like commissions, stock options, and ownership transfers is preferable.

According to Holmström (1979, 1982), it is recommended that executive compensation be determined by a set of metrics that illustrate the executives' efforts to enhance shareholder value. This approach aligns with the incentives proposed by Jensen and Murphy (1990) which aim to foster the alignment of interests between executives and shareholders. Burns and Kedia (2006), Jensen and Murphy (1990) and Lewellen et al. (1987) and posit that incorporating stock options into remuneration packages can enhance alignment and convergence between a manager's compensation and the company's performance. This theoretical perspective suggests that a robust association between these factors can be fostered by including stock options as a component of compensation. According to Core et al. (2003), incentives can be defined as the fluctuation in executives' wealth in correlation with the company's share price. This means that as share prices rise, individuals who possess capital in the form of shares or stock options are able to augment their overall wealth. These incentives are sometimes referred to as capital incentives, since they leverage the stated values on the stock exchange to motivate executives to exert the requisite efforts in order to achieve an increase in share price.

Murphy (1985) discovered a robust positive correlation between executive compensation and both performance and sales. Additionally, Murphy (1985) emphasized the significance of incorporating variables to measure shareholder return. However, classic works such as Copeland et al. (2007) attribute the emergence of subsequent empirical studies on the correlations between executive remuneration and shareholder return to the pioneering work of Jensen and Murphy (1990). Based on the remuneration data reported in Forbes during the period from 1974 to 1986, Jensen and Murphy (1990) arrived at the conclusion that the association between executive remuneration and performance, while statistically significant and positive, exhibited a relatively modest effect size. Specifically, their findings indicated that a rise of 1,000,000 USD$ in shareholder wealth corresponded to a mere increase of 3.25 USD$ in CEO remuneration. Several investigations have been conducted and published in subsequence years. According to the research conducted by Gibbons and Murphy (1992), there is evidence to suggest that a 10% increase in shareholder wealth is associated with a 1.7% increase in executive compensation. Similarly, Conyon et al. (1995) have identified a statistically significant relationship between executive pay and shareholder return, although the elasticity of this relationship is relatively low. Additionally, Conyon and Leech (1994) have demonstrated, through the utilization of variables such as company size and corporate governance measures, a positive albeit modest correlation between higher executive pay and company performance. Nevertheless, the research conducted by Conyon (1994), Conyon and Leech (1994), Gregg et al. (1993), Main (1992), Main and Johnston (1993) fail to establish a robust correlation between compensation and performance.

Since the 1980s, numerous multinational corporations have opted to substitute the traditional fixed remuneration system with a remuneration system that encompasses not only a variable element contingent upon the company's performance, but also a significant incentive-based component Filatotchev and Allock (2010). Nevertheless, the studies conducted by Bebchuk and Fried (2003b), Hall and Liebman (1998), Holmström (1979) and Jensen and Murphy (1990) have not provided conclusive empirical evidence to support the notion that there exists a direct and positive correlation between executive compensation levels and a specific set of incentives linked to company performance. There exists a divergence of perspectives among authors about the efficacy of executive remuneration as a means of mitigating agency costs. While some authors posit that it serves as an efficient mechanism for minimizing such costs, others argue that it is inherently intertwined with the very problem of agency costs.

According to Bonner and Sprinkle (2002), incentive schemes have an impact on the time preference of executives, leading them to choose activities that offer immediate rewards or the ability to delay performance. These difficulties have been previously discussed in academic literature. For instance, Kerr (1975) and Holmström and Milgrom (1991) contend that CEOs compromise the quality of decision-making, as identified by Kelly (2007), by prioritizing activities that are financially rewarded. And it is in this sense that Schleifer and Schleifer and Vishny (1997, p. 747) argue that […] "*is problematic to argue that incentive contract completely solves the agency problems".* According to Schleifer and Vishny (1997), executives tend to engage in self-serving negotiations for incentive contracts when they possess knowledge that suggests a rise in their compensation is probable, particularly in cases where the Board of Directors has inadequately structured these contracts. The authors also highlight the intentional timing of stock option grants by managers, wherein they receive these grants shortly before the disclosure of positive news and delay them until after the release of unfavourable news

announcements. This observation aligns with the key findings of Yermack (1997). Hence, it is pertinent to inquire about the efficacy of stock options as an incentive mechanism in promoting congruence between managerial actions and shareholders' interests, given their inability to fully deter self-interested conduct.

Additionally, the matter of earnings management should be considered. Earnings management, as posited by Healy and Wahlen (1999) arises from the exercise of discretion by executives and managers in financial reporting and/or transaction structuring. These actions have the potential to manipulate results, thereby misleading certain stakeholders or impacting contractual agreements contingent upon financial indicators. Hence, establishing a clear demarcation between earnings management and illicit decisions poses a challenge. It is imperative to acknowledge that earnings management does not include contravening accounting standards; rather, it involves leveraging any available flexibility within these standards. Given the aforementioned circumstances, it becomes evident that the selection of specific accounting methodologies enables or even permits the manipulation of financial data by altering the outcomes of the organization in accordance with the established objectives.

Considering this perspective, while the design of remuneration packages aims to incentivize managers to prioritize the maximization of shareholder value, it can also incentivize them to engage in behaviours that enhance their own wealth and drive up share prices (Park 2019). Given the circumstances, it is imperative to reevaluate the extent to which compensation packages incorporating stock options or share plans serve as a contemporary corporate governance tool for aligning the interests of executives with managers, thereby mitigating agency costs.

An additional viewpoint, which has not been the prevailing focus of this matter but warrants attention, is the Stakeholder Theory. In contrast to the Agency Theory, the theory under consideration posits that the primary responsibility or objective of management is not solely focused on maximizing the financial success of the company. Instead, it emphasizes the importance of ensuring the survival of the company by effectively addressing and managing the diverse conflicts of interest among the various stakeholders (Harrison et al. 2015). According to these authors, it is imperative to manage the firm while considering the interests and well-being of its stakeholders, which encompass consumers, suppliers, shareholders, workers, and the local community. It is imperative to guarantee the rights of this particular group and facilitate their involvement in the decision-making processes that directly impact their welfare and interests. According to Bresley et al. (2008), organizations that experience discontent among their consumers and employees are prone to witnessing a decline in their profitability and stock value.

The subsequent part will demonstrate that a number of empirical findings confirm the transfer of wealth to shareholders by senior managers, disregarding the significance of enhancing organizational value. Sundaram and Inpkpen (2004) have advocated for this concept, but Jensen (2001) argues that if a corporation adheres to this perspective and causes harm to a significant stakeholder, it jeopardizes the maximization of the company's value.

Post-Keynesian Theory is the predominant economic theory utilized by econometric models demonstrated in our findings to explain the rise in income inequality within the economy and society. This perspective, specifically the Kaleckian approach, is frequently used to analyse the aforementioned rise in inequality. In addition, the post-Keynesian investment function is used to investigate the decline in capital accumulation.

The systematic literature review results

The subsequent section is divided into three segments. First, we will provide a concise description of our sample of articles and a temporal analysis of the research conducted on the financialization, publication methods, and research approach of the chosen publications. Second, we examine the research designs and methods employed in the empirical articles comprising our final portfolio. Thirdly and lastly, we summarize and discuss the results of the empirical sample articles based on their research foci and highlight the theoretical approaches utilized in the studies.

Characteristics of final portfolio articles

Evolution and quality of scientific production

Figure 6 depicts the temporal development of research on the topic of Financialization in Corporate Governance, while Fig. 7 depicts the growth trend of citations indicating the significant increase of this topic in recent decades. Most likely, the intensification of scientific productivity over the past decade can be attributed to the 2008–2011 global financial crisis.

Table 1 displays the 15 most-cited articles. Table 2 demonstrates that the 38 publications are associated with 22 prestigious journals, as they are all indexed in Scopus and Web of Science. A more thorough examination reveals that 34% of these publications are concentrated in nine major journals. Except for Accounting Economics and Law-a Convivium, which was neither evaluated by Scimago's Journal & Country Rank (Scopus) nor by Clarivate Analytics' Journal Citation Report (Web of Science), 41% of these 13 journals are categorized by Scimago as Quartile 1 and 32% as Quartile 2.

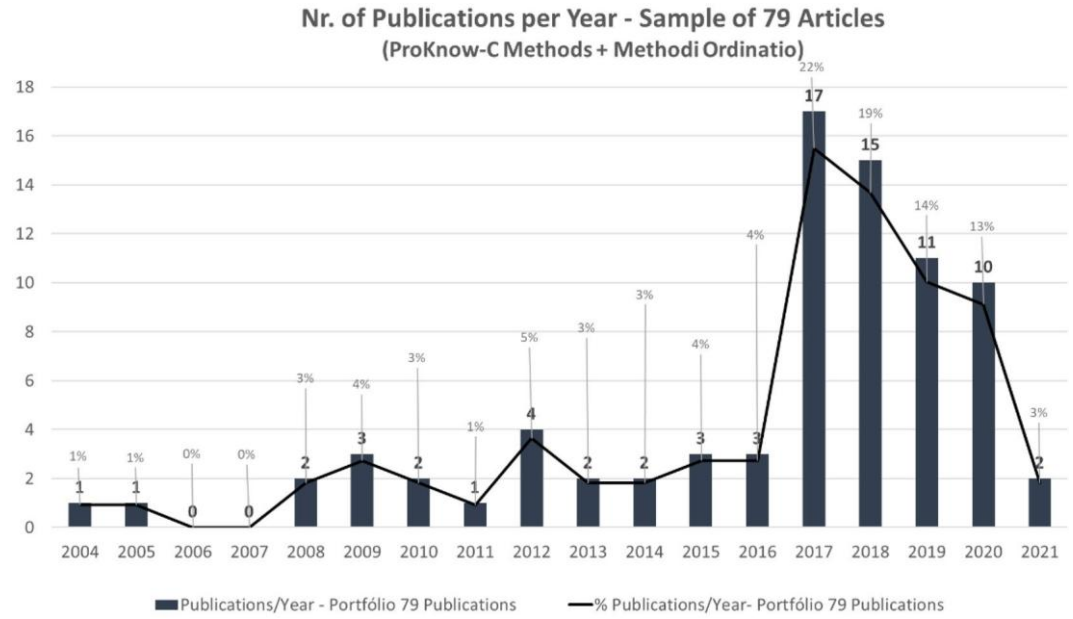

Fig. 6 Number of articles per year—sample of 79 Articles (ProKnow-C Methods + Methodi Ordinatio)

Table 3 displays various metrics for assessing the scientific quality of the journals comprising the Final Portfolio of this systematic review.

This study also analysed Spearman's correlations (Table 4) between the various journal impact measures from the Scopus, Web of Science, and Google Scholar databases, namely JIF/2019, CiteScore2019, Scimago H-Index, and Google Scholar H5—Index. This section aims to demonstrate that the final journal included and associated with our final portfolio of 38 articles have received high ratings based on a variety of metrics.

Considering the sample of 40 selected journals, the results confirm highly positive and significant correlations between the JIF/2019 and CiteScore2019 (Rho = 0.893 p value < 0.001), between the JIF/2019 and the Scimago H-Index (Rho = 0.774, p value < 0.001), between

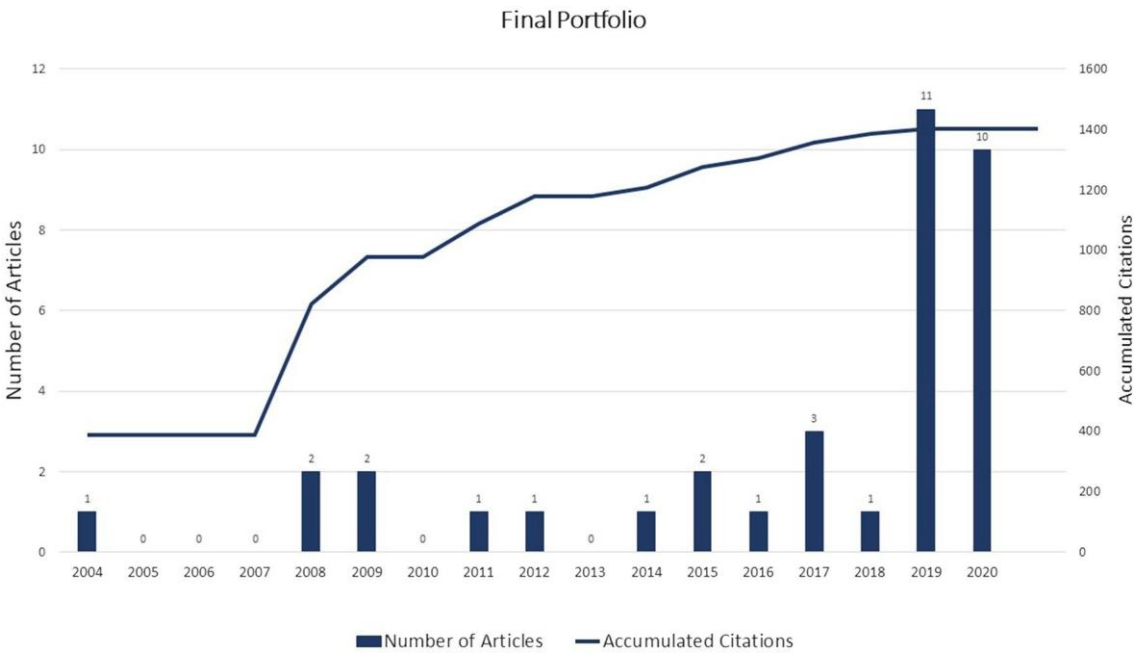

Fig. 7 Number of articles per year and accumulated citations

Table 1 Table of the 15 most cited articles

Order	Bibliography Information	No. citations
1	Stockhammer, E. (2004). Cambridge Journal of Economics. Financialization and the slowdown of accumulation	388
2	Orhangazi, Ö. (2008). Cambridge Journal of Economics. Financialization and capital accumulation in the non-finance. l corporate sector: 1973–2003	248
3	Pain R. (2008). Industrial and Corporate Change. Financialization of the global economy	187
4	Onaran O., Stockhammer E., Grafl L. (2011). Cambridge Journal of Economics. Financialisation, income distribution and aggregate demand. d in the USA	110
5	Stockhammer, E. (2012). Economic investigation. Financialization, income distribution and the crisis	88
6	Milberg, W. and Winkler D. (2009). Cambridge Journal of Economics. Financialization and the dynamics of offshoring in the USA	80
7	van Treeck, T. (2009). Cambridge Journal of Economics. A synthetic, consistent stock-flow macroeconomic model of 'financialisation'	76
8	Huh, E. (2015). Cambridge Journal of Economics. Finance-dominated capitalism and re-distribution of income: a Kaleckian perspective	49
9	Dunhaupt, P. (2017). Cambridge Journal of Economics. Determinants of labour's income share in the era of financialisation	33
10	Lin K.-H. (2016). Organization Science. The rise of finance and firm employment dynamics	30
11	Froud, J., Johal, S., Leaver, A. and Williams, K. (2014). Critical Perspectives on Accounting. Financialization across the Pacific: Manufacturing cost ratios, supply chains and power	29
12	Tori, D., Onaran, Ö. (2018). Cambridge Journal of Economics. The effects of financialization on investment: Evidence from firm-level data for the UK	27
13	Kliman, A. and Williams, SD (2015). Cambridge Journal of Economics. Why 'financialisation' hasn't depressed US productive investment	21
14	Huh, E. (2017). European Journal of Economics and Economic Policies-Intervention. Post-Keynesian macroeconomics since the mid 1990s: main developments	16
15	Kohler K., Guschanski A., Stockhammer, E. (2019). Cambridge Journal of Economics. The impact of financialization on the wage share: A theoretical clarification and empirical test	7

Quotes from scopus and web of science

Table 2 Best Scimago quartile

Best Scimago quartile	No. publications		Magazines	
	No	%	No	%
Quartile 1	13	34	9	41
Quartile 2	19	50	7	32
Quartile 3	5	13	5	23
ND	1	3	1	5
Total	38		22	

Google Scholar H5-Index and JIF/2019 (Rho = 0.879 and p value < 0.001) and CiteScore2019 (0.819 and p value < 0.001). These findings are consistent with those from recent studies (Cabezas-Clavijo and Delgado-López-Cózar 2013; De Carvalho et al. 2020; Waris et al. 2017).

Methodologies used

A subset of the 38 total articles can be classified as being theoretical in nature. Ten of these theoretical articles, or approximately 26.31 per cent of the total, consist of literature reviews. Approximately 65.79% of the remaining theoretical articles consist of empirical investigations, either alone or in combination with conceptual analyses. The prevailing strategy employed in this study is quantitative in nature, relying on the utilization of econometric models. The investigation incorporates both empirical and national statistical data to examine the topic from both an empirical and conceptual perspective. It is notable that only 9 of the total of 25 empirical studies examined can be classified as cross-studies. In addition, it is evident that the United States of America has been the subject of the most research in this corpus of work.

Data source and choice of data

In Fig. 8, a summary of the data sources utilized by the articles in the Final Portfolio is presented. With the exception of two articles with exploratory qualitative methodology that utilized survey data collected from a sample of interviewees, the remaining 23 articles obtained their quantitative data from two primary sources: 11 empirical studies that utilized a firm panel obtained their data from the respective annual financial statements; the remaining 12 studies of a more

Table 3 Evaluation metrics of scientific journals

	Source title	Number of publications	Origin of publications	JIF 2019	JCR impact factor quartile	CiteScore 2019	Best Scimago quartile	Scimago H-index	H5-index	H5-median
1	Cambridge Journal of Economics	7 6	Scopus WoS	1.717	Q2	3.3	Q2	79	37	67
2	Critical Perspectives on Accounting	7	WoS	2.684	Q1	5.1	Q1	63	40	63
3	Journal of Post Keynesian Economics	3 2	Scopus WoS	0.635	Q4	1.1	Q2	38	18	22
4	International Review of Applied Economics	2 1	Scopus WoS	ND	ND	1.9	Q2	37	17	25
5	Review of Political Economy	3	WoS	ND	ND	1,2	Q1	28	16	29
6	Accounting Economics and Law-A Convivium	3	WoS	ND	ND	ND	ND	ND	9	13
7	Accounting Organizations and Society	2	WoS	3,958	Q1	5.8	Q1	133	38	62
8	Competition and Change	2	Scopus	2.188	Q2	3.1	Q1	14	ND	ND
9	Economic and Labour Relations Review	2	Scopus	2.259	Q1	2.5	Q2	20	19	34
10	European Management Journal	2	Scopus	2.369	Q3	6.3	Q1	99	44	67
11	Industrial and Corporate Change	2	Scopus	1.981	Q2	3.5	Q1	104	34	53
12	Journal of Economic Issues	2	Scopus	0.577	Q4	1.1	Q2	44	19	24
13	Review of Radical Political Economics	2	WoS	0.607	Q4	1.3	Q3	29	16	23

ND non data

Table 4 Spearman's correlations between the different impact measures of journals

Non-parametric correlations							
Correlações Não paramétricas							
			JIF 2019	CiteScore 2019	Scimago H-index	Google Index H5	Google mediana H5
rô de spearman	JIF 2019	Coeficiente de correlação	1000	0.893**	0.774**	0.879**	0.858**
		Sig. (1 extremidade)		< 0.001	< 0.001	< 0.001	< 0.001
		N	25	25	25	24	24
	CiteScore 2019	Coeficiente de correlação	0.893**	1000	0.794**	0.819**	0.829**
		Sig. (1 extremidade)	< 0.001		< 0.001	< 0.001	< 0.001
		N	25	37	37	32	32
	Scimago H-index	Coeficiente de correlação	0.774**	0.794**	1000	0.848**	0.835**
		Sig. (1 extremidade)	< 0.001	< 0.001		< 0.001	< 0.001
		N	25	37	37	32	32
	Google index H5	Coeficiente de correlação	0.879**	0.819**	0.848**	1000	0.956**
		Sig. (1 extremidade)	< 0.001	< 0.001	< 0.001		< 0.001
		N	24	32	32	35	35
	Google mediana H5	Coeficiente de correlação	0.858**	0.829**	0.835**	0.956**	1000
		Sig. (1 extremidade)	< 0.001	< 0.001	< 0.001	< 0.001	
		N	24	32	32	35	35

**Correlation is significant at the 0.01 level (extremity)

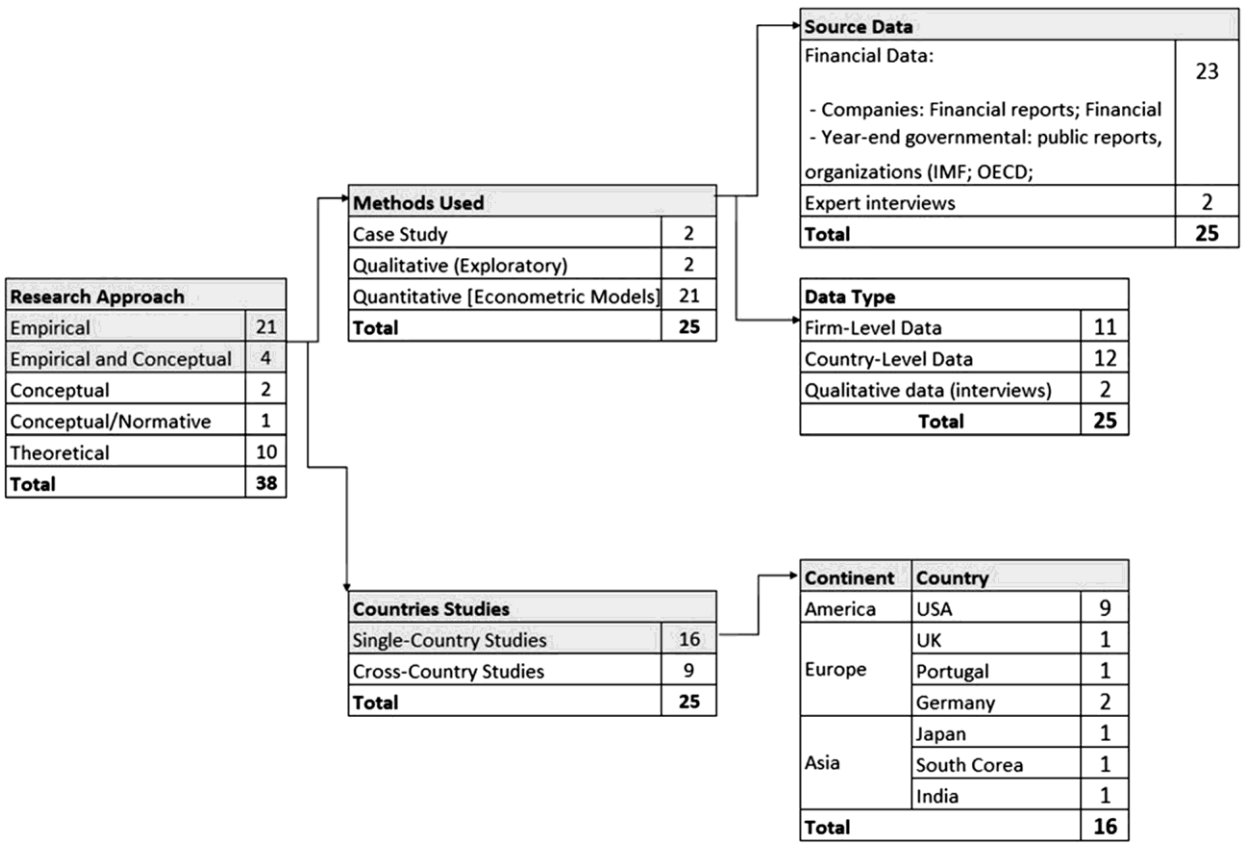

Fig. 8 Methodology used

macroeconomic nature obtained their data from end-of-year government reports or public websites and/or from reports and data from international organizations such as the IMF, the OECD, and websites such as https://wid.world.

Empirical results found

Theoretical and conceptual context of the thematic

For Baronian et al. (2021) financialization is an endogenous process initiated by the appearance of large corporations and new organizational structures where there is a clear separation of powers between the management and capital ownership. New principles of strategic management based on performance evaluation metrics emerge and cost and management accounting are now used as essential tools for decision-making by top managers that, together with the disconnection between management activities and productive activities, according to the authors, are the first step towards an internal financialization process characterized by management set in goals, objectives and performance evaluation by the executives with the aim of creating value for shareholders. But to Lowe et al. (2020) many of the profit and profitability measures/metrics make the collective efforts of all the people who work behind the scenes of a corporation invisible, leaving the feeling that executives and managers are solely responsible for the organizations successes. Furthermore, Lowe et al. (2020) they highlight the devaluation of critical theory and interpretive research by managers—as if no lessons were to be learned from it—as well as a clear generalized influence by neoliberal economic ideas. Chahed (2021) came up with the concept of 'financialization technology' to develop the theorization of the emergence of finance in the field of accounting and explored the process by which concepts of financial economics gained acceptance in defining accounting standards. The authors identify three main conceptual moments in the accounting policy process in the United Kingdom between 1960 and 1990, and a closer examination of each of these three moments shows that narrative reporting gained acceptance whenever proponents of new accounting concepts struggled to tie theirs proposals, to any specific financial measurement basis. Chahed (2021) designate narrative reporting as a financialization technology insofar as its objective is exactly the construct of an economic-financial language turned to the shareholder.

From theoretical works, with literature reviews or critical analyses on the subject, there are generic questions that make us reflect on how finance-led capitalism disseminated its inexorable market logic characterized by the absence of regulation and aimed to maximizing shareholder value. Reference is made to a new corporate governance model focused on creating shareholder value based on financial profitability facilitated by: the rise of financial markets through increased trading in highly leveraged derivatives markets, the appearance of new products—such as securitization and hedge funds—the absence of international regulation and, finally, the excessive weight of the financial sector compared to other sectors of economic activity (Dore 2008; Stockhammer 2012).

For Stockhammer (2012) the financialization process gave rise to an accumulation regime dominated by finance, the 2007–2011 crisis is a reflection of this same financialization process and the polarization of income distribution.

In the financial sector, new economic agents have emerged to perform the same functions as banks[10]: parallel banking sector has emerged as the driving force of financialization, made possible only by the lack of regulation. In the banking sector, mortgage credit becomes a priority and from these mortgage credits arise securitization products. The commercial banking sector itself is not immune to the ideology of shareholder value creation that has overridden the interests of customers with strategies such as: a focus on cost reduction and revenue growth; promises of free banking with cross-selling of additional products such as insurance, loans, and credit cards; and an emphasis on real estate lending—even resulting in an oversimplification of decision making for real estate lending compared to lending to small and medium-sized enterprises (SMEs) that generate jobs and wealth (Froud et al. 2017).

In the non-financial sector, there was a change in investment behaviour, which Lazonick and O'Sullivan (2000) as cited *in* Stockhammer (2012) describe it as a change in management behaviour from 'retain and reinvest' to 'downsize and distribute'. "*Financialization has had a dampening effect on business investment due to negative effects of shareholder value orientation and increased uncertainty*" associated with the volatilities of the financial markets (Stockhammer 2012, p. 52). In households, financialization was reflected by a higher level of indebtedness via mortgage credit (which represented 80% of their debts), a decrease in their savings and an increase in private consumption (Stockhammer 2012). Onaran et al. (2014), for example, empirically demonstrate that in the North American economy the primary redistribution of income in favour of income from investor capital (interest and dividends) and business class profits at the expense of wages suppressed consumption, however, the secondary redistribution of profits in favour of investor income had a positive effect on consumption via the wealth effect from rising prices of financial assets and real estate assets during the stock market boom period. The effects of financialization on the distribution of income at the expense of wages, the resulting dependence on debt fuelled by the housing bubble, and growth based on low real

[10] Non-financial institutions, Insurers; Investment Funds; Money Market Funds; Hedge Funds; Private Equity and SIV Funds.

investment have led to a risky and fragile economy (Onaran et al. 2014).

The excessive weight of financial activities within productive organizations were analysed by Do Carmo et al. (2019). Through a case study involving five of the world's largest manufacturers in the automotive industry[11] demonstrate that in all of them, financial profitability is superior to productive profitability—regardless of whether on their Boards there are more or fewer members from financial institutions, for example, at Hyundai and Volkswagen none of their members come from the financial sector. Regarding the executive compensation policy, this is very similar, on average, the annual salary paid in 2014 to the CEO was US$ 13.876 million, except for Toyota which paid 4.88 times less (2.84 Million $US). Regarding the average salary of the employees of the manufacturers, it varies from country to country, depending on the position and the manufacturer. However, in general, the difference between employee salaries and CEOs' total earnings is hundreds of times greater. On dividend payments, except for Hyundai which distributed considerably less dividends to shareholders, both in proportional and absolute numbers, the remaining four manufacturers shared most of their net profit with their shareholders: Ford and Toyota Volkswagen between 2012 and 2015 distributed between 98 and 100% of their net profits, General Motor in the same period distributed an average of 79% and Hyundai a substantially lower amount, at around 10%.

> *"Together, these five automotive companies shared more than US$ 160 billion to shareholders over four years, an average of US$ 40 billion a year (…).* Elias (2013, p.5) *states that William Lazonick observed that 'if the three major U.S. automakers had not spent US$ 50 billion over the last twenty years on impressing Wall Street, they would not have made it to the situation they were in, and if General Motors had stayed in the banks with the US$ 20.4 billion distributed to stockholders from 1986 to 2002, it would have had US$ 29.4 billion of its own cash to stay afloat and respond to the global competition when it went broke'"*
>
> (Do Carmo et al. 2019, p. 855).

The shift in power from labour to capital is clearly reflected in the evolution of wages (Stockhammer 2012) and for Veldman (2019), the issue of inequality is the result of this model of corporate governance that affects the distribution of privileges, protections and procedures of the different actors involved. The growing increase in top managers' salaries, associated with compensation schemes with performance bonuses and stock options, has increasingly led to the current management to create value for shareholders and accentuate inequalities in the distribution of income (Clarke et al. 2019; Veldman 2019). The introduction of Stock Options as an integral part of executive compensation systems has pushed top management into close competition for share price increases and short-term strategies (Matsumoto 2020).

Examining the transactions of publicly traded non-financial corporations in the US between 2005–2017, Palladino (2020a) finds that net inside sales of corporate insider' shareholdings above US$100,000 are almost twice as common in quarters where stock buybacks occur, than in quarters where there is no stock buybacks. It empirically demonstrates, *ceteribus paribus*, "*a ten percent change in stock buybacks is associated with a half-percent change in corporate insiders selling their personal shareholdings*" (p. 152).

> *"(…) insiders are choosing to increase their use of corporate funds to conduct stock buybacks in the same quarters when they are personally profiting from higher share prices" …"it is impossible to say whether buybacks precede insider share-selling in the same quarter"(…) "However, the findings suggest that corporate executives have the ability to use stock buybacks in ways that not only benefit shareholders to the exclusion of other corporate stakeholders, but that serve management self-interest without requiring such benefit to be disclosed"*
>
> (Palladino 2020a, p. 168).
>
> *"The shareholder value doctrine has served to generate increasing macro-economic inequality by driving inequality at the level of the firm while neglecting wider social obligations including taxation. Simultaneously the drive for shareholder value has structurally damaged the future of corporations by limiting the investment in human capital development, innovation, and research and development*"
>
> (Clarke et al. 2019, p. 15).

According to Stockhammer (2012, p.60) "*The popular perception of the increasing role of finance is clearly substantiated by economic data: activity of financial markets has increased faster than real activity; financial profits make up an increasing share of total profits; and households as well as the financial sector are taking on a lot more debt*". Veldman (2019) it also highlights, in addition to this same macroeconomic effect, the concentration of market share in companies with very high levels of productivity per worker, meaning little creation of new jobs.

In his conceptual work, Rabinovich (2020) raises some pertinent questions, namely how it is that companies, not being investing, obtain such high levels of profitability and wonders about the destination of these profits, since they are not invested in capital goods. For these specific questions,

[11] Case Study with Toyota, Volkswagen, Hyndai, General Motor and Ford.

he finds answers in the changes that were felt in Corporate Governance in the post-Keynesian literature, which analyses this Investment-Profit puzzle as the result of the introduction of the maximization of shareholder value as a guiding principle of corporate behaviour:

> *"The literature recognizes two broad channels by which investment is affected. The first, what* Fiebiger (2016) *calls the drain side of financialisation, has implied a heightened transfer of earnings from non-financial corporations to financial markets through stock buybacks, interest and dividend payments. The definition we are following of financialisation—the negative consequences of the maximization of shareholder value—is basically represented by this channel. The second channel, what* Fiebiger (2016) *calls the pull side of financialisation, and* Rabinovich (2019) *partly refers as the financial turn of accumulation hypothesis, has implied an enlarged acquisition of financial assets from which non-financial companies derive a growing proportion of financial income"*
>
> (Rabinovich 2020, p.8.9).

According to Post-Keynesian thinking shareholders aim for profit while managers aim for company growth, but as shareholders become more powerful with increased corporate control, along with a compensation policy with performance bonuses and stock options, management begins to align its interests with the interests of shareholders and its objectives are now to ensure profitability to its shareholders through the distribution of profits to the detriment of capital asset accumulation (Rabinovich 2020; Stockhammer 2004; Trivedi 2020). For Trivedi (2020) this distribution of profits is possible through two large channels: the first one, which refers to the Crowding-Out effect, which translates into the diversion of funds to the acquisition of financial assets in an attempt to increase short-term profitability; and the second via an increase in the payment of dividends in the logic of creating shareholder value. Both channels have a negative impact on the accumulation of capital goods as they absorb resources that could be used for real investment purposes, with a significant part of the income, obtained through financial investment that excludes real investment. In fact, from the early 2000s on, a vast empirical, econometric and non-econometric literature has emerged aiming to estimate these channels with negative impacts on capital goods accumulation (Rabinovich 2020). In this systematic review we will highlight the empirical work of Auvray and Rabinovich (2017), Kliman and Williams (2014), Orhangazi (2007), Stockhammer (2004), Tori and Onaran (2018) and Trivedi (2020).

Rabinovich (2020) also wondered how non-financial companies remain competitive in the face of a diminished production capacity and concluded that there are other factors that contribute to the fact that today, these non-financial companies are not so dependent on Investment in Fixed Capital to increase their productive capacity. In our systematic review of the financialization literature, issues such as wage degradation are highlighted (Barradas 2019; Clarke et al. 2019; Dunhaupt 2016; Hein 2013; Kohler et al. 2018; Ozdemir 2019; Palladino 2020b), financial accumulation and the outsourcing or offshoring of production (Auvray and Rabinovich 2017; Milberg and Winkler 2010) all of them also marked by Rabinovich (2020) as issues worth taking into account to explain the Investment-Profit puzzle.

Empirical results: financialization and accumulation of fixed capital

The present analysis focuses on a collection of seven empirical articles (see "Online Appendix" Table B) authored by Auvray and Rabinovich (2017), Kliman and Williams (2014), Orhangazi (2007), Seo et al. (2020), Stockhammer (2004), Tori and Onaran (2018) and Trivedi (2020). These articles aim to assess the primary channels that have negative effects on capital asset accumulation. Notably, Trivedi (2020) and Seo et al. (2020) specifically investigate listed companies in India and Korea, respectively. In contrast, the remaining authors primarily focus their econometric studies on developed economies, with a particular emphasis on the United States. Kliman and Williams (2014) and Stockhammer (2004) employ macroeconomic/aggregate data, whilst the remaining researchers conduct their empirical analyses utilizing panel-level data of publicly traded corporations.

Overall, research conducted using either macroeconomic data or firm-level panel data consistently reveals that short-term management practices centred around maximizing shareholder value have detrimental impacts on capital accumulation. In general, the variables employed to assess both channels exhibit considerable similarity among the empirical research identified. Table 5 presents a comprehensive overview of the primary indicators employed to assess the two primary channels responsible for diverting internal resources of major corporations away from capital expenditures, namely Financial Payments and Financial Revenues.

Stockhammer (2004) is widely recognized as a seminal contribution to the study of financialization and capital accumulation. It stands out as one of the pioneering works that introduced a novel theoretical framework to elucidate the mechanisms through which financialization, marked by the shareholder revolution and the emergence of a market governed by corporate control, shifted power dynamics towards shareholders. Consequently, this transformation influenced management priorities and ultimately resulted in a discernible decline in the targeted growth rate. An econometric study is conducted to examine the relationship between capital accumulation and financialization.

Table 5 Main proxies used to measure the financial payments and the financial revenues channels

Investment diversion channels in fixed capital goods		Proxies	Authors
Shareholder value	Financial payments	$\frac{\frac{Earnings\ per\ share - dividends\ per\ share}{earnings\ per\ share}}{\frac{Equity\ Investment}{Before\ Tax\ Cash\ Flow}}$	Trivedi (2020)
		Appropriations—category that includes not only dividend payments, but also provisions made by the company for future payments	
		Payment of Interest + Dividends + cash dividends + Purchase of the company's own common or preferred shares	Orhangazi (2007)
		$\frac{Dividends+Interest}{Fixed\ Assets}$	Tori and Onaran (2018)
		Repurchase of common and preferred shares Interest expenses Payment of dividends to common and preferred shares	Auvray and Rabinovich (2017)
		$\frac{Dividend\ Payments}{Net\ Profit}$ $\frac{Dividend\ Payments+Share\ Repurchase}{Net\ Profit}$	Seo et al. (2020)
Financial investments	Financial profits	Other non-operating income	Trivedi (2020)
		$\frac{Interest\ Income+Net\ Equity}{Net\ Profit}$	Orhangazi (2007)
		$\frac{Dividend\ Incomes+Interest\ Incomes}{Fixed\ Assets}$	Tori and Onaran (2018)
		Interest and investment income Issuance of common and preferred shares;	Auvray and Rabinovich (2017)
		∑ [Gains on Financial Instruments with maturity + Gains on trading of bonds with maturity + Gains on sale of bonds and other gains]	Seo et al. (2020)
		∑ [Investment in Financial Instruments with short term + Investment in Securities with short term]	
Control variables (most used)	Debt	Long-term debt	Auvray and Rabinovich (2017) Orhangazi (2007)
		Total debt	Trivedi (2020)
		Capital cost (macroeconomic data) Interest expenses on debt/fixed asset	Stockhammer (2004) Tori and Onaran (2018)
	Operating profits Net sales		Auvray and Rabinovich (2017) Orhangazi (2007) Tori and Onaran (2018) Trivedi (2020)
	Fixed assets *or* Total assets		Auvray and Rabinovich (2017) Trivedi (2020) Orhangazi (2007)

This analysis focuses on the aggregate corporate investment in the United States, United Kingdom, Germany, and France using time series data. It is among the first empirical studies to test this hypothesis, and others have since followed. The investment function utilized by Stockhammer (2004) made the level of accumulation dependent on the utilization of productive capacity, profit sharing, the cost of capital, and investor participation in non-financial corporations, with a positive relationship expected between the first two variables and a negative relationship between the last two variables. Empirical studies applied to the author's hypothesis from a macro-perspective allow us to draw the following conclusions: in the United States, the United Kingdom, and France, the participation of rentiers has a negative impact on investment. In contrast to Germany, where this is the only variable without statistical significance, for the United States this is the only variable with statistical significance. According to the literature, the development of the concept of 'shareholder value' in Germany has lagged behind.

Other works followed, Auvray and Rabinovich (2017)[USA], Orhangazi (2007)[USA], Tori and Onaran (2018)[UK] and Trivedi (2020)[India]], all attempt to show empirically that financialization has negative effects on the behaviour of corporations. The investigations were conducted using non-financial firm level data from the United States, the United Kingdom, and India, respectively. The study conducted by Trivedi (2020) on India-listed

nonfinancial companies also included a second category of nonfinancial manufacturing companies.

Orhangazi (2007) provides empirical evidence that financialization has negative effects on the investment behaviour of publicly traded companies in the United States. Operating profit has a positive effect on the level of real investment for the entire sample, but the coefficient is statistically more significant for larger companies than for smaller companies (manufacturers or not); however, long-term debt has a statistically significant negative effect for all companies. Regarding the two proxies that assess how financialization influences the level of investment, financial payments have a statistically significant negative coefficient for the majority of sub-samples, whereas financial profits only have a negative coefficient for large companies; for small and medium-sized companies, this is not the case, which, according to Orhangazi (2007, p. 29), suggests "*that financial profits in small and medium enterprises are essential to finance productive investment*".

The findings of Tori and Onaran (2018) and Trivedi (2020) are comparable. Although both financialization variables (financial capital inflows and financial capital outflows) have a negative effect on capital goods investment for UK-listed non-financial companies, financial revenues have a positive effect on investment in smaller companies. And Trivedi (2020) concludes that financialization, as evidenced by the rise in payments and financial income, has a statistically significant negative impact on the accumulation of capital assets only in the group of listed companies. This author chose the endowments variable (dividends payment and retention of profits for future dividends payments) to measure the financialization of companies, and this variable had statistical significance only in the large listed companies and not in the manufacturing companies studied, emphasizing that the dominance of the stock market in terms of shareholder value creation is much more pronounced in listed companies than in unlisted companies.

Auvray and Rabinovich (2017) extend the scope of their analysis by empirically investigating the feat of financialization and offshoring in real investment by non-financial companies listed in the United States. They define two estimation equations: the first equation consists of variables associated with financialization and their respective control variables, and the second equation consists of variables they believe measure offshoring. By introducing the variable(s) Repurchase/Issuance of common and preferred shares, these authors' empirical work is groundbreaking compared to those previously presented. We have already stated that stock buybacks result in an increase in the share price and are merely a manifestation of short-term management strategies designed to generate shareholder value (Palladino 2020a; Rabinovich 2020). In addition to working with the sample as a whole, it is also divided based on firm size (Large versus SMEs), and the results are comparable to those of Trivedi (2020), Tori and Onaran (2018) and Orhangazi (2007). Of their regressions, regressions Auvray and Rabinovich (2017) conclude that financialization manifests itself predominantly in larger firms: for the entire sample, only the payment of dividends is statistically significant with the expected negative sign, and only when the sample is divided by firm size (Large and SMEs), does repurchase also become statistically significant for the larger firms, confirming, as expected, a negative correlation with the investment.

If we consider the question of how non-financial companies can remain competitive in the face of a reduced productive capacity due to a reduction in the accumulation of capital assets (Rabinovich 2020), it makes sense to examine Offshoring, as the last few decades have witnessed significant changes in supply chains that have led to the expansion of global production networks. And this globalization of the productive sector had two major interdependent goals: to reduce production costs, thereby increasing corporate profits, and to use the increased corporate profits to finance the acquisition of financial assets capable of generating higher returns for shareholders (Milberg and Winkler 2010). When firms undergo reorganization procedures for their global value chains, they opt to retain the key activities within the organization while offshoring the non-core ones. Auvray and Rabinovich (2017) employ two indicators to quantify the extent of offshore, namely foreign intermediate inputs of restricted or core operations and foreign intermediate inputs of non-essential and/or non-energy activities, in accordance with the aforementioned premise. The validity of this hypothesis is contingent upon the presence of a negative connection between financial payments and capital expenditure investment within a sample of companies operating in industries characterized by a higher level of consumption of foreign intermediate inputs, as perceived by the authors.

The authors argue that a correlation between offshoring and financialization can only be asserted if this negative correlation is observed exclusively in industries characterized by a substantial degree of offshoring. By establishing this correlation, the authors have empirically demonstrated that a relationship exists between offshoring and financialization. Furthermore, their findings indicate that the 'reduce and distribute' strategy has been successfully implemented by companies operating in industries heavily engaged in Global Value (Auvray and Rabinovich 2017).

Building upon prior research, Seo et al. (2020) aim to evaluate the limited perspective in managing shareholder value by examining two distinct variables: the Payment Indicator and the Financial Investment. Nevertheless, these studies exhibit a distinct rationale compared to the preceding ones, as they aim to evaluate the innovation strategy of non-financial enterprises in Korea rather than solely focusing on the extent of capital goods investment. Based on the

conducted literature review, it was discovered that financialization manifests itself across multiple dimensions. This includes not only a decline in investments in tangible and intangible assets and a shift towards short-term focus, but also a reduction in investments in Research and Development (R&D) initiatives and alterations in innovation strategies. For instance, the researchers emphasize the significance of the study. According to a study conducted by Lee et al. (2020), an analysis of macroeconomic data from 31 OECD nations reveals a negative relationship between the progression of financialization and the level of radicalization in technological innovation. Additionally, the study finds a positive association between financialization and the number of patent registrations. These findings are consistent with the research conducted by (Seo et al. 2020).

The dependent variable is assessed through two distinct approaches. Firstly, it is quantitatively measured by the number of patents granted to company *i* at time *t*, which serves as an indicator of the company's incremental innovation. Secondly, it is qualitatively measured by considering patents weighted by future citations, which serves as a proxy for assessing the company's radical technological innovation. The results of the estimation were given individually for the two chosen dependent variables in the entire sample. The findings suggest that the size of the firm and its investment in research and development are factors that positively influence both incremental (quantitative) and radical (qualitative) innovation. In relation to the export rate, which serves as an indicator of market competitiveness, it has been observed that this variable exerts a detrimental impact on incremental innovation.[12] The empirical findings indicate that there exists a negative relationship between the indebtedness index and both the quantitative and qualitative indicators of innovation. This suggests that firms with higher levels of indebtedness are inclined to decrease their investment in innovation. The rationale behind this behaviour lies in the fact that an indebted company faces limitations in its ability to effectively respond to unfavourable shocks, particularly when a significant portion of its financial resources are allocated towards long-term investments in radical innovation. Consequently, it is advisable for such companies to refrain from engaging in this practice (Seo et al. 2020). With respect to the selected independent variables for assessing financialization, the findings, as anticipated, indicate a negative impact of the dividend distribution index and the overall distribution index on radical innovation:

> *"Thus, in an effort to meet short-term earnings targets and stock price levels demanded by the financial markets, managers must spend much of their funds on increasing dividend payouts and stock repurchases. In turn, there is little funding available for R&D investment and the planning horizon of managers shortens. Therefore, ultimately, managers focus on incremental innovation by improving existing technologies, rather than on radical innovation"* (Seo et al. 2020, p. 16).

In an effort to validate the findings, a comprehensive examination is conducted based on the scale of tangible assets, which affirms that the phenomenon of managerial myopia resulted in a short-term orientation among major organizations, while having no discernible impact on small and medium-sized enterprises.

Hahn (2019) espouses a similar line of reasoning as Seo et al. (2020) although employing a distinct methodology. The researcher intends to examine the extent to which the potential for technical and sustainable innovation may be sustained through a short-term management plan. This investigation will be guided by two primary research questions: To what extent does financialization hinder the autonomy of research and innovation within well-established German industrial enterprises? And to what degree are the future orientation and independence of innovation efforts compromised by the growing impact of financial investors and their focus on maximizing shareholder value? The author presents a study that examines panel data from German manufacturing firms, revealing that a significant majority of these companies rely on internal cash flows to finance their innovation endeavours, including those that are publicly traded. To address the empirical inquiries pertaining to the autonomy of the company's present and forthcoming innovation strategy, the author does interviews with cluster managers and financial institutions. Based on the author's analysis, it can be inferred that both the SA and private limited companies exhibit a significant degree of financial autonomy. This autonomy appears to be deliberate, as there is no discernible impact from external investors such as banks and shareholders on investment strategies or project decisions. Instead, these decisions are primarily guided by performance ratings and the expertise of the management team. To mitigate the constraints imposed by market forces on research autonomy, major corporations have established research centres to ensure technological advancement, expertise, and sustained innovation over the long term, while operating within control systems that incorporate performance evaluation metrics. The impact of financialization on innovation in German companies has been found to be less significant compared to the influence of Human Resources or Financial Control. It is well acknowledged that maintaining a high level of innovation is of utmost importance for enhancing the

[12] According to Schumpeter's Hypothesis, companies operating in monopolistic markets but facing the domestic market, tend to reveal a lower level of innovation than companies facing the foreign market where the level of competition is substantially higher.

competitiveness and market position of a company (Hahn 2019).

There appears to be an observable empirical pattern indicating that financialization is more prevalent in large corporations. This is evidenced by certain characteristics such as publicly traded capital, the involvement of institutional investors, and corporate governance models that incorporate remuneration systems for executives, including stock option packages. These factors contribute to the promotion and facilitation of short-term management practices aimed at maximizing shareholder value.

Financialization and income inequality

> *"Financialization has been considered an economic phenomenon characterized by a increase in the importance of the financial sector over society and the economy* (Epstein 2002). *This phenomenon transforms the functioning of economic systems at both macro and micro level, having an impact on at least three issues: (1) elevating the significance of the financial sector in relation to the real sector, (2) transferring income from the real sector to the financial sector, and (3) increasing income inequality and contributing to wage stagnation* (Palley 2008, 1)"
>
> (Do Carmo et al. 2019, p. 843).

The empirical literature provides evidence that the adoption of the Agency Theory as a guiding principle for maximizing shareholder value has given rise to a novel corporate governance model. However, this approach has been shown to exacerbate economic and societal inequalities, as well as create a significant imbalance and lack of commitment towards fulfilling corporate social responsibilities (Clarke et al. 2019).

There exists empirical evidence indicating that financialization and neoliberalism have played a role in the decrease in labour income share since the early 1980s, as identified by Hein (2013) furthermore, numerous additional empirical studies have emerged with the aim of establishing causal connections between financialization and the exacerbation of economic inequalities observed in recent decades. It is therefore feasible to discern an initial pathway linked to the sectoral structural transformation of the economy, as neoliberalism amplifies the significance of financial operations and augments the private sector while diminishing the public sector. Consequently, this contributes to a reduction in the proportion of wages in the national accounts and consequently a decline in the income share of the Gross Domestic Product (GDP) (Barradas 2019; Dünhaupt 2016; Hein 2013; Lin 2016; Ozdemir 2019). The second channel is related to the correlation between the augmented remuneration of top executives who adopt a short-term perspective in their managerial approach, with the objective of generating value for shareholders. This is accomplished by means of redistributing wealth through the disbursement of dividends and interest payments within the corporate (Barradas 2019; Dunhaupt 2016; Hein 2013; Kohler et al. 2018; Lin 2016; Palladino 2020b). The third channel is linked to the decline in bargaining power of unions, which can be attributed to shareholder primacy, labour market deregulation, and the liberalization and globalization of international trade and finance (Barradas 2019; Dunhaupt 2016; Hein 2013; Kohler et al. 2018; Ozdemir 2019).

This systematic review examines a collection of empirical studies ("Online Appendix" Table C) that have incorporated the concepts of financialization and neoliberalism into their econometric equations to assess their impact on the labour share. The majority of these studies focus on aggregate-level analysis. The findings of these studies, as reported by Barradas (2019), Dunhaupt (2016), Kohler et al. (2018), Ozdemir (2019) and Palladino (2020b), generally indicate a negative relationship between financialization/neoliberalism and the labour share. However, it should be noted that not all of these studies directly investigate all three channels of influence identified in this review.

According to Barradas (2019, p. 388), certain models lack a comprehensive assessment of the impact of financialization and neoliberalism on labour share, as they only consider specific channels in their estimations. To address this limitation, this author suggests doing an empirical investigation using panel data from 27 European Union nations. The findings of this study indicate that, despite variations in institutional frameworks among different nations, there is compelling evidence to support the notion that financialization and neoliberalism have detrimental impacts on the proportion of labour income in European Union member states. The findings demonstrate that, as anticipated, technological advancement and shareholder orientation have a negative impact on the labour share. Conversely, the GDP growth rate and government action in general yield positive benefits. The variable exhibiting the lowest anticipated outcome is financial activity. Initially, when the model alone incorporated the variables of financialization and neoliberalism, financial activity shown a notably beneficial impact on the labour share. However, upon the introduction of control variables, the statistical significance of financial activity diminished. The factors of education, globalization, and union density rate did not exhibit any statistically significant associations.

To Kohler et al. (2018), a significant portion of conducted studies primarily concentrate on topics such as bargaining power, capital outflow options, and the overemphasis on the financial sector. However, these studies often neglect to address the matters of household debt and the competitive pressures of capital markets associated with the first channel. Therefore, the authors put forward the proposition of

evaluating the significance of the capital markets channel, which is quantified by the ratio of stocks traded to average market capitalization. Additionally, they suggest examining the household debt channel, which is defined by the proportion of household disposable income, as an indicator of workers' debt. The study arrives to firm results regarding the adverse effects of financial openness and financial payments on the share of wages. Notably, financial openness exerts a greater influence compared to financial payments. Conversely, the analysis does not identify any statistically significant relationship between household debt, capital market competitiveness, and the wages share.

One such study that encompasses all three channels is conducted by Dunhaupt (2016, pp. 19, 20). Utilizing a cross-sectional time-series dataset spanning 22 years and encompassing 13 OECD countries, the author empirically establishes the influence of financialization on the proportion of labour in the overall national income. This impact is observed through three distinct pathways. The limited negotiating power of workers is primarily influenced by the shareholder value orientation and short-term perspective, as well as the processes of globalization and liberalization in international trade and finance. Furthermore, there has been a rise in overall liabilities, specifically in the form of interest payments and dividends that have been redirected towards salaries. This has led to an escalation in the mark-up and subsequently contributed to a decrease in the labour share of the national income. Ultimately, the reduction in governmental involvement had a significant impact on the distribution of economic activities across sectors. Additionally, the growing emphasis on the financial sector played a role in altering this composition. These factors all contributed to the overall decrease in the proportion of national revenue allocated to labour.

In Ozdemir (2019) study, a panel dataset comprising 52 countries from 1992 to 2012 is utilized to conduct an empirical analysis. The study confirms three hypotheses put forth by the author. Firstly, it establishes a negative association between financialization and income distribution in the short to medium term. Secondly, it demonstrates a negative correlation between increased globalization and income inequality in the short to medium term. Lastly, it identifies a U-shaped relationship between economic development and unequal income distribution in the short to medium term. According to Ozdemir (2019), the findings indicate that an increased degree of stock market developments is associated with a greater disparity in income distribution, resulting in a decreased proportion of wages in the overall national income. Additionally, variables such as globalization and technical advancements are identified as contributors to the decline in wages (p. 265).

In contrast to the findings of Kohler et al. (2018), who conducted an econometric study and found no statistically significant relationship between capital market competition and income distribution, Ozdemir (2019) presents evidence suggesting that an increase in stock market developments is associated with a greater degree of income inequality, resulting in a decreased proportion of wages in the overall national income. Such as Dünhaupt (2016) and Kohler et al. (2018), Ozdemir (2019) demonstrates that the phenomenon of globalization and technological advancements has a significant impact on the decline of ages. While the majority of empirical studies acknowledge the role of union power in this context, only the aforementioned works of Dünhaupt (2016), Kohler et al. (2018) and Ozdemir (2019) provide statistically significant results pertaining to this particular variable.

In a study conducted by Palladino (2020a), an examination of macroeconomic account data[13] and annual stock buybacks data[14] reveals a noteworthy finding. Specifically, there is empirical evidence indicating a decline in the proportion of wages to corporate assets from 21 to 11% between the years 1972 and 2017. Concurrently, payments to shareholders experienced an increase from 1.7 to 3.5% of total assets during the same time frame. The researcher additionally observes a consistent correlation between business earnings and payments to shareholders during the period from 1979 to 1997. However, starting from 1998, this correlation exhibits an upward trend, indicating a heightened influence of shareholders. From 1979 to 1997, there existed a notable positive correlation between profits and wages, indicating that wage levels were aligned with the upward trajectory of corporate profits. However, starting from 1998 and continuing until 2017, this correlation underwent a significant and more pronounced reversal, surpassing the previously observed positive relationship between payments to shareholders and corporate profits. In conjunction with the macroeconomic analysis, Palladino (2020a) conducts a fixed effects regression analysis using panel data of publicly traded non-financial companies in the United States. The study focuses on the relationship between wages, recorded at the firm level and encompassing salaries, wages, and other compensation-related benefits, and a key independent variable, namely payments to shareholders. This independent variable is measured as the combined value of dividends and stock buybacks, expressed as a proportion of operating expenses. The study reveals that a 10% rise in Shareholder Payments results in a corresponding decrease of 1.5% in Recorded Wages. This study investigated the correlation between shareholder primacy and labour compensation across different levels: aggregate, industry, and firm. The objective was to empirically test the hypothesis that the

[13] Source: Bureau of Economic Analysis (BEA).

[14] Data obtained from BD S&P Compustat.

pursuit of shareholder returns contributes to the prolonged stagnation of wages for typical workers in the United States.

However, the impacts of financialization extended beyond just wages and income distribution, since there have also been notable shifts in the distribution of employment opportunities. Two illustrative instances of this phenomenon can be observed in the findings reported by Lin (2016) and Wallusch et al. (2020).

But the consequences of financialization were not only felt in terms of wages and income distribution, but distribution of jobs also has itself changed. Two examples of this are the results obtained by Lin (2016) and Wallusch et al. (2020). Lin (2016) concludes, based on a comprehensive analysis of the relationship between financial growth (achieved through increased investment) and employment dynamics within non-financial corporations in the United States from 1982 to 2005, that "*Overall, the analysis shows that production and service workers are more vulnerable than professional and managerial workers to changes associated with corporate restructuring and globalization*" (p.12) and "*the negative impacts of financialization than lower skilled or less educated workers*" (p.13). Wallusch et al. (2020) conducted a study utilizing national and regional data on wages and employment distribution in the financial and insurance sector, as well as the industrial sector, in Central and Eastern European countries from 2003 to 2014. Their findings indicate that financialization in these countries resulted in two overarching outcomes: the generation of employment opportunities within the financial sector and an increase in wages that led to a reduction in wage disparities between the new and old member states of the European Union. However, it is worth noting that inequalities have been exacerbated at both the sectoral and regional levels. This may be attributed to the fact that employment opportunities within the financial industry, despite offering significantly greater salary compensation, were comparatively lower in comparison with the industrial sector. Furthermore, the growth of the financial sector mostly occurred in major urban centres.

An additional illustration pertained to the decline in working conditions experienced by workers across different hierarchies. This decline manifested in heightened feelings of insecurity and instability, as workers perceived the implementation of a new management approach centred around goals and financial ratios. This perception was particularly pronounced as companies underwent successive acquisitions, resulting in a progressive deterioration and precariousness of working conditions (Scheuplein 2019).

> *"As a result, the private equity type of ownership puts companies in a state of permanent crisis, with employees having to bear the entrepreneurial risk with their jobs. At the same time, industrial relations show increased, harsher and novel conflicts. In most of the companies acquired by private equity, the cultural embedding of the industrial conflict is being melted away and the institutions of conflict resolution are being undermined from within"*
>
> (Scheuplein 2019, p.11,12).

Discussion and future lines of research

The objective of this systematic review was to find relevant research that would provide insights into two primary inquiries: firstly, whether there exists a correlation between Corporate Governance and Financialization, and secondly, whether there exists a correlation between CEO Remuneration and Financialization. While the response did not provide a direct response to the anticipated concerns, it proved to be highly significant in fostering an understanding that there exists potential for further investigation and future research. It has been observed that although there exists a substantial body of the literature on the subject of financialization, and the research methodology has been tailored to address these specific research inquiries, the empirical studies primarily concentrate on two key aspects: the correlation between financialization and the accumulation of capital assets, and the association between financialization and disparities in income redistribution.

> *"In the process, it (NFC) is transformed into a financial-like corporation* (Krippner 2005), *through a complex and multi-layered process. Corporate strategies such as 'divest and distribute' have led to a reduction in productive investment, a rapid increase in financial payouts, and a deterioration in income distribution to the detriment of labor and taxpayers in the industrialized world* (Alvarez 2015; Lazonick 2014; Lin and Tomaskovic-Devey 2013)"
>
> (Kotnik and Sakinç 2022, p. 8).

The existing literature acknowledges that the connection between Corporate Governance and Financialization primarily revolves around and is substantiated by the prevailing Governance framework's emphasis on generating Shareholder Value. Additionally, the expansion of financial capital into sectors beyond financial institutions has been facilitated, to some extent, by alterations in managerial practices within non-financial companies (NFC) (Bogle and Sullivan 2009; Coles et al. 2006; Crotty 2003, 2009 *in* Zhang and Andrew 2014). In subsequent investigations, it would be intriguing to explore the potential existence of distinct attributes linked to various governance models that exhibit a stronger correlation with financialization policies, given no such association has been identified thus far. For instance, extant empirical research has demonstrated that publicly traded and larger corporations exhibit a higher degree of financialization.

However, limited attention has been given to examining other aspects of the Corporate Governance model.

It has been observed that the emphasis on financial metrics, such as share price increases and dividends, is a fundamental component of the phenomenon known as financialization. This entails non-financial firms redirecting their investments and business operations away from conventional production processes and towards activities related to finance (Krippner 2005; Tomaskivic-Devey and Lin 2011). In order to comprehend the shift towards a more finance-oriented approach in the strategies and structure of non-financial enterprises, it is necessary to conduct an examination of the incentives and rewards provided to the primary decision-makers inside these organizations (Shin 2012).

While the origins of financialization have been ascribed to societal and institutional shifts, such as regulatory measures and neoliberal public policies (Krippner 2011; Tomaskivic-Devey and Lin 2011), it is important to note that these changes have played a significant role at the macro level. However, Shin (2012, p. 554) argues that the actual implementation of financialization within the non-financial sector has been primarily driven by companies and, more specifically, by influential decision makers. The involvement of corporate executives in the phenomena of financialization and the shareholder value revolution was facilitated through their adherence to the shareholder value mantra. This entailed CEOs engaging in the reallocation of corporate resources and profits away from conventional transactions, such as leveraged mergers and acquisitions and share buybacks. These actions were undertaken with the aim of securing substantial rewards for themselves (Davis et al. 1994; Zajac and Westphal 2004).

> *"As a central productive actor, the business enterprise restructured its environment through its financialized strategies and was restructured by financial imperatives that were progressively promoted under the banner of shareholder value and gradually spread around the world"*
>
> (Kotnik and Sakinç 2022, p. 8).

The role of executive compensation in motivating managers to make strategic decisions that benefit shareholders has been widely acknowledged. However, this emphasis on shareholder value creation has led top executives to prioritize financial returns for corporate investors above all else. Therefore, it would be worthwhile to examine how companies allocate their resources by exploring the origins of these financial assets and studying empirical evidence on the factors that contribute to companies' financial accumulation (Shin 2012). We also propose that it would be worthwhile to examine Special Purpose Vehicles (SPVs), which have been utilized by non-financial companies for various purposes including financial risk mitigation, tax avoidance, asset transfer, debt securitization, financial innovation, preservation of industrial intellectual property, and more. These SPVs can be seen as unintended outcomes resulting from corporate financialization processes. Special purpose vehicles (SPVs) were among the financial instruments that played a significant role in the Enron crisis. These instruments were primarily utilized to conceal losses. Consequently, it would be worthwhile to consider incorporating SPVs as an additional variable in the measurement of financialization. This is in addition to the existing widely used variables, such as financial receipts and payments.

It is our contention that there exists a gap in the existing body of the literature pertaining to investigations aimed at uncovering potential causal connections between compensation systems and the adoption of certain financialization strategies. By doing so, these studies would make a valuable contribution to the field by addressing the current dearth of knowledge highlighted by Kotnik and Sakinç (2022). Specifically, this research aims to shed light on the degree to which CEOs are influenced by the ideology of shareholder value and their susceptibility to engaging in financialized decision-making. Is there a positive correlation between the level of financialization within a company and the compensation received by its CEOs? What are the underlying incentives driving financialized strategic decisions?

It is deemed advantageous to use a fresh perspective while examining CEO compensation. The issue of CEO salary has been a subject of controversy among academics, politicians, and the media, as highlighted by Gong (2011) research. This discourse has centred on the extent to which these high levels of compensation align with the interests of shareholders. These uncertainties were increasingly apparent during the worldwide economic downturn of 2008. According to the author's perspective, existing research have yielded inconclusive findings about the impact of CEO remuneration on performance outcomes. Consequently, it is reasonable to raise doubts about the effectiveness of current executive remuneration structures in matching the interests of CEOs and shareholders. What factors have exerted a greater influence on the strategic decision-making processes of non-financial corporations: the generation of shareholder value or the individual incentives of CEOs linked to their compensation, contingent upon the immediate performance of Non-Financial Companies (NFC) shares?

Conclusion

The primary aim of this systematic review is to address two research inquiries (1) What relationship exists between Financialization and Corporate Governance? (2) Is there any relationship between financialization and CEO compensation/ remuneration systems? The ProKnow-C and Methodi

Ordinatio methodological protocols were employed to carefully choose a collection of 38 scientific works. These articles were then subjected to synthesis and presentation of their empirical findings. Two areas of research pertaining to financialization were identified: the correlation between this phenomenon and capital accumulation, as well as the inequitable redistribution of income. It became evident that there exists an inverse association between financialization and investment in production goods, as well as between financialization and the proportion of income derived from labour. Contrarily, financialization is linked to various phenomena, including a notable surge in financial payments through dividends and interest, as well as a substitution of financial investments for investments in productive goods. These outcomes can be attributed to the prevailing governance model that prioritizes the maximization of shareholder value.

In broad terms, empirical studies into the connection between financialization and investment commonly reveal an inverse association, indicating that financialization tends to hinder the accumulation of fixed capital. This hindrance is often attributed to the prevalence of short-term management strategies that prioritize the creation of shareholder profit. Consequently, the authors identify two primary mechanisms accountable for diverting the internal resources of major corporations away from capital goods investment: Financial Payments and Financial Income. The empirical research examining the causal connections between financialization and income inequality concentrates on three explanatory pathways. Firstly, the influence of neoliberalism, which has resulted in an expanding prominence of financial activities and a reduction in the public sector relative to the private sector. Secondly, the upward trend in top managers' salaries, as they have aligned their interests with shareholders by adopting short-term management strategies that generate shareholder value. Lastly, the diminishing bargaining power of workers, which can be attributed not only to the prioritization of shareholders but also to labour market deregulation, globalization, and the liberalization of international trade and finance.

Similar to any work this particular work possesses inherent restrictions. One potential drawback of our study is the utilization of a significance level (α) of 10 in the Ordinatio Index. This choice may have resulted in a bias towards selecting more recent papers, perhaps overlooking articles of greater scientific significance. Subjectivity is inherent in any research work, as researchers must make decisions that are influenced by their own perspectives. However, to minimize subjectivity, we have employed established procedures that have been well accepted within the scientific community. Exploring the alternative value of $\alpha = 1$ (or any other) could potentially yield valuable insights. However, based on the current systematic review, we contend that the findings can be utilized to inform future research endeavours and highlight practical and societal implications in this domain.

Hence, it is our contention that there exists potential for future avenues of inquiry that may seek empirical substantiation regarding the factors influencing companies' financial accumulation and the origins of their financial assets. This entails a more precise identification of the specific areas where companies allocate their resources and an examination of whether there are causal connections between these decisions, such as financialization policies involving the utilization of Special Purpose Vehicles, and the incentive systems of CEOs. Lastly, in order to examine the potential correlation between specific attributes of corporate governance and increased financialization in non-financial firms, an analysis could also be conducted.

We have also identified pertinent concerns over CEO remuneration, which we have submitted as a disconcerting inquiry: What factors have exerted a greater influence on the strategic decision-making processes of non-financial corporations: the generation of shareholder value or the individual incentives of CEOs linked to their compensation, contingent upon the immediate performance of non-financial companies shares?

Authors such as Hopkins and Lazonick (2016), Laurin-Lamothe and L'Italien (2015), and Lazonick and Shin (2019) contend that existing compensation systems provide CEOs with incentives to prioritize the extraction of value rather than its creation. The facilitation of this phenomenon can be attributed to the guiding principles inherent in contemporary corporate governance models, which were formulated with the consideration of agency theory.

This study aims to provide valuable insights into contemporary governance models, complementing existing lines of research. By adopting a novel perspective, distinct from the prevailing agency theory that emphasizes the alignment of interests between executives and shareholders, this work sheds light on the challenges associated with income redistribution and the resulting exacerbation of social inequalities.

Primarily, there exists a discernible emphasis on achieving sustainable and equitable economic expansion in contemporary times. The 17 Sustainable Development Goals encompass and reflect the aforementioned issues. This new endeavour holds the potential to assist governments, regulators, and firms in reevaluating contemporary corporate governance procedures, emphasizing the creation of value not only for shareholders, but also for society at large. In the future, a new Sustainable Corporate Governance should emerge.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

References

Admati, A.R. 2017. A Skeptical View of Financialized Corporate Governance. *Journal of Economic Perspectives* 31(3): 131–150. https://doi.org/10.1257/jep.31.3.131.

Allen, M. P. 1981. Power and Privilege in the Large Corporation: Corporate Control and Managerial Compensation. *American Journal of Sociology* 86(5): 1112–1123 *cited in* Shin, T. (2012). *CEO Compensation and Shareholder Value Orientation Among Large US Firms**.

Alvarez, I. 2015. Financialization, Non-financial Corporations and Income Inequality: The Case of France. *Socio-Economic Review* 13(3): 449–475 *cited in* Kotnik and Sakinç (2022). Executive compensation in Europe: realized gains from stock-based pay.

Auvray, T., and J. Rabinovich. 2017. *The Financialisation-Offshoring Nexus and the Capital Accumulation of U . S . Nonfinancial Firms to Cite This Version : HAL Id : hal-01492373 N ° 2017-02 The Financialisation-Offshoring Nexus and the Capital Accumulation of U . S . Nonfinancial Firms*. https://hal.archives-ouvertes.fr/hal-01492373.

Baiman, S. 1990. Agency Research in Managerial Accounting: A Second Look. *Accounting, Organizations and Society* 15(4): 341–371.

Baronian, L., M. Pierre, and L. Baronian. 2021. From Orchestra Conductor to Principal's Agent: How Internal Financialization of Top Management has Enabled External Financialization of the Firm. *Review of Political Economy*. https://doi.org/10.1080/09538259.2020.1869400.

Barradas, R. 2019. Financialization and Neoliberalism and the Fall in the Labor Share: A Panel Data Econometric Analysis for the European Union Countries. *Review of Radical Political Economics*. https://doi.org/10.1177/0486613418807286.

Bebchuk, L.A., and J.M. Fried. 2003a. Executive Compensation as an Agency Problem. *Journal OfEconomic Perspectives* 17(3): 71–92.

Bebchuk, L.A., and J.M. Fried. 2003b. Executive Compensation as an Agency Problem. *Journal of Economic Perspectives* 17(3): 71–91.

Bebchuk, L.A. and M. Weisbach. (2009). *The State of Corporate Research. Charles A. Dice Centrer for Research in Financial Economics*. Fischer Collegue of Businee Working Paper Series. http://www.ssrn.com/abstract=1508146.

Berle, A., and G. Means. 1932. *The Modern Corporation and Private Property*. London: Macmillan.

Berry, A.J., and E. Al. 2005. *Management Control: Theories, Issues and Performances*, 2nd ed. London: Palgrave Macmillan.

Bhagat, S., and B.S. Black. 2002. Board Independence and Long-Term Performance. *Journal of Corporation Law* 27 (2): 231–273.

Bogle, J. C., and R. N. Sullivan. 2009. Markets in Crisis. *Financial Analysts Journal* 65(1): 17–24. https://doi.org/10.2469/faj.v65.n1.3 *cited in* Zhang and Andrew (2014). Financialisation and the Conceptual Framework.

Bonner, S.E., and G.B. Sprinkle. 2002. The Effects of Monetary Incentivs on Efforts and Tasks Performance: Theories, Evidence and a Framework for Researcho Title. *Accounting Organizatons and Society* 27(3): 303–345.

Bresley, R., S.C. Myers, and F. Allen. 2008. *Princípios de Finanças Corporativas*, 8th ed. New York: McGraw-Hill.

Burns, N., and S. Kedia. 2006. The Impact of Performance-Based Compensation on Misreporting. *Journal of Financial Economics* 79(1): 53–67.

Cabezas-Clavijo, Á., and E. Delgado-López-Cózar. 2013. *Google Scholar Metrics 2013 : Nothing New Under the Sun* (No. 12; Issue July).

Campos, E.A.R., R.N. Pagani, L.M. Resende, and J. Pontes. 2018. Construction and Qualitative Assessment of a Bibliographic Portfolio Using the Methodology Methodi Ordinatio. *Scientometrics* 116(2): 815–842.

Do Carmo, M., M.S. Neto, and C. Donadone. 2019. Financialization in the Automotive Industry: Shareholders, Managers, and Salaries. *Journal of Economic Issues* 53(3): 841–862. https://doi.org/10.1080/00213624.2019.1646609.

Chahed, Y. 2021. Words and Numbers: Financialization and Accounting Standard Setting in the United Kingdom. *Contemporary Accounting Research* 38(1): 302–337. https://doi.org/10.1111/1911-3846.12614.

Clarke, T., W. Jarvis, and S. Gholamshahi. 2019. Critical Perspectives on Accounting the Impact of Corporate Governance on Compounding Inequality: Maximising Shareholder Value and Inflating Executive Pay. *Critical Perspectives on Accounting* 63: 102049. https://doi.org/10.1016/j.cpa.2018.06.002.

Coles, J. L., N. D. Daniel, and L. Naveen. 2006. Managerial Incentives and Risk-Taking. Journal of financial Economics, 79(2): 431–468 *cited in* Zhang and Andrew (2014). Financialisation and the Conceptual Framework.

Conyon, M.J. 1994. Corporate Governance Changes in UK Companies Between 1988 and 1993. *Corporate Governance: An International Review* 2 (2): 87–100.

Conyon, M.J., P. Gregg, and S. Machin. 1995. Taking Care of Business: Executive Compensation in the United Kingdon. *The Economic Journal* 105(430): 704–714. https://doi.org/10.1080/1361946970858.

Conyon, M.J., and D. Leech. 1994. Top Pay, Company Performance and Corporate Governance. *Oxford Bulletin of Economics and Statistics* 124(574): 66–89.

Copeland, T.E., J.F. Weston, and K. Shastri. 2007. *Financial Theory and Coprporate Policy*. London: Pearson.

Core, J., W. Guay, and D. Larcker. 2003. The Executive Equity Compensations and Incentives: A Survey. *FRBNY Economic Review, 27–50*.

Crotty, J. 2003. The Impact of Destructive Product Market Competition and Impatient Finance on Nonfinancial Corporations in the Neoliberal Era. *Review of Political Economics* 35(3): 271–279. https://doi.org/10.1177/0486613403255533.

Crotty J. 2009. Structural Causes of the Global Financial Crisis: A Critical Assessment of the 'New Financial Architecture'. *Cambridge Journal of Economics*, 33: 563–80 *cited in* Zhang and Andrew (2014). Financialisation and the Conceptual Framework.

Davis, G.F., K.A. Diekmann, and C.H. Tinsley. 1994. The Decline and Fall of the Conglomerate Firm in the 1980s: The Deinstitutionalization of an Organizational Form. *American Sociological Review* 59: 547–570.

De Carvalho, G.D.G., C.C. Sokulski, W.V. Da Silva, H.G. De Carvalho, R.V. De Moura, A.C. De Francisco, and C.P. Da Veiga. 2020. Bibliometrics and Systematic Reviews: A Comparison Between the Proknow-C and the Methodi Ordinatio. *Journal of Informetrics*. https://doi.org/10.1016/j.joi.2020.101043.

Demsetz, H., and B. Villalonga. 2001. Ownership Structure and Corporate Performance. *Journal of Corporate Finance* 7: 209–233.

Denis, D., and J. McConnell. 2003a. International Corporate Governance. *Journal of Financial and Quantitative Analysis* 38 (1): 1–36.

Denis, D.K., and J.J. McConnell. 2003b. International Corporate Governance. *The Journal of Financial and Quantitative Analysis* 38 (1): 1–36.

Denning, S. 2017. Why Maximizing Shareholder Value is a Threat to U.S. Business. *Strategy and Leadership* 45(6): 3–10. https://doi.org/10.1108/SL-09-2017-0084.

Devers, C. E., A. A. Cannella, G. P. Reilly, and M. E. Yoder. 2007. Executive Compensation: A Multidisciplinary Review of Recent Developments. *Journal of Management* 33(6): 1016–1072 *cited in* Shin, T. (2012). CEO Compensation and Shareholder Value Orientation Among Large US Firms*.

DiPrete, T. A., G. M. Eirich, and M. Pittinsky. 2010. Compensation Benchmarking, Leapfrogs, and the Surge in Executive Pay. *American Journal of Sociology* 115(6): 1671–1712 *cited in* Shin, T. (2012). CEO Compensation and Shareholder Value Orientation Among Large US Firms*.

Dobbin, F., and J. Jung. 2010. The Misapplication of Mr. Michael Jensen: How Agency Theory Brought Down the Economy and Why it Might Again. In *Markets on Trial: The Economic Sociology of the US Financial Crisis: Part B* (pp. 29–64). Emerald Group Publishing Limited *cited in* Shin, T. (2012). CEO Compensation and Shareholder Value Orientation Among Large US Firms*.

Dobbin, F., and D. Zorn. 2005. Corporate Malfeasance and the Myth of Shareholder Value. In *Power and Social Theory*, ed. E. D. Diane, Vol. 17, 179–198. Publishing Limited.

Dore, R. 2008. Financialization of the Global Economy. *Industrial and Corporate Change* 17(6): 1097–1112. https://doi.org/10.1093/icc/dtn041.

Doubleday, D., and J. Wagner. 2009. New Era for Boards and Executive "Pay for Performance." *The Corporate Board* 30(178): 5–12.

Dünhaupt, P. 2016. Determinants of Labour's Income Share in the Era of Financialisation. *Cambridge Journal of Economics* 2016: 1–24. https://doi.org/10.1093/cje/bew023.

Eisenhardt, K.M. 1989. Agency Theory: An Assessment and Review. *Academy of Management Review* 14(1): 57–74.

Elías, J. 2013. The impact of the variable financialization in the collapse of General Motors Corporation of 2008. In *Gerpisa colloquium cited in* do Carmo et al. (2019). Financialization in the Automotive Industry: Shareholders, Managers, and Salaries.

Ensslin, L., A. Dutra, S.R. Ensslin, L.C. Chaves, and V. Dezem. 2015. *Research Process for Selecting a Theoretical Framework and Bibliometric Analysis of a Theme : Illustration for the Management of Customer Service in a Bank*. *June*, 782–796.

Ensslin, L., S.R. Ensslin, R.T.O. Lacerda, and J.E. Tasca. 2010. *ProKnow-C, Knowledge Development Process—Constructivist. Processo Técnico Com Patente de Registo Pendente Junto ao INPI*.

Epstein, G. 2002. *Financialization, Rentier Interest, and Central Bank Policy* [Paper presentation]. PERI Conference on Financialization of the World Economy, December 7–8, 2001. University of Massachusetts, Amherst *cited in* do Carmo, M., Neto, M. S., & Donadone, J. C. (2019). Financialization in the Automotive Industry: Shareholders, Managers, and Salaries.

Fama, E. 1980. Agency Problems and the Theory of the Firm. *The Journal of Political Economy* 88 (2): 288–307.

Fama, E.F., and M.C. Jensen. 1983a. Agency Problems and Residual Claims. *Journal of Law and Economics* 26: 327–349.

Fama, E.F., and M.C. Jensen. 1983b. Separation of Ownership and Control. *Journal of Law and Economics* 26 (2): 301–325.

Fich, E.M., and A. Shivdasani. 2006. Are Busy Boards Effective Monitors? *Journal of Finance* 61 (2): 689–724.

Fiebiger, B. 2016. Rethinking the Financialisation of Non-financial Corporations: A Reappraisal of US Empirical Data. *Review of Political Economy* 28(3): 354–379 *cited in* Rabinovich, J. (2020). Financialisation and the 'supply-side' face of the investment-profit puzzle investment-profit puzzle.

Filatotchev, I., and D. Allock. 2010. Corporate Governance and Executive Remuneration: A Contingency Framework. *Academy of Management Perspectives* 24(1): 20–33.

Finkelstein, S., D. C. Hambrick, and A. A. Cannella. 2009. *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*. New York: Oxford University Press *cited in* Shin, T. (2012). CEO Compensation and Shareholder Value Orientation Among Large US Firms*.

Firstenberg, P.B., and B.G. Malkiel. 1980. Why Corporate Boards Need Independent Directors. *Management Review* 69 (4): 26–38.

Fligstein, N., and T. Shin. 2007. Shareholder Value and the Transformation of the US Economy, 1984–2000 1. In *Sociological forum* (Vol. 22, No. 4, pp. 399–424). Oxford: Blackwell Publishing Ltd *cited in* Shin, T. (2012). CEO Compensation and Shareholder Value Orientation Among Large US Firms*.

Froud, J., D. Tischer, and K. Williams. 2017. It is the Business Model … Reframing the Problems of UK Retail Banking. *Critical Perspectives on Accounting* 42(October 2012): 1–19. https://doi.org/10.1016/j.cpa.2016.04.001.

Gibbons, R., and K.J. Murphy. 1992. Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence. *Journal of Political Economy* 100(3): 1–9.

Gillan, S.L., and L.T. Starks. 2003. Corporate Governance Ownership and the Role of Institutional Investors: A Global Perspective. *Journal of Appliance Finance* 3 (2): 4–22.

Goldstein, A. 2012. Revenge of the Managers: Labor Cost-Cutting and the Paradoxical Resurgence of Managerialism in the Shareholder Value Era, 1984 to 2001. *American Sociological Review* 77(2): 268–294 *cited in* Shin, T. (2012). CEO Compensation and Shareholder Value Orientation Among Large US Firms*.

Gong, J.J. 2011. Examining Shareholder Value Creation over CEO Tenure: A New Approach to Testing Effectiveness of Executive Compensation. *Journal of Management Accounting Research* 23(1): 1–28.

Gregg, P., S. Machin, and S. Szymanski. 1993. The Disappearing Relationship Between Directors' Pay and Corporate Performance. *British Journal of Industrial Relation* 31(1): 1–9.

Grossman, S.J., and O.D. Hart. 1980. Takeover Bids, the Free-Rider Problem and the Theory of Corporation. *The Bell Journal of Economics* 11 (1): 42–64.

Gstraunthaler, T., J. Lukács, and M. Steller. 2008. The Board of Directors and its Role in the Corporate Governance System—Considerations about the Control Model—A Research Note. *International Journal of Economic Sciences and Applied Research* 1 (1): 37–54.

Hager, S.B. 2021. Varieties of Top Incomes? *Socio-Economic Review* 18(4): 1175–1198. https://doi.org/10.1093/ser/mwy036.

Hahn, K. 2019. Innovation in Times of Financialization: Do Future-Oriented Innovation Strategies Suffer? Examples from German Industry. *Research Policy* 48(4): 923–935. https://doi.org/10.1016/j.respol.2018.10.016.

Hall, B., and J. Liebman. 1998. Are CEOs Really Paid Like Bureaucrats? *Quarterly Journal of Economics* 113(5): 653–691.

Hall, B.J., and K.J. Murphy. 2003. The Trouble with Stock Options. *Journal of Economic Perspectives* 17(3): 49–70.

Hansmann, H. and R. Kraakman. 2001. The End of History for Corporate Law. *Georgetown Law Journal* 89(2): 439–68 *cited in* Admati, A. R. (2017). A Skeptical View of Financialized Corporate Governance.

Harrison, J.S., R.E. Freeman, and M.C. Abeu. 2015. Stakeholder Theory as an Ethical Approach to Effective Management: Applying the Theory to Multiple Contexts. *Review of Business*

Management 17(55): 858–869. https://doi.org/10.7819/rbgn.v17i55.2647.

Healy, P.M., and J.M. Wahlen. 1999. A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizonsorizons* 13(4): 365–383.

Hein, E. 2013. Finance-Dominated Capitalism and Re-distribution of Income: A Kaleckian Perspective. *Cambridge Journal of Economics* 2008: 1–28. https://doi.org/10.1093/cje/bet038.

Holmström, B. 1979. Moral Hazard and Observability. *Bell Journal of Economics* 10(Spring): 74–91.

Holmström, Bengt. 1982. Moral Hazard in Teams. *The Bell Journal of Economics* 13(2): 324–340.

Holmstrom, B., and P. Milgrom. 1991. Multitask Principal Agent Analyses: Incentive Contracts, Asset Ownership and Job Design. *Journal of Law, Economics & Organization* 7: 24–52.

Jensen, M.C. 2001. Value Maximisation, Stakeholder Theory, and the Corporate Objective Function. *European Financial Management* 7(3): 297–317.

Jensen, M.C., and W.H. Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3(4): 305–360. https://doi.org/10.1016/0304-405X(76)90026-X.

Jensen, M.C., and K.J. Murphy. 1990. CEO Incentives—It's Not How Much You Pay, But How. *Harvard Business Review* 3(February): 138–153.

John, K., and L.W. Senbet. 1998. Corporate Governance and Corporate and Board Effectiveness. *Journal of Banking and Finance* 22: 371–403.

Kelly, K.O. 2007. Feedback and Incentives on Nonfinancial Value Drivers: Effects on Managerial Decision Making. *Contemporary Accounting Research* 24 (2): 523–556.

Kerr, S. 1975. On the Folly of Rewarding A, While Hoping for B. *Academy of Management Journal* 18(4): 769–783.

Kliman, A., and S.D. Williams. 2014. Why "Financialisation" Hasn't Depressed US Productive Investment. *Cambridge Journal of Economics* 2014(2012): 1–26. https://doi.org/10.1093/cje/beu033.

Knafo, S., and S.J. Dutta. 2020. The Myth of the Shareholder Revolution and the Financialization of the Firm. *Review of International Political Economy* 27(3): 476–499. https://doi.org/10.1080/09692290.2019.1649293.

Kohler, K., A. Guschanski, and E. Stockhammer. 2018. *The Impact of Financialisation on the wage share. A Theoretical Clarification and Empirical Test* (Economics Discussion Papers 2018–1; Vol. 1).

Kotnik, P., and M.E. Sakinç. 2022. Executive Compensation in Europe: Realized Gains from Stock-Based Pay. *Review of International Political Economy*. https://doi.org/10.1080/09692290.2022.2078397.

Krippner, G.R. 2005. The Financialization of the American Economy. *Socio-Economic Review* 3(2): 173–208. https://doi.org/10.1093/SER/mwi008.

Krippner, G.R. 2011. *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge: Harvard University Press.

La Porta, R., F. Lopes-de Silanes, and A. Schleifer. 1999. Law and Finance. *Journal of Political Economy* 106 (6): 1113–1155.

Larcker, D.F., S.A. Richardson, and I.R. Tuna. 2007. Corporate Governance, Accounting Outcomes, and Organizational Performance. *The Accounting Review* 82(4): 963–1008.

Laurin-Lamothe, A., and F. L'Italien. 2015. Financiarisation des Entreprises et Rémunération des Dirigeants au Québec et au Canada. *Revue Interventions économiques. Papers in Political Economy* (52).

Lazonick, W. 2014. Profits Without Prosperity. *Harvard Business Review* 92(9): 46–55 *cited in* Kotnik and Sakinç (2022). Executive compensation in Europe: realized gains from stock-based pay.

Lazonick, W. 2016. *The Value-Extracting CEO: How Executive Stock-Based Pay Undermines Investment in Productive Capabilities* (December 3). Institute for New Economic Thinking Working Paper Series No. 54. https://ssrn.com/abstract=2993933 or https://doi.org/10.2139/ssrn.2993933.

Lazonick, W., and J.S. Shin. 2019. *Predatory Value Extraction: How the Looting of the Business Corporation Became the US Norm and How Sustainable Prosperity can be Restored*. Oxford: Oxford University Press.

Lazonick, W., and M. O'Sullivan. 2000. Maximizing Shareholder Value: A New Ideology for Corporate Governance. *Economy and Society* 29(1): 13–35. https://doi.org/10.1080/030851400360541.

Lee, Y.S., H.S. Kim, and H.J. Seo. 2020. Financialization and Innovation Short-Termism in OECD Countries. *Review of Radical Political Economics* 52 (2): 259–286.

Lewellen, W., C. Loderer, and K. Martin. 1987. Executive Compensation and Executive Incentive Problems: An Empirical Analysis. *Journal of Accounting and Economics* 9(3): 287–310.

Lilling, M. 2006. The Link Between CEO Compensation and Firm Performance: Does Simultaneity Matter? *Atlantic Economic Journal* 34(1): 101–114. https://doi.org/10.1007/s11293-006-6132-8.

Lin, K.-H. 2016. The Rise of Finance and Firm Employment Dynamics. *Organization Science* 27(4): 972–988. https://doi.org/10.1287/orsc.2016.1073.

Lin, K. H., and D. Tomaskovic-Devey. 2013. Financialization and US Income Inequality, 1970–2008. *American Journal of Sociology*, 118(5): 1284–1329 *cited in* Kotnik and Sakinç (2022). Executive compensation in Europe: realized gains from stock-based pay.

Loderer, C., and U. Peyer. 2002. Board Overlap, Seat Accumulation and Share Prices. *European Financial Management, England* 8 (2): 165–192.

Lowe, A., Y. Nama, A. Bryer, C. Dambrin, I. Jeacle, J. Lind, P. Lorino, K. Robson, C. Carter, and E. Svetlova. 2020. Problematizing Profit and Profitability: Discussions. *Accounting, Auditing & Accountability Journal* 33(4): 753–793. https://doi.org/10.1108/AAAJ-10-2019-4223.

Mace, M. 1986. *Directors, Myth, and Reality*. Boston: Harvard Business School Press.

Main, B. 1992. *Top Executive Pay and Company Performance* (University).

Main, B., and J. Johnston. 1993. Remuneration Committees and Corporate Governance. *Accounting and Business Research* 23(1): 35–62.

Matsumoto, A. 2020. Considerations on Inequality, Corporate Governance, and Financialization. *Journal of Economic Issues* 54(2): 334–340. https://doi.org/10.1080/00213624.2020.1743141.

Mellahi, K., and David G. Collings. 2010. The Barriers to Effective Global Talent Management: The Example of Corporate Élites in MNEs. *Journal of World Business* 42(2): 143–149.

Merchant, K.A., and W.A. Van Der Stede. 2003a. *A Manangement Control System: Performance Measurement, Evaluation and Incentives*. London: Prentice Hall.

Merchant, K.A., and W.A. Van Der Stede. 2003b. A Manangement Control System: Performance Measurement. In *Evaluation and Incentives*. Harlow: Pr.

Milberg, W., and D. Winkler. 2010. Financialisation and the Dynamics of Offshoring in the USA. *Cambridge Journal of Economics* 34: 275–293. https://doi.org/10.1093/cje/bep061.

Montalban, M., and M.E. Sakinc. 2013. Financialization and Productive Models in the Pharmaceutical Industry. *Industrial and*

Corporate Change 22(4): 981–1030. https://doi.org/10.1093/icc/dtt023.

Murphy, K.J. 1985. Corporate Performance and Managerial Remuneration: An Empirical Analysis. *Kevin J. Murphy* 7(3): 11–42.

Onaran, Ö., E. Stockhammer, and L. Grafl. 2014. Financialization, Income Distribution, and Aggregate Demand in the USA. *Cambridge Journal of Economics* 35(4): 637–661. https://doi.org/10.1093/cje/beq045.

Orhangazi, Ö. 2007. *Financialization and Capital Accumulation in the Non-Financial Corporate Sector: A Theoretical and Empirical Investigation of the U.S. Economy: 1973–2003* (No. 149).

Ozdemir, O. 2019. Financialization and the Labor Share of Income. *Review of Economic Perspectives* 19(4): 265–306. https://doi.org/10.2478/revecp-2019-0015.

Ozkan, N. 2007. Do Corporate Governance Mechanisms Influence CEO Compensation? An Empirical Investigation of UK Companies. *Journal of Multinational Financial Management* 17(5): 349–364. https://doi.org/10.1016/j.mul-fin.2006.08.002.

Pagani, R.N., J.L. Kovaleski, and L.M. Resende. 2015. Methodi Ordinatio: A Proposed Methodology to Select and Rank Relevant Scientific Papers Encompassing the Impact Factor, Number of Citation, and Year of Publication. *Scientometrics* 105(3): 2109–2135. https://doi.org/10.1007/s11192-015-1744-x.

Palladino, L. 2020a. Do Corporate Insiders Use Stock Buybacks for Personal Gain? Do Corporate Insiders Use Stock Buybacks for Personal Gain? *International Review of Applied Economics* 34(2): 152–174. https://doi.org/10.1080/02692171.2019.1707787.

Palladino, L. 2020b. Financialization at Work: Shareholder Primacy and Stagnant Wages in the United States. *Competition and Change*. https://doi.org/10.1177/1024529420934641.

Palley, T. 2008. *Financialization: What it is and Why it Matters* (IMK Working Paper, Issues 04–2008). IMK at the Hans Boeckler Foundation, Macroeconomic Policy Institute. https://econpapers.repec.org/RePEc:imk:wpaper:04-2008 *cited in* do Carmo, M., Neto, M. S., & Donadone, J. C. (2019). Financialization in the Automotive Industry: Shareholders, Managers, and Salaries.

Park, K. 2019. Does Peer Firm Executive Compensation Affect Earnings Management. *Managerial Finance* 45(1): 54–71.

Rabinovich, J. 2019. The Financialization of the Non- financial Corporation. A Critique to the Financial Turn of Accumulation Hypothesis. *Metroeconomica* 70(4): 738–775 *cited in* Rabinovich, J. (2020). Financialisation and the 'supply-side' face of the investment-profit puzzle investment-profit puzzle.

Rabinovich, J. 2020. Financialisation and the 'Supply-Side' Face of the investment-Profit Puzzle Investment-Profit Puzzle. *Journal of Post Keynesian Economics*. https://doi.org/10.1080/01603477.2020.1734463.

Scheuplein, C. 2019. Private Equity as a Commodification of Companies: The Case of the German Automotive Supply Industry of the German Automotive Supply Industry. *Journal of Economic Policy Reform*. https://doi.org/10.1080/17487870.2019.1637590.

Schleifer, A., and R.W. Visnhy. 1986. Large Shareholders and Corporate Governance Control. *Journal of Political Economy* 94 (3): 461–488.

Schleifer, A., and R.W. Vishny. 1997. A Survey of Corporate Governance. *The Journal of Finance* 52(2): 737–783.

Seo, H.J., S.J. Kang, and Y.J. Baek. 2020. Managerial Myopia and Short-Termism of Innovation Strategy: Financialisation of Korean Firms. *Cambridge Journal of Economics*. https://doi.org/10.1093/cje/beaa023.

Shaw, K., and M. Zhang. 2010. Is CEO Cash Compensation Punished for Poor Firm Performance? *The Accounting Review* 85(3): 1065–1093. https://doi.org/10.2308/accr.2010.85.3.1065.

Shin, T. 2012. CEO Compensation and Shareholder Value Orientation Among Large US Firms*. *The Economic and Social Review* 43(4): 535–559.

Stockhammer, E. 2004. Financialisation and the Slowdown of Accumulation. *Cambridge Journal of Economics* 28(5): 719–741. https://doi.org/10.1093/cje/beh032.

Stockhammer, E. 2005. Shareholder Value Orientation and the investment-Profit Puzzle. *Journal of Post Keynesian Economics* 28(2): 193–215. https://doi.org/10.2753/PKE0160-3477280203.

Stockhammer, E. 2010. Financialization and the Global Economy. In *Journal of Post Keynesian Economics* (No. 240). http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.434.2586&rep=rep1&type=pdf.

Stockhammer, E. 2012. Financialization, Income Distribution and the Crisis. *Investigacion Economica* 71(279): 39–70.

Sundaram, A.K., and A.C. Inkpen. 2004. Stakeholder Theory and "The Corporate Objective Revisited": A Reply. *Organization Science* 15 (3): 370–371.

Tomaskovic-Devey, D., and K.-H. Lin. 2011. Income Dynamics, Economic Rents, and the Financialization of the US Economy. *American Sociological Review* 76(4): 538–559. https://doi.org/10.1177/0003122411414827.

Tori, D., and O. Onaran. 2018. The Effects of Financialization on Investment: Evidence from Firm-Level Data for the UK. *Cambridge Journal of Economics* 42(5): 1393–1416. https://doi.org/10.1093/cje/bex085.

Tosi, H.L., S. Werner, J.P. Katz, and L.R. Gomez-Mejia. 2000. How Much Does Performance Matter? A Meta-Analysis of CEO Pay Studies. *Journal of Management* 26(2): 301–339. https://doi.org/10.1177/014920630002600207.

Tricker, B. 2012. *Corporate Governance: Principles, Policies and Practices*, 2nd ed. Oxford: Oxford University Press.

Trivedi, S.R. 2020. Impact on Financialisation on Accumulation: Evidence from India. *Economic Papers* 39(1): 89–100. https://doi.org/10.1111/1759-3441.12265.

Van der Zwan, N. 2014. Making Sense of Financialization. *Socio-Economic Review* 12: 99–129. https://doi.org/10.1093/ser/mwt020.

Veldman, J. 2019. Critical Perspectives on Accounting. *Critical Perspectives on Accounting* 63: 1–11. https://doi.org/10.1016/j.cpa.2018.04.001.

Vieira, R., G. Azevedo, and J. Oliveira. 2022. Using Quantitative Methodologies to Conduct a Systematic Review in Social Sciences Proknowk-C and Ordinatio Method in the theme "Financialization in Corporate Governance." *Iberian Conference on Information Systems and Technologies, CISTI*, *2022-June*(June), 1–7. https://doi.org/10.23919/CISTI54924.2022.9820070.

Vives, X. 2000. Corporate Governance: Does it matters? In *Corporate Governance: Theoretical and Empirical Perspectives*, ed. X. Vives, 1–22. Cambridge: Cambridge University Press.

Wallusch, J., B. Woźniak-Jęchorek, and S. Kuźmar. 2020. Aggregate and Regional Effects of Financialisation in CEE Countries. *Post-Communist Economies* 32(7): 860–876. https://doi.org/10.1080/14631377.2020.1745556.

Waris, A., S. Ahmad, and I.M. Abdel-Magid. 2017. Comparison among Selected Journal Quality indicators of Public. *Trends in Information Management, February 2020*, 150–164. https://www.researchgate.net/publication/339415426_Comparison_among_Selected_Journal_Quality_indicators_of_Public_Health_Journals.

Yermack, D. 1997. Good timing: CEO Option Awards and Company News Announcements. *Journal of Finance* 50: 449–476.

Zajaz, E.J., and J.D. Westphal. 1994. Substance and Symbolism in CEOs' Long-Term Incentive Plans. *Administrative Science Quarterly* 39(3): 367–390.

Zajac, E.J., and J.D. Westphal. 2004. The Social Construction of Market Value: Institutionalization and Learning Perspectives on

Stock Market Reactions. *American Sociological Review* 69 (3): 433–457. https://doi.org/10.1177/000312240406900306.
Zhang, Y., and J. Andrew. 2014. Financialisation and the Conceptual Framework. *Critical Perspectives on Accounting* 25(1): 17–26. https://doi.org/10.1016/j.cpa.2012.11.012.